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DIAGNOSTIC STUDY

OF

**KIBO PAPER INDUSTRIES LIMITED
DAR - ES - SALAAM, TANZANIA**

FINAL REPORT

BANGALORE - INDIA JUNE 1993



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REHABILITATION OF INDUSTRIAL ENTERPRISES
IN EAST AFRICA

FINAL REPORT ON
KIBO PAPER INDUSTRIES LIMITED
DAR-ES-SALAAM, TANZANIA

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DATE OF REPORT: JULY 1993

KIBO PAPER INDUSTRIES LIMITED

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SYNOPSIS

Kibo Paper Industries Limited (KIBO Paper) in Dar es Salaam, Tanzania was one of the enterprises selected for study in consultation with the Ministry of Industries and Trade, Government of Tanzania and UNIDO. After 103 man-days of study, and having rendered direct assistance, Amarnath Kamath & Co., Management Consultants, recommend the following:

KIBO Paper deserves serious consideration for industrial rehabilitation. Factors that support this recommendation are:

1. KIBO Paper is the only integrated paper making and printing plant in East Africa with an acceptable standard of technology.
2. Vast domestic markets and export opportunities exist for the products of KIBO Paper, which the Company has not exploited.
3. The financial institutions were pleased with the direct assistance of the Consultants and the positive response of the workers. They have expressed their willingness to consider the restructuring of outstanding loans.
4. KIBO Paper employs workers who can be motivated and trained to meet the challenges of rehabilitation.
5. The changes suggested in the organisation structure should be implemented. Vacancies for managers in production, finance, marketing and human resource development should be filled with qualified people without delay.
6. KIBO Paper's financial and market position should improve if recommendations made in the report are implemented.

RECOMMENDED REHABILITATION STRATEGIES**A. Activities in the short term to improve profitability**

1. The Company should start the process of restructuring the organisation. All approved positions still vacant should be filled as soon as possible.
2. The Company is apparently overstaffed primarily because of gross under-utilisation of capacity. Capacity utilisation can be increased from the present 20% to 50% with the same labour force.
3. The Company should embark on a programme to continuously improve product quality through use of better quality raw materials and tighter process inspection which will help in regaining customer acceptance and market share for KIBO products.
4. A planned preventive maintenance programme should be implemented to repair or modify equipment and for purchase of essential spares.
5. Raw materials and finished goods inventories and receivables from customers totalling TSh. 464 million (as on November 15, 1992) should be reduced.
6. The Company should re-establish business contact with old customers, and negotiate for orders. Realistic sales targets for February - April 1993 were set at TSh. 78.30 million per month. In March 1993, the Company surpassed all expectations and achieved sales of TSh. 104 million. The practice of daily monitoring of sales and collections initiated by the Consultants should be continued.

7. Outstanding loans with EADB and TIB amounting to TSh. 1.40 billion on December 31, 1992 have to be rescheduled.

B. Activities in the medium term to improve performance

1. The Company should make every effort to complete the suggested restructuring of the organisation.
2. Commencement of training activity as part of human resource development for upgrading KIBO Paper work force at all levels.
3. Provide KIBO Paper work force a better salary and wage structure along with productivity linked incentive programmes.
4. The process of improving the marketing effectiveness of the Company through departmental reorganisation, product diversification and quality improvement, realistic costing and competitive pricing, frequent customer interaction and establishment of an extensive distribution net work should lead to maximum tapping of domestic and export market potential.
5. Appendix-II projects cash flow for the next five years after considering improvements from the present programme.
6. The Company should negotiate a larger overdraft facility with the National Bank of Commerce to finance the projected increase in sales after restructuring the irregularity in the current overdraft facility.
7. The Company should revive the computerisation programme.

8. The Company should suitably modify the hall housing the printing section to bring about substantial savings in air conditioning costs.
9. A centralised store should be set up in Production Hall-I at the printing plant at Changombe.
10. Develop talent in the art-work and design department to generate output of acceptable standards, thereby enhancing the saleable quality of packaging material.
11. Reconstitution of the Board of Directors of KIBO Paper with improved stake-holder representation.
12. Disassociation of the holding company, TKAI, from the management of KIBO Paper by divestment as a step towards ultimate privatisation.

I. EXECUTIVE SUMMARY

1.0 A BRIEF HISTORY OF KIBO PAPER

1.1 KIBO Paper was established in 1965 as a private sector enterprise. The Company declared bankruptcy in 1969 and was nationalised the following year.

1.2 The National Development Corporation (NDC) acquired 76% of the Company's share holding. In the ensuing years the National Milling Corporation acquired 14% of the share holding and The Worker's Development Corporation held the balance 10%. On January 1, 1979 NDC's controlling interest was transferred to Tanzania Karatasi Associated Industries (TKAI). TKAI now holds 95% of the shares of KIBO Paper.

1.3 Between 1971 and 1980, KIBO Paper was managed by Packages Ltd. of Pakistan. During their tenure a strong work ethic was developed leading to significant operational improvements and reducing losses. To build KIBO Paper into a fully integrated packaging Company:

- the Paper Mill was commissioned in the late 1970s and
- the production of multi-wall bags and gummed packing tapes were introduced.

2.0 LOCATIONS OF FACTORIES AND OFFICES

The Company's head office and packaging division are located at Changombe, and the paper mill and corrugator plant are situated at Pugu Road, six kilometres away.

3.0 PRODUCTS

3.1 The paper mill produces three types of paper boards:

- Fluting board: grammage ranging between 125 - 150 gsm
- Test liner board: grammage ranging between 150 - 200 gsm
- Duplex board: grammage ranging between 240 - 450 gsm

3.2 In 1992, the paper mill produced 1,600 tonnes of paper boards against an installed capacity of 9,000 tonnes per annum, all of which was used in-house for the manufacture of packaging products.

PRODUCTION STATISTICS 1992 and 1993 (FORECAST) FOR PACKAGING PRODUCTS

(x 1000 tonnes)

Items	1 9 9 2 Plan	Actual	% of Actual to plan	1993 Plan
Paper board and corrugated products	2.10	1.63	77.5	1.79
Packaging materials	1.05	0.33	31.5	0.89
Multi-wall bags	3.10	1.25	40.5	2.77
Gummed Tapes	0.05	0.05	100.0	0.07
	6.30	3.26	51.7	5.52

4.0 MANAGEMENT AND MANPOWER

At present KIBO Paper is managed by an Acting General Manager, who reports to the Board of Directors. The Company employs 526 persons, aged between 21 and 55 years.

At the time of writing, vacancies for department heads in production and finance still persist apart for the need for more experienced persons in marketing and human resource development.

5.0 PRE-STUDY DEVELOPMENTS AT KIBO PAPER

5.1 Immediately preceding the start of this study, on October 25, 1992 factory workers at KIBO Paper locked out the General Manager, Production Manager and Purchasing Manager in protest against the Board of Directors delay in meeting their monetary demands, and also delay in their dealing with mismanagement in the Company. Annexure XVI presents a collage of newspaper articles that reported on these developments at KIBO Paper.

5.2 An Acting General Manager was then appointed to run the Company.

6.0 FINANCIAL CONDITION OF THE COMPANY

6.1 During the course of this study it was found that the Company's credit line had been fully utilised. Loans outstanding with the East African Development Bank (EADB) and the Tanzania Industrial Bank (TIB) exceeded TSh. 1.40 billion. In fact, in mid 1992 EADB had refused to consider the Company's requests for additional working capital and later had threatened foreclosure of the Company.

6.2 An analysis of raw materials and finished goods inventories and receivables from customers revealed that a total of TSh. 464 million was blocked in these three assets as on November 15, 1992. (Note: TSh. 250 million worth of raw materials were sufficient for four months production, at the minimum monthly production rate prevalent at that time.)

6.3 KIBO Paper faces serious financial problems. Through steady financial deterioration, the Company now has negative net worth.

7.0 THE APPROACH TO REHABILITATION OF KIBO PAPER

7.1 At the start of this study, repercussions from the events of October 25, 1992 continued to foster tension and uncertainty. Our Consultants made conscious efforts to help ease these tensions.

7.2 Consultants' efforts on-site were aimed at maintaining production levels in spite of severe power shortages prevalent at that time. The marketing department was restaffed internally. The practice of calling on important customers for orders was revived.

7.3 EADB & TIB managers were contacted and requested to give KIBO Paper a chance at rehabilitation by not precipitating matters relating to the large outstanding loan.

7.4 On December 12, 1992 the Consultants addressed the employees to inform them of the precarious position of the Company and the important role the employees will have to play in its rehabilitation.

7.5 To boost morale, on our Consultant's recommendation, management at KIBO Paper launched a poster campaign inviting employees to participate in the rehabilitation of the Company.

8.0 SETTING AND ACHIEVING PLANNED TARGETS

8.1 A production programme for the quarter ended January 31, 1993 was formulated based primarily on raw materials in stock (see section 6.2 above), and supplemented with very limited new purchases.

8.2 A monthly sales target of TSh. 78.30 million was set for February - April 1993 covering 12 existing products. This target was exceeded in March (TSh. 104 million) and April (TSh. 82 million) 1993.

8.3 Trade debtors were contacted to recover amounts overdue.

8.4 The Acting General Manager and the Consultants assisted marketing personnel by initiating efforts to win back former customers by personally visiting them.

8.5 With encouragement from Consultants, the managers and technicians at KIBO Paper designed and developed special sacks for sugar bagging, making the Company the only manufacturer of multi-wall sugar bags in Tanzania. Orders are under negotiation with Kilombero Sugar Co.

8.6 KIBO Paper also began to strengthen its position as the largest manufacturer of multi-wall sacks for the cement industry, by improving customer service to existing customers and through effort at bringing back large customers it had lost.

8.7 A performance based incentive plan was drawn up by the Consultants to provide employees a bonus of up to 15% per month.

9.0 REORGANISING THE MANAGEMENT STRUCTURE

9.1 The reorganisation of the management structure at KIBO Paper (Appendix - I) should encourage and foster growth, both in the sales of each product line as well as in production output to meet the increased demand.

9.2 The Company should be headed by a General Manager, fully responsible for the running of the Company, in effect a CEO.

The General Manager should be assisted by:

a. Managers in charge of administration, finance and accounts, internal audit, human resource development, marketing, quality control, purchase, engineering and security reporting to the GM as one team.

b. Four plant managers, each in charge of one of the plants below, reporting to the GM as a team:

- the paper mill
- the corrugated products plant
- the packaging material & printing plant
- the multi-wall bag plant.

10.0 RECONSTITUTING THE BOARD OF DIRECTORS

10.0 KIBO Paper's Board of Directors should be reconstituted to include the stake holders like bankers, customers and employees. This reconstituted Board should commit itself to the successful privatisation of KIBO Paper.

II. PREAMBLE

On October 9, 1992, Messrs. Amarnath Kamath & Co., Management Consultants, signed contract no. 92/081 with UNIDO, to provide consulting services for a project on "REHABILITATION OF INDUSTRIAL ENTERPRISES" in the East African countries of Tanzania, Uganda & Zambia.

The objectives of the project are:

- a) To advise the Government of each country and the selected enterprises, on short and medium term measures to rehabilitate the money losing enterprises selected and to provide direct assistance during the diagnostic analysis.
- b) To encourage and define possibilities and means for enterprise to enterprise co-operation between the industrial enterprises audited and similar enterprises in India for transfer of technology and technical assistance.

The work evolving from these objectives are:

1. Objective (a)
 - i) To prepare diagnostic reports for the enterprises audited and extend direct assistance to them, and
 - ii) To provide direct assistance to improve management systems and productivity of manpower and equipment in the enterprises.

2. Objective (b)

A report is to be submitted containing:

- i) the approach and procedures for maintaining enterprise to enterprise cooperation between the industrial enterprises in East Africa and industrial enterprises in India, and
- ii) a list of opportunities for enterprise to enterprise co-operation identified during the implementation of the project.

Two progress reports documenting the activities of our consultants and with preliminary recommendations have been submitted.

This is the final report on KIBO Paper, submitted after a presentation of our findings and a discussion of our recommendations with the Government of Tanzania, the UNIDO Country Director and the management of KIBO Paper, held on May 5/6, 1993.

III. CONSULTING METHODOLOGY

KIBO Paper was selected for study after consultation with the Ministry of Industry and Trade, Government of Tanzania.

Mr. A. Kamath, Chief Executive, Messrs. Amarnath Kamath & Co., Bangalore, India and Mr. P.D. Shenoy, visited KIBO Paper on November 2, 1992. Mr. Raju Swamy, a Senior Consultant (SC) joined the team on November 5, 1992 followed by two Technical Consultants, Mr. P. Bhatnena and Mr. T.P. Pai. The enterprise was studied in two parts because of its large size & distinctive divisions: the paper mill at Pugu Road and the printing and packaging plant in Changombe.

103 man-days were spent in Tanzania, studying KIBO Paper and rendering direct assistance as needed. Regular progress reviews were held with the National Coordinator at the Ministry of Industry and Trade and with the UNIDO Country Director.

To explain the objectives of this study and elicit the cooperation of all employees, the SC addressed managers and staff on November 9, 1992 (at which the Acting General Manager and Chairman of the Workers Union were also present). The SC held several meetings with them thereafter (Annexures V to XV contain the minutes of all these meetings and office memoranda issued as a result).

Meetings with bankers and officials in various government departments were arranged. After detailed financial analysis, careful review, discussions with bankers and government officials, and meetings with managers, supervisors and other employees of the Company, a survival strategy for KIBO Paper was launched.

Three progress reports were submitted to the Principal Secretary, Ministry of Industries and Trade through the UNIDO Country Director and via the National Coordinator for the periods ending December 10, 1992, January 10, 1993 and January 27, 1993 (Copies in Annexure XVIII). On January 29, 1993 the UNIDO Country Director and the SC appraised the Honorable Minister for Industry & Trade, Mr. Cleopa Msuya with the findings of this study.

Mr A. Kamath and Mr C.R. Seetharam, Team Leader, returned to Tanzania in May 1993. They presented the draft report to UNIDO, Ministry officials and KIBO Paper and TKAI officials in Dar es Salaam on May 5-6, 1993. The updates, observations and comments received from all concerned on the draft report prepared after the study have been incorporated in this final report.

The list of principal organisations, companies and persons contacted during the study is given in Annexure I.

IV. BACKGROUND REPORTS

1.0 COUNTRY BACKGROUND - TANZANIA

1.1 Demographic outline

The United Republic of Tanzania is made up of the former Republic of Tanganyika and the People's Republic of Zanzibar. Tanzania is the largest country in East Africa with an area of 945,000 sq.km. of which 6% is covered by lakes and rivers. Major lakes include lake Victoria in the north-east and lake Tanganyika in the east.

In 1991, the population of Tanzania was estimated to be 25.2 million (including the 0.7 million inhabitants of Zanzibar). Average annual growth in population is estimated at 2.8%. The population density stands at 26 people per square kilometre.

The World Development Report (1992) ranks Tanzania as the second poorest country in the world (after Mozambique) with GNP per capita of \$ 110. The UNDP's Human Development Index ranks Tanzania higher than 33 other countries, using a broader measurement of development which includes adjusted real GDP per capita, life expectancy and the level of education attained.

Enrollment in primary schools increased to 60% of the school going population in 1975; life expectancy rose by 5% and access to primary health care and safe water improved in both rural and urban areas.

Disparities in net income were narrowed through a rationalised tax structure and an adjustment in public sector salaries.

The economic crisis of the 1970s and 1980s affected the total economy and the country, constraining government's capacity to deliver social services, eroding gains achieved.

1.2 Structure of the economy

The annual growth in GDP of 5.5% between 1973 and 1978, fell to 0.4% per year between 1978 and 1982. From 1979 onwards, accelerated inflation resulted in a deterioration of the national fiscal structure. Budgetary deficits averaged 16% of GDP, and both imports and exports declined sharply. By 1982 the import volumes fell 32% below that in 1978. As a result, growth of GDP in real terms fell from 5.1% (1987) to 2.5% (1991)

Agriculture constitutes 58.2% and manufacturing 5.1% of the total GDP of TSh. 625 million in 1991. Table - 1 shows GDP by sector of origin. Growth in agriculture has remained at 1% while industrial output grew at 5% in 1992, up from -5.20% in 1989.

Table - 1: Gross domestic product by sector of origin (mainland)
(million Tanzanian Shillings, at current prices)

	1985	%	1990	%
Agriculture, forestry, etc.	61,231	56.7	233,804	58.2
Mining & quarrying	251	0.2	4,815	1.2
Manufacturing	6,665	6.2	20,436	5.1
Electricity & water	1,071	1.0	5,088	1.3
Construction	2,061	1.9	12,650	3.2
Trade, hotels, etc.	14,195	13.1	57,717	14.4
Transport & communications	7,021	6.5	36,242	9.0
Financial services	6,659	6.2	24,123	6.0
Public administration	10,735	9.9	31,968	8.0
Imputed bank service charge	-1,806	-1.7	-25,260	-6.3
GDP at factor cost	<u>108,083</u>	<u>100.0</u>	<u>401,583</u>	<u>100.0</u>

Source: EIU Country Profile 1991-92 (Bureau of Statistics).

Table-2 below compares wage employment by economic sectors.

Table - 2: Number of wage earners employment by sector

	1984 No.	%	1989 No.	%	Annual average growth (%)
Agriculture	108,114	17.1	117,745	16.5	1.7
Mining & quarrying	5,360	0.8	5,698	0.8	1.2
Manufacturing	115,908	18.3	128,769	18.1	2.1
Electricity & water supply	27,091	4.3	28,989	4.1	1.4
Construction	34,365	5.4	26,896	3.8	4.8
Trade, hotels, etc.	46,707	7.4	50,215	7.1	1.5
Transport and communications	61,279	9.7	76,145	10.7	4.4
Financial services	16,646	2.6	21,973	3.1	5.7
Public admin.	217,910	34.4	255,328	35.9	3.2
Total	<u>633,380</u>	<u>100.0</u>	<u>711,758</u>	<u>100.0</u>	<u>2.4</u>

Source: EIU Country Profile 1991-92 (taken from the Budget speech, 1991)

Inflation averaged 22.3% in 1991 in spite of the slower devaluation of the Tanzanian Shilling.

Table - 3 below shows changes in consumer price index (1977=100)

Table - 3: Consumer prices (mainland)

	1985	1986	1987	1988	1989	1990
National index	584.4	775.2	1,007.4	1,321.6	1,663.2	1,990.8
Annual % change	33.3	32.4	30.4	31.2	25.8	19.7
Urban index	661.5	911.4	1,194.8	1,591.6	2,074.9	2,601.2
Annual % change	43.0	37.8	31.1	33.2	30.4	25.4

Source: EIU Country Profile 1991-92 (Bank of Tanzania)

The Foreign Exchange Act, 1992 was passed by the National Assembly on March 16, 1992 following which a common exchange rate has been introduced. Rapid unification of the official and newly established exchange-bureau rates is planned.

Recognising the need for timely adjustments in foreign exchange rates to restore profitability for exporters, the Government has followed an active exchange rate policy aimed at controlling the over valuation of the Tanzanian shilling. A series of exchange rate adjustments starting in late 1988 valued the TSh. from 90 to the US Dollar, to TSh. 325 in August 1992.

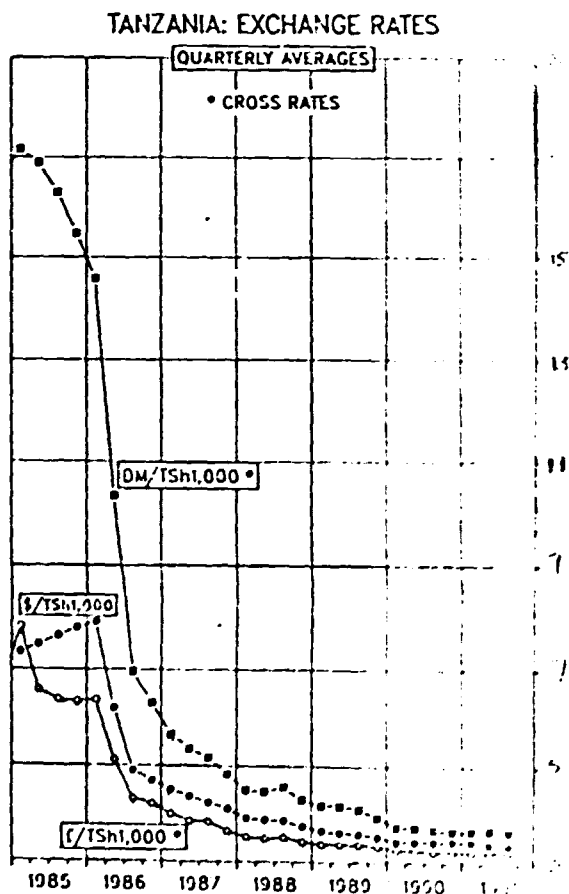
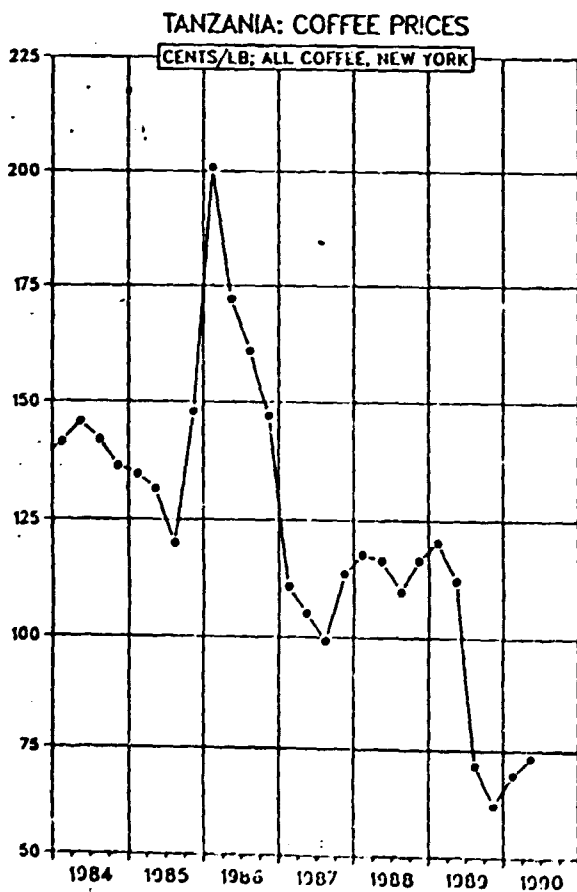
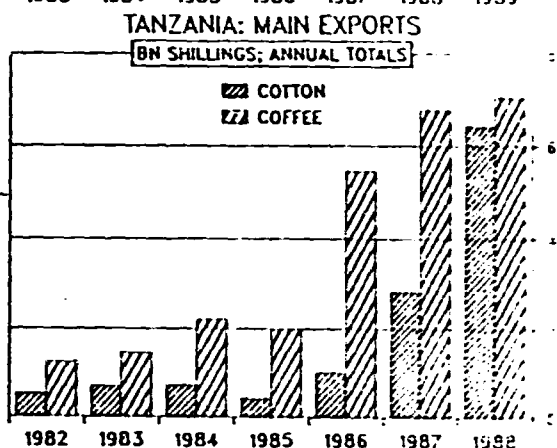
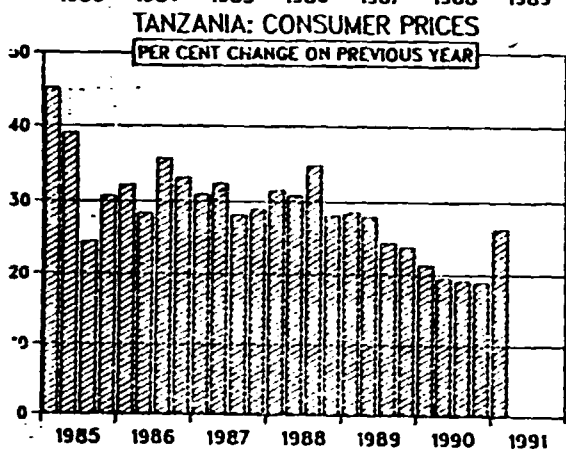
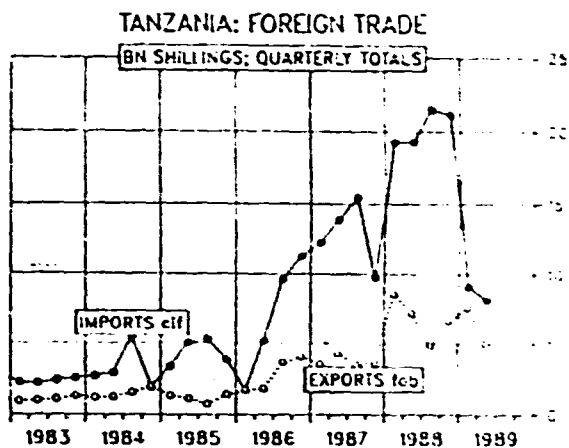
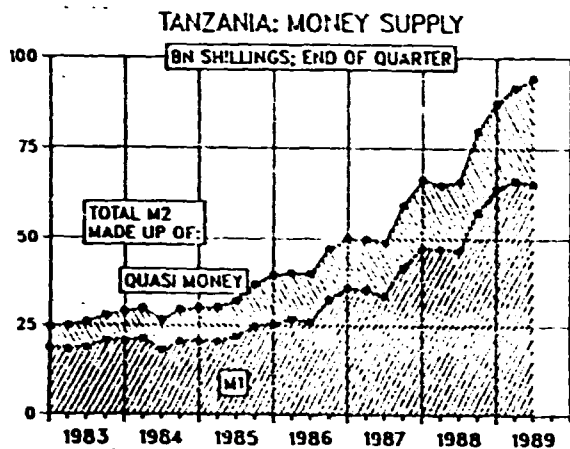
Table - 4 below shows the variations in the exchange rate from October 31, 1991 to January 31, 1992; a graphical representation of the same is presented over leaf.

Table - 4: Changes in the exchange rate of TSh. to US\$
(TSh. per US\$)

	Oct.31 1991	Nov.30 1991	Dec.31 1991	Jan.31 1992
Official rate	230	234	234	247
Exchange Bureau rate	380	420	425	420
Apparent over- valuation (%)	65	79	79	70

Source: EIU Country Report No. 2, 1992

Economic Trends in Tanzania



Source: The Economic Intelligence Unit

By December 1992 the exchange bureau rate was TSh. 425 per US Dollar. As the exchange rate adjustment proceeded, the government progressively dismantled quantitative restrictions and switched to tariffs and other indirect levies to influence the level and pattern of foreign trade. In February 1988, the Bank of Tanzania announced the facility of an open general licence window. This has since been widened substantially to enable increased liberalisation in trade. Goods not eligible for import under the open general license include items controlled for health and security reasons and selected consumer goods. A reform of the tariff system was also carried out, simplifying the schedule of rates and reducing the number of exemptions.

The Tanzanian government has welcomed private investment to rehabilitate 100% government-owned public sector enterprises. This was first done in the leather industry and has recently been extended to all such commercial enterprises.

A comprehensive road transport policy has been introduced, aimed at reducing transport bottlenecks that impede the distribution of agricultural inputs, and the movement of export crops to processing centers and ports. A two-stage programme to rehabilitate the Tanzanian railway network has been prepared and endorsed by donors who funded the first stage of the programme; the second stage has begun with a line of credit from IDA.

2.0 THE MARKET FOR PAPER-BASED PACKAGING PRODUCTS IN TANZANIA

2.1 Market classification

The paper-based packaging products market is classified into:

- a. Packaging paper and paper board
 - Kraft paper and paper board
 - Machine made paper and paper board
 - Paper bags, boxes and containers

- b. Industrial paper and paper board
 - Cigarette paper
 - Parchment and grease proof paper and paper board
 - Composite paper and paper board
 - Corrugated paper and paper board
 - Others (e.g. carbon, stencil, etc.)

2.2 Competitive environment

Nearly all packaging requirements of paper and paper board are met locally.

There are more than 10 converting units that process imported paper & board and other raw materials into packaging, paper and other paper products. A few companies make related items like printing inks, office and educational supplies.

Including KIBO Paper, there are 6 companies in Tanzania, engaged in the manufacture of packaging products (corrugated boxes, sacks, bags, wrappers and cartons).

2.3 Demand analysis

The growth in demand for packaging and industrial paper in Tanzania is directly related to industrial and economic growth. In 1982, GDP in Tanzania was tested as a guiding variable, to help in forecasting the demand for packaging materials. By correlating GDP with the consumption of packaging and industrial paper, a coefficient of correlation of 0.89, demonstrated that the growth rate for packaging and industrial paper is closely dependent on the growth of GDP in Tanzania.

As projecting GDP can project demand for packaging materials with reasonable accuracy, projections through to 2000 A.D. were made using a compounded growth in GDP of 4.7% per annum. These projections are presented below.

Table 5: Demand estimates for packaging & industrial paper
1993 - 2000 (in tonnes)

Projections developed from tested
Coefficient of Correlation of 0.89
for the period 1970 - 1980

Year	GDP	PPB	IPPB	TOTAL
1993	17,527	40,601	8,293	48,894
1994	18,351	43,741	8,929	52,670
1995	19,213	47,025	9,594	56,619
1996	20,116	50,466	10,292	60,758
1997	21,062	54,070	11,022	65,092
1998	22,052	57,842	11,786	59,020
1999	23,085	61,789	12,586	74,375
2000	24,173	65,923	13,424	79,347

Source: Company records

LEGEND: GDP - Gross Domestic Product in million
Tanzanian shillings at 1970 prices

PPB - Packaging Paper and Board;

IPPB - Industrial Paper & Paper Board; includes
tissue, stencil, carbon & wrapping paper
which are not processed in any factory

The sum total of the production of all KIBO Paper's product lines form part of the total demand in the table presented above. Extracting the demand for these product lines from the table, we find that the size of the market for packaging products in 1993 is well below the installed capacity at KIBO Paper.

Table 6: KIBO's market position

Product category	Installed capacity at KIBO	Total demand (*)
	(In tonnes)	
Multi-wall sacks	10,500	5,000
Corrugated products	9,000	3,500
Duplex boards & labels	7,500	6,500

Source: Company records

(*) for Tanzania only

V. DIAGNOSTIC STUDY

1.0 THE PAPER MILL - PUGU ROAD

1.1 Introduction

1.1.1 The paper mill located at Pugu Road, was commissioned in 1978. Manufacturing of corrugated sheets & boxes and gummed packaging tapes is also done here.

1.1.2 The paper mill produces medium fluting liner boards and duplex boards, using both waste paper and virgin pulp as feed-stock. It is well designed and equipped with a modern plant. While the pulp/paper mill has an installed capacity to produce 9,000 tonnes of paper and board products per year, it can attain a production level of only 7,500 tonnes per year. In 1992, the mill produced 1,600 tonnes of paper and board ranging in grammage from 90 gsm to 450 gsm.

1.1.3 The paper mill employs 200 permanent & 30 temporary workers.

1.1.4 The factory buildings at Pugu Road occupy 4,853 sq. metres on a plot measuring 31,680 sq. metres. A schematic layout of the factory site is presented on the following page.

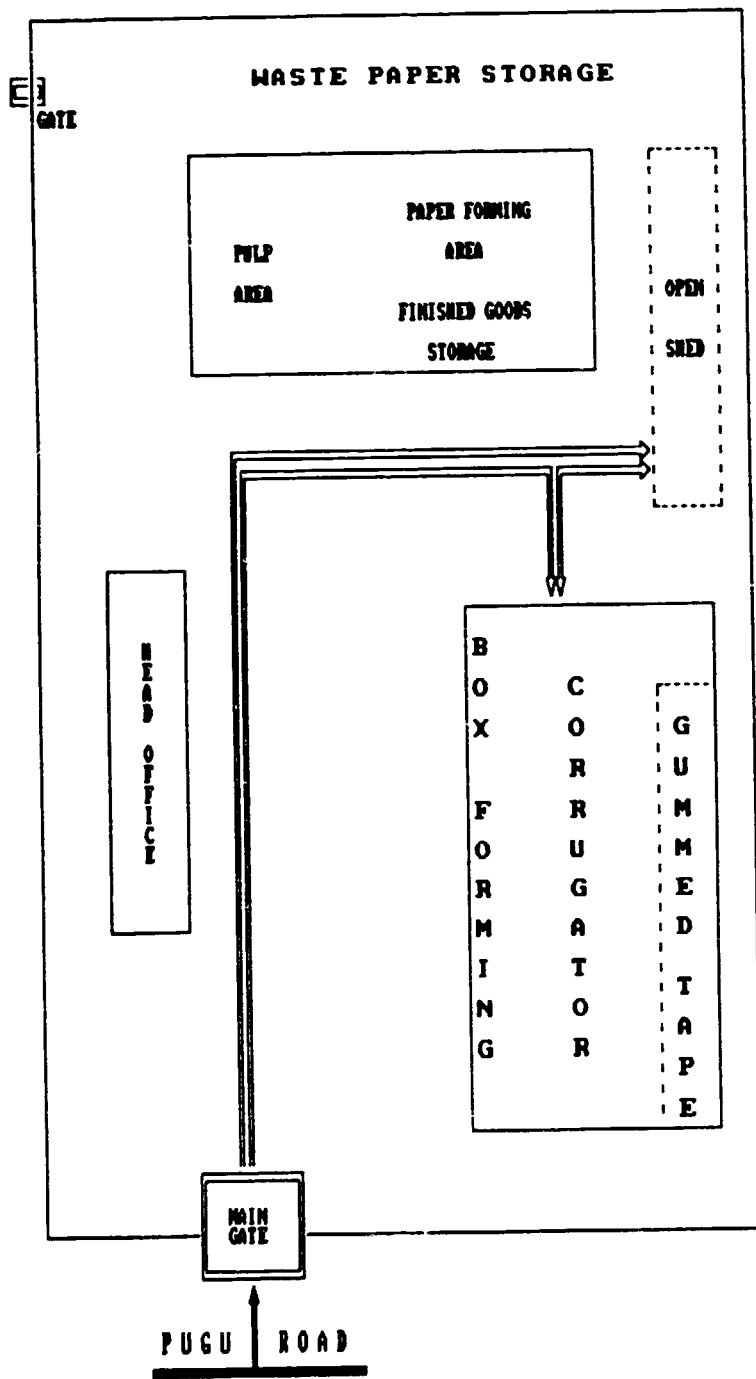
1.2 Growth through backward and forward integration

1.2.1 In 1977, KIBO Paper embarked on a programme of backward integration. This programme was executed in three phases:

PHASE I - The paper mill was commissioned in 1978 at a cost of TSh. 27 million (TSh. 21 million for machinery and TSh. 6 million for buildings) with a capacity to produce 3,000 tonnes of paper per year (10 tonnes per day). Production averaged 8-9 tonnes/day.

Layout of KIBO Paper plant

(NOT TO SCALE)



PHASE-II (1981-82) - The capacity of the paper plant was expanded to 9,000 tonnes per year (30 tonnes per day) after an investment of TSh. 20.4 million in machinery and TSh. 2.5 million for civil construction.

The following equipment and production lines were added:

- A 30-tonne per day corrugator plant, including allied box-making equipment and printer/slotter machines.
- A continuous automatic box forming and gluing machine, and stitching machines with stapling facility.
- A 7-tonne per hour steam boiler.

PHASE-III (1990-91) - The paper mill's capacity to manufacture higher grammage paper and board (250 gsm to 450 gsm) was implemented at a cost of TSh. 177.80 million in machinery and TSh. 6.10 million for the additional civil works.

1.2.2 Lists of equipment installed during Phase II and Phase III are provided in Appendix XIV.

1.2.3 The installation of vital equipment for quality control: the digital weight and moisture control apparatus, was overlooked in this phase of development (details in Annexure XIX). As a result, the quality of paper liner and duplex board (DB) suffers.

1.2.4 During the 1980s, a strategy for forward integration was developed, introducing new production lines to manufacture value added products. Production lines to manufacture corrugated boxes and gummed tapes for the packaging industry were established.

1.3 The production process

Production at the paper mill has two distinct processes:

Pulp making (from waste and virgin pulp), and
Paper forming

A complete process flow chart for the paper mill is given in Annexure II(B).

1.3.1 The Pulp Making Process - Pulp is made from both waste paper and virgin fibre.

a. Pulp production from waste paper

Waste paper collected is first passed through a REGGER to remove materials and objects that cannot be pulped (pieces of plastic, cloth, rope, etc.). This improves the efficiency of the pulper. Appendix IX shows the quantity of waste paper collected monthly in 1992.

Operating at a capacity of 20 tonnes throughput of waste paper per day, the PULPER yields wet pulp with a consistency factor of 4.5 (i.e. a yield of 45 gms. of wet pulp per litre of feed-stock).

During the period under study, the output from the pulper averaged 450 Kgs. per batch, i.e. 450 Kgs. of paper, soaked in 10,000 litres of water for 30 minutes. Monthly production data is given in Appendix X.

The wet pulp is then pumped to the DUMP CHEST, passing through a high density cleaner where smaller foreign particles like pins, staples, nails and stones are removed.

The pulp is conducted through a **TURBO SEPARATOR** where the remaining foreign particles are removed. Fibres clinging to lighter reject pieces are reclaimed through a vibrating screen.

The cleaned pulp then passes through a **CONICAL DEFLAKER** and a series of **REFINERS** before entering the Stock Chest where sizing chemicals are added.

The pulp is then pumped onward to the **MACHINE CHEST** where it is diluted and pumped to the cleaners. The process of dilution is controlled by a consistency regulator. The diluted pulp flows to a fan pump, then through a pressure screen to the head box of the cylinder moulds, where the top liner is formed.

Problems affecting quality

- * The pulp mill's only refiner has been under repair for over an year, resulting in poor quality pulp being produced.
- * A higher proportion of waste paper is mixed with kraft paper and white pulp, resulting in substandard paper and board being produced.

b. Pulp Production from Virgin Pulp

As virgin pulp does not contain foreign and unpulpable material, it does not pass through the Regger. The pulp is pumped through a high density cleaner (to remove heavier particles), past a vibrating screen, to the Dump Chest.

The pulp is then pumped through a deflaker, a double disc refiner and a conical refiner to the Stock Chest, where sizing chemicals are added. The stock is pumped via the Machine Chest to the level box where the consistency of the pulp is regulated. The stock

then moves through cleaners and fan pumps, and passes through a pressure screen before reaching the head box of a cylinder mould, where the top liner is formed.

This line has adequate refining capacity. The technology and plant capacity are in line with paper mills internationally.

1.3.2 The paper forming process

The room wherein the paper forming process is located, is divided into three sections -

- i. The Paper Forming Section
- ii. The Web Press Section
- iii. The Paper Drying Section

The Paper Forming Section

The paper pulp in the head box (pumped there from the machine chest), moves by gravity into the mixing pump where it is diluted to a consistency of 0.5% "fibre in stock". The diluted pulp is then pumped to the centri-cleaner where residual objects like sand are removed. The pulp is passed through a pressurised screen to a cylinder mould, where a paper web is formed on the top wire of the cylinder. A felt pad lifts the web formed on each cylinder and transfers it to the press section. Five forming cylinders operate: two for forming the top liner and three for forming the back liner.

The Web Press Section

In this section excess water is removed from the formed paper web. Two plain presses and a suction press remove excess water from the web, reducing its consistency to 45% "fibre in stock" before it enters the dryer section in sheet form.

The Paper Drying Section

This section has eleven pre-dryers (1.5 metre in diameter each), one Yankee dryer (3.0 metre in diameter) and one pope reel (1 metre in diameter). All dryers are positioned under a hood. The pre-dryers are provided pocket ventilation to improve efficiency. Sheets of paper/board are dried to a moisture content of 7% at the pope reel. The dried reels are then sent for rewinding to required size.

The paper producing line can produce 30 tonnes of paper and board per day. Machine speeds vary depending on the grammage of paper/board produced. In the present configuration, machine speeds for the production of various grammage of paper/board are:

GSM:	60-70	125	150	350	450
SPEED(*):	90-120	100	80-90	20-25	18-20

(*) metres per minute

The entire production line described in this section has adequate drying capacity to cope with higher machine output speeds, when increased production is required.

All machines for this production line were supplied by M/s. P.J. WOLFF & SONNE, GmbH, and are well maintained.

1.3.3 The Roll Slitting Operation

The dried reels from the paper drying section are slit to predetermined widths and rewound onto cores. Four vacuum pumps suck excess water from the felt and the paper. Side trims and the water at the pope reel are sent to an old pulper and pumped into the dump chest to be recycled. The existing slitter cannot handle

full capacity production of 30 tonnes per day. Slit and rewound reels have to be transported to the waste collection point and weighed, as a weighing scale has not been provided near the slitter.

1.3.4 The Corrugator Plant

The corrugator plant, installed in 1980, is a complete process line to manufacture 3-ply and 5-ply corrugated boards, with B & C type fluting rollers. (Installing A, D & E type fluting rollers could extend the product range). Paper and board requirements for corrugated box/board production is met entirely by the adjacent paper plant at Pugu Road.

The corrugator line, with a rated output of 30 tonnes per day (9,000 tonnes per year), can produce 1,612 sq. metres of single board and 1,125 sq. metres of double board per hour. This line presently works two shifts per day and produces 6 tonnes of corrugated board. The machinery is well maintained and in good condition. Production details of corrugated board for 1992 are presented in Appendices XII & XIII.

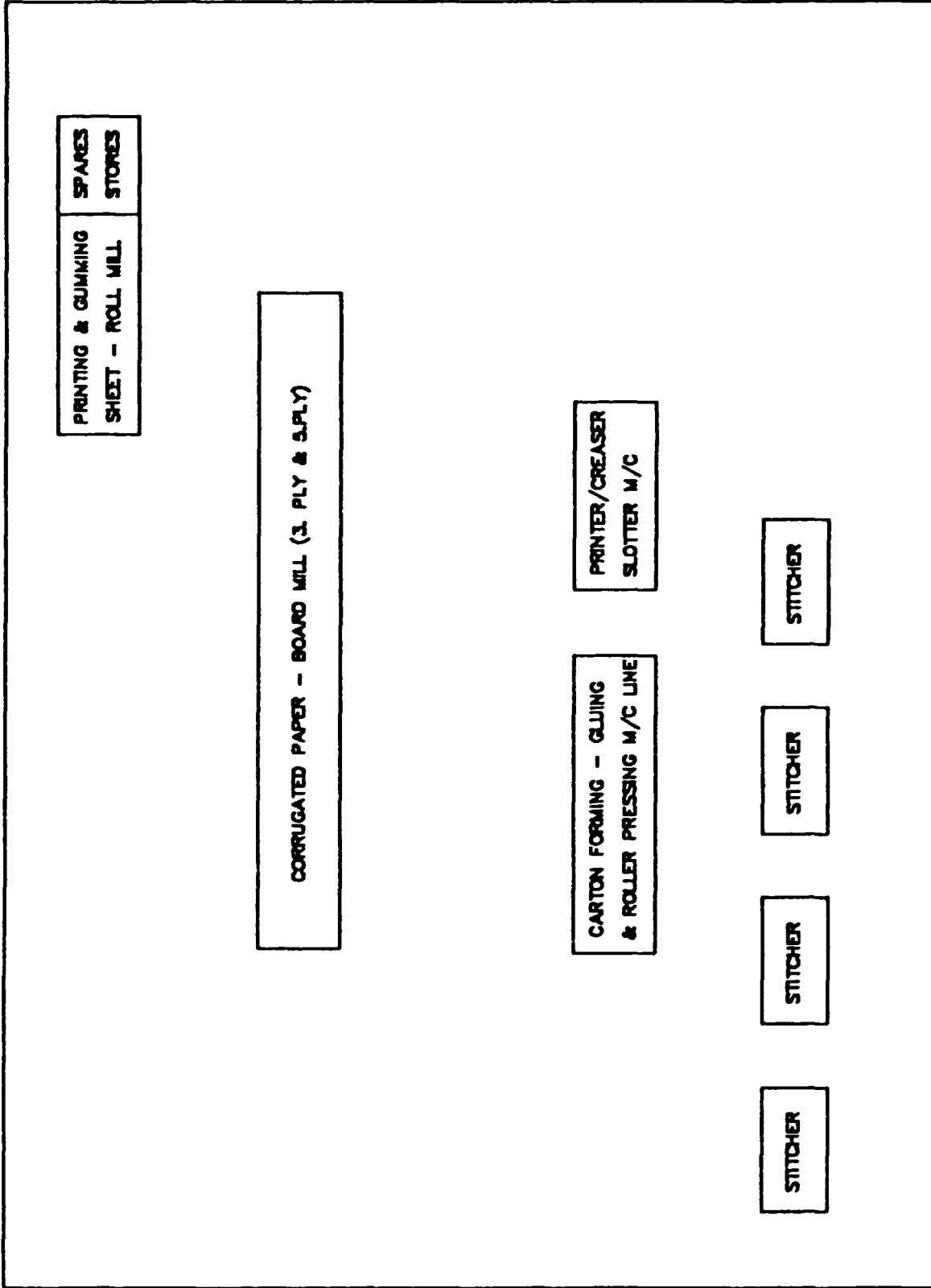
The corrugator mill is equipped with a double-baker, drier, slitter, cutter and stacker. Completed boards are transferred to the printer-creaser-slotter machine. This machine can undertake 2 colour printing after which the board is slit and creased for folding. The boards are folded manually along the crease and held overlapped at the corners for staple stitching.

Boxes intended for food packaging are not stitched, but glued on the automatic folding and fluting machine. Boxes made by both the above methods are then collapsed and flat stacked for delivery.

CORRUGATED BOXES

KIBO PAPER INDUSTRIES LTD.

PUGU ROAD DIVISION



1.3.5 Production of Gummed Tape for Packaging

70 gsm Test Liner Board (TLB) paper is used to produce gummed tape. This line has an installed capacity of 1.2 million metres (equivalent to 82 tonnes) per year.

Larger rolls of TLB are rerolled onto smaller rolls to fit the gummed tape machines. One side of the rerolled paper is printed with Company logos and other markings. The reverse side is passed over gumming rollers which evenly coats the paper with gum. The roll then passes through steam-heated drying chambers and is allowed to cool before rewinding. Broad rolls are transferred to the Changombe plant for slitting into 2", 3", and 4" wide rolls.

The annual demand for gummed tape in Tanzania presently stands at 960,000 metres, which is in excess of available supply.

1.4. Utility requirements at the pulp mill

The following utilities are supplied to all manufacturing operations located at Pugu Road: the pulp mill, corrugated board and box production, and gummed tape manufacturing. Where possible, consumption for each production line is provided. The last energy audit was done in 1987.

1.4.1 Water

The pulp mill requires 35,000 litres of water per hour. Two bore wells together supply 9,000 litres of water per hour. Additional water requirements are drawn from the city council water supply which is very expensive, unreliable and of poor quality. The city council has recently sanctioned another direct line for Kibo Paper for additional water supply.

KIBO Paper uses a closed circuit for recycled water. The plant uses 40 litres of water per kilogram of paper produced. This quantity can be reduced by the installation of a clarifier or a simple water purification system to recycle effluent water. A clarifier designed to handle 10,000 litres of effluent per hour, will cost about US\$ 8,000.

1.4.2 Steam

Steam is generated using two boilers with capacities of 3 and 7 tonnes per hour, respectively. The boiler is fed untreated water, as the water treatment facility supplied with the boiler has not functioned since installation. Both boilers are maintained in fair condition.

Condensate from the steam traps is recycled by collecting it in a flash tank and pumping it to the boiler feed tank. Flash steam is used to heat the air around the web drying cylinder, raising the temperature in this area. Moist air released from the dryer is heated again to avoid condensation on its way out. This process increases web drying capacity.

The web drying cylinders are connected to a common header of 3 bar steam pressure (pressure having been reduced from 9 bar using a pressure reducing valve). As it is necessary to supply the first two drying cylinders with steam at a lower pressure, a diaphragm type reducing valve may be used to connect them. This permits the operator at the drying cylinder, the flexibility to control steam pressure.

1.4.3 Furnace oil

Furnace oil is used to heat the boilers. The boilers provide steam to both the pulp mill and the corrugator plant. 300 litres of furnace oil is needed to keep both these plants operational. Consumption of furnace oil during three years from 1990-1992 was:

Year :	1990	1991	1992
Litres used :	405,000	625,000	387,000
Tonnes of paper produced :	1,031	1,916	1,630
Consumption per tonne :	393	256	237

Note: The ideal consumption of furnace oil for a similar paper plant averages 250 litres per tonne of paper produced.

1.4.4 Electricity

KIBO Paper has an installed load of 1.536 megawatts (Mw) of electricity. The pulp mill uses between 650 - 800 kilowatts (Kw) of electricity per tonne of pulp produced and the corrugator plant uses 150 Kw. The electrical circuit is equipped with an automatic power factor controller to control power factor between 0.9 and 1.0. The KVA demand is reduced by compensating the inductive load with capacitors. The main drive for the DC motor (120 Kw) which runs the pulp mill production line is equipped with a solid state thyristor control unit.

Electrical power consumed during the three years 1990-1992 was:

Year :	1990	1991	1992
in KWH :	1,239,030	1,896,630	1,054,814
Tonnes of paper produced :	1,031	1,916	1,630
Consumption per tonne :	1,207	990	647

Note: The optimal consumption of power for a similar paper plant averages 650 KWH per tonne of paper.

Electrical control panels for most equipment are located in a separate room. The control panels for equipment added after the plant was commissioned (the double disc refiner and the turbo separator) are located near the equipment. As circuit isolators have not been provided, disconnecting power supply in an electrical circuit can be done only by removing the appropriate fuses. Electrical panels and electrical equipment were supplied by Siemens and have been maintained in fair condition.

1.4.5 Compressed air

Compressed air is supplied by a 37 Kw. (50 h.p.) rotary screw compressor made by KAISER (West Germany). The compressed air station is equipped with a 2,000 litre receiver and a post-cooler to remove moisture from the compressed air.

This well maintained compressor can deliver 5.25 cubic metres of compressed air per minute, at 10 bar air pressure. The pulp mill requires 3.2 cubic metres of compressed air per minute.

A list of machines and equipment located at the Pulp Mill may be found in Appendix XIV.

2.0 THE PRINTING AND PACKAGING PLANT

2.1 Introduction

2.1.1 This section of the report presents the operations of KIBO Paper's printing and packaging plant at Changombe, Dar es Salaam.

2.1.2 The factory covers 19,050 sq.metres and includes three production halls, a two-storied administrative building, a canteen, a dispensary (with a doctor in attendance) and a security room. The premises are well maintained. A production flow chart for the packaging plant is given in Annexure II(A) and the layout drawing of the premises is given over leaf.

2.1.3 Between 1967 and 1980, corrugated boards were produced using double fluted imported paper. In 1980, this production line was abandoned when the modern corrugated box line at Pugu Road was commissioned. The entire production line, including the boiler installed solely for the corrugated box line, has since been idle. It is now dismantled, and awaiting disposal.

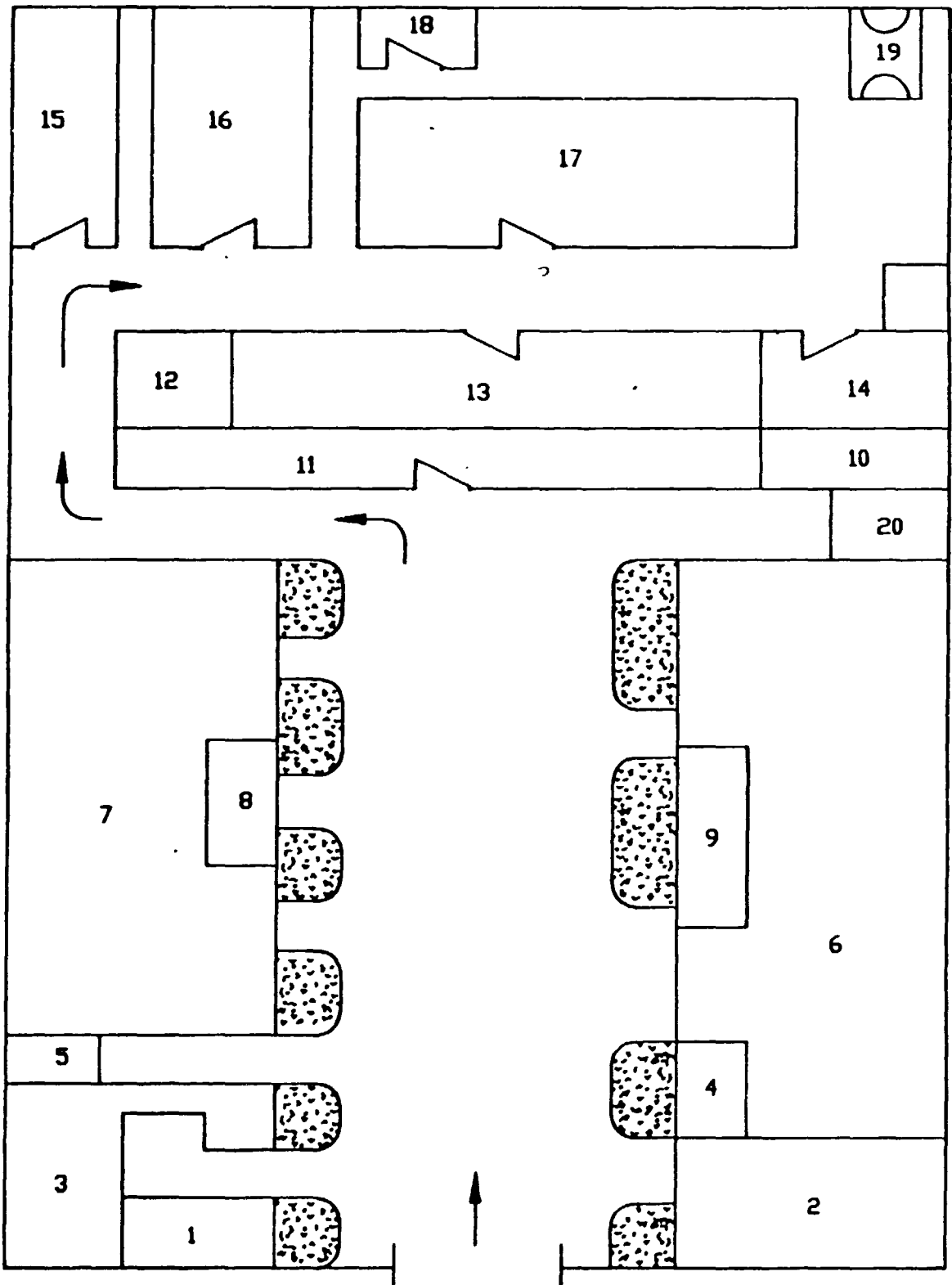
2.2 PRODUCTION FACILITIES

The plant and equipment are spread out over three production halls. A layout diagram for each hall is given over leaf.

2.2.1 Production hall - I

This hall accommodates a number of machines and a variety of activities. The structure is strong despite poor maintenance. Equipment from the disused corrugated board production line and dead stock items (paper rolls, old corrugated boxes, partitions, used carton boxes and chemicals) are stored in this Hall. Two Swedish baling presses are installed outside this hall.

LAYOUT OF KIBO PAPER INDUSTRIES LTD., CHANG'OMBE



KEY:

- | | |
|--------------------|---------------------|
| 1. SECURITY | 11. OFFICE BLOCKS |
| 2. CLINIC | 12. SUPPLIES |
| 3. MAN POWER | 13. PACKAGES |
| 4. TOILET | 14. WORKSHOP |
| 5. TOILET | 15. WORKSHOP |
| 6. CORRUGATOR DIV. | 16. PAPER STORE |
| 7. MULTIWALL | 17. CANTEEN |
| 8. DESPATCH | 18. TOILET |
| 9. GUM TAPE | 19. NET BALL GROUND |
| 10. PAPER STORES | 20. BALING PRESS |

SQ. METRES.

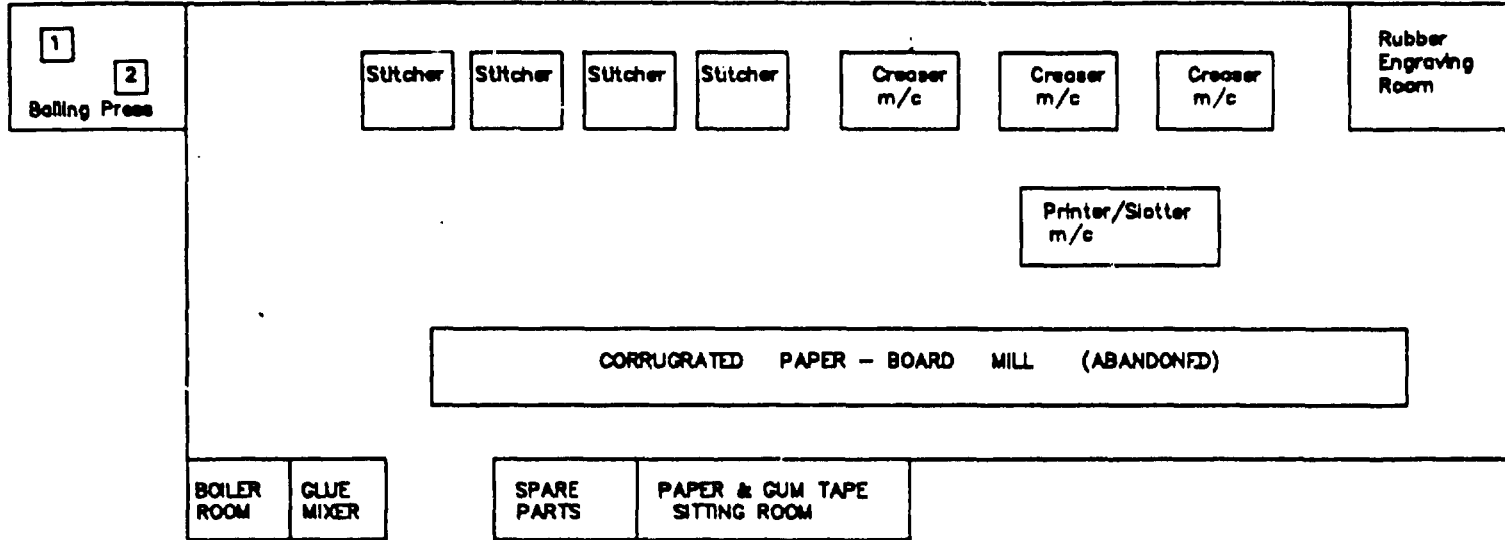
PLOT AREA	:	19050.00
MULTIWALL DIV.	:	1483.00 APPROX.
PACKAGES DIV.	:	2385.00
CORRUGATOR & GUM TAPE	:	3900.00
EXISTING BUILTUP AREA	:	9944.39

HALL - 1

KIBO PAPER INDUSTRIES LTD

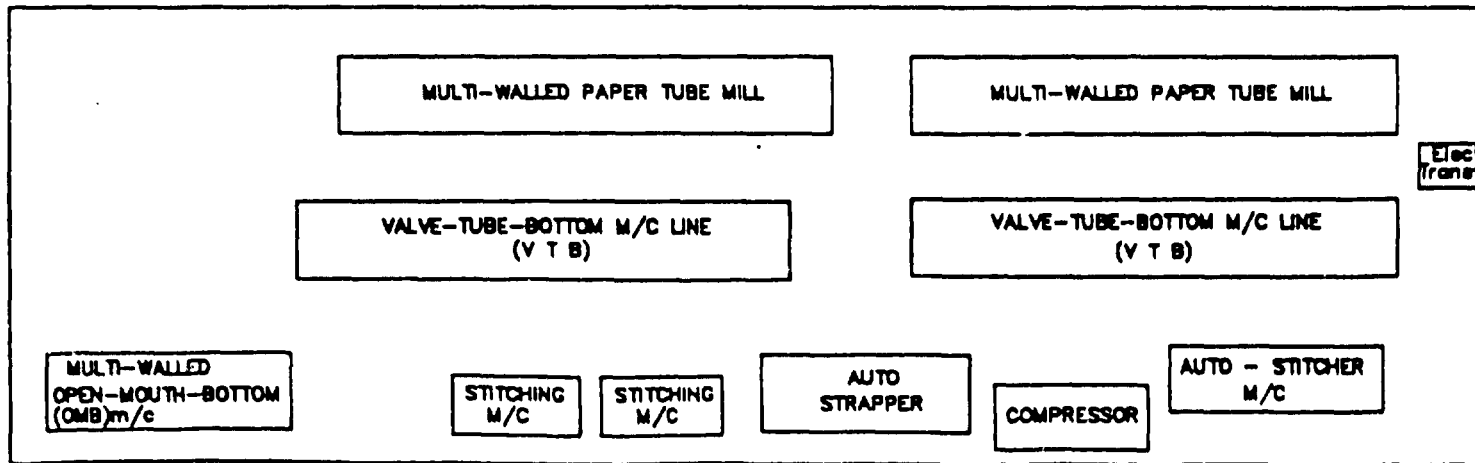
CORRUGATED BOXES/PARTITIONS-DIV.

CHANG'OMBE



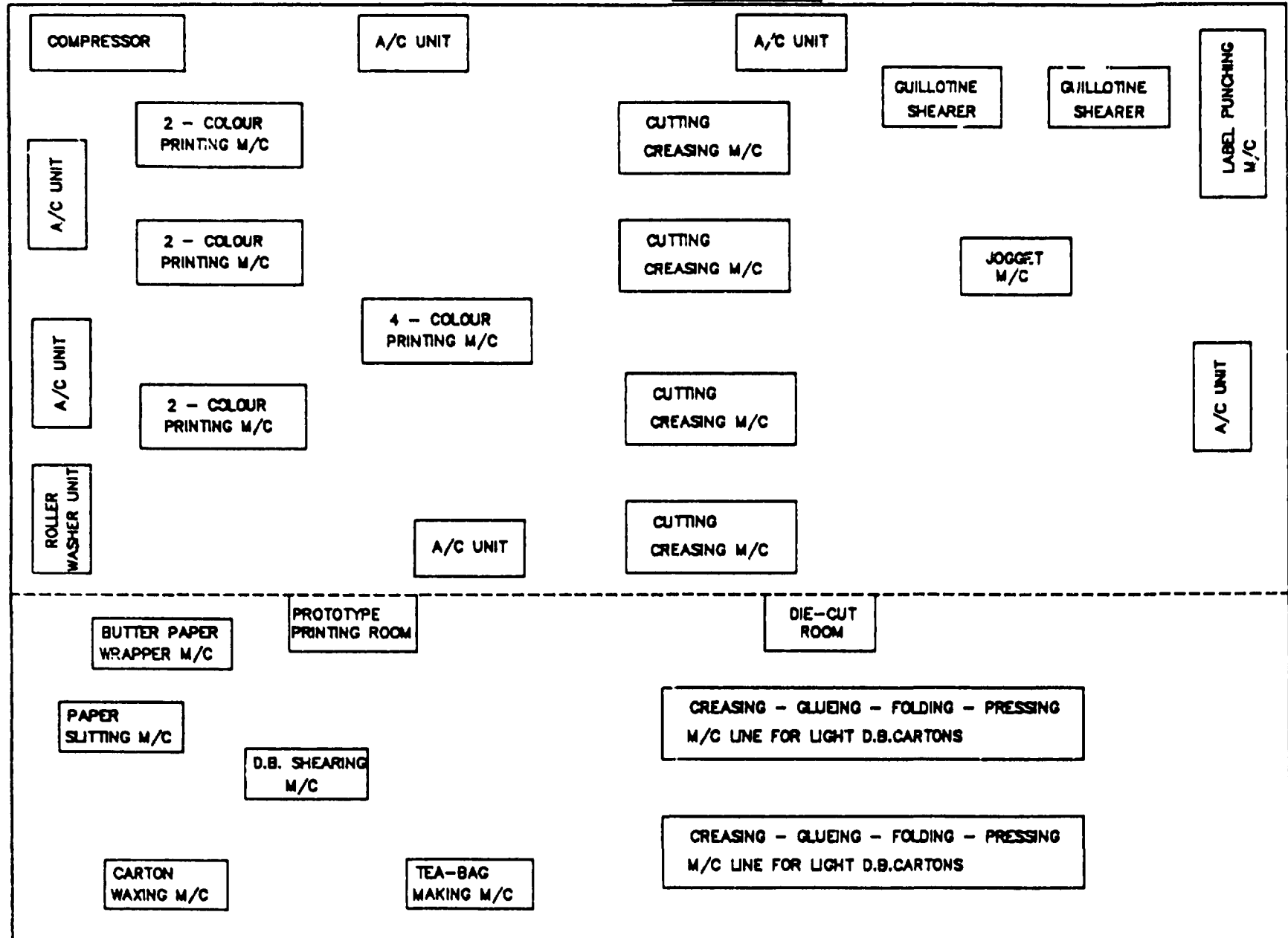
HALL - II

MULTI-WALLED SACKS DIV



PRINTING DIV. HALL III A-B

KIBO PAPER INDUSTRIES LTD.
CHANG'OMBE



D.B. - DUPLEX BOARD

Two adjacent rooms are part of this Production Hall. One room accommodates the engraving section where Company logos and other matter to be printed are etched on flexographic printing rubber sheets. The other adjacent room accommodates a motorised glue mixer used in the production of gummed packaging tape.

The boiler room adjoining the glue mixing room holds two boilers, both idle after the corrugator line was closed in 1980. One of these boilers is now under repair, while the other is not in good working condition.

Gummed and printed paper rolls from the Pugu Road paper plant are received in this Hall, where they are slit into narrower strips, 25 mm to 100 mm wide, and rewound onto smaller reels.

2.2.2 Production hall - II

This hall accommodates two production lines for the manufacture of multi-walled paper bags. The first line was installed in 1974 and the second in 1982. Output from the first line has been consistently less than that of the second line.

The first step in making multi-wall sacks is to form "tubes". On two tuber machines, paper is drawn from paper rolls mounted at one end, and drawn back and forth over rollers to form multiple layers. Each top-layer is offset from the edge of the previous layer, exposing a margin for application of glue. The stacked layers of paper then pass through bending and folding devices to form continuous, flat, paper tubes. The tubes are then cut to pre-set lengths, leaving the top and bottom ends open. The finishing of the top and bottom ends depends on the end use of the sacks. Multi-wall sacks are made for the following end uses:

- 50 Kgs. cement bags are made by feeding the flat paper tubes into two Valve Type Bottomer (VTB) machines where both ends are cut and sealed. A "filling valve" is stitched on one end.

- 25 Kgs. sacks to bag food grains are made by feeding the flat paper tubes into the Open Mouth Bottomer (OMB) machine. One end is folded, fluted and sealed with gum; the other end is left open for filling.

- 2.50 Kgs. bags to carry seeds are formed by stitching the flat paper tubes at one end with a folded multi-wall paper strip. The other end is left open for filling.

Three sewing machines, including one auto stitcher are used in the production of multi-wall sacks.

2.2.3 Production hall - III

For the purpose of studying this Hall, we have divided it into two natural sections: the air conditioned area and the vicinity outside the air conditioned area.

The air conditioned area of this Hall accommodates the following machines:

a. PRINTING EQUIPMENT

i. The Roland-Ultra Offset Press

This 2-colour printing press (plate size: 1270 mm. x 1035 mm.), has a rated capacity of 9,500 impressions per hour. Due to its vintage, it is capable of a maximum of 2,000 impressions per hour. 3 workers normally operate this machine, used for printing corrugated boxes. It is presently not in use for want of orders.

ii. The Roland Record Offset Press

This 2-colour printing press (plate size: 785 mm. x 1030 mm.) has a rated capacity of 12,000 impressions per hour. As per the instructions of the Swedish machine consultant, it is used at a speed of only 1,875 impressions per hour (see Mr. Mchomes's report available with the Company). Machine operators state that they have, at times, operated the machine at higher speeds.

iii. The Champion Colour Metal Press

This 2-colour printing press (plate size: 1295 mm. x 1024 mm.) has a rated capacity of 10,000 impressions per hour. This machine can accommodate 1,295 mm wide paper, the largest such machine at KIBO Paper. It is used for printing on wide board/paper and generates only 1,000 impressions per hour.

iv. The Roland Record Offset Printing Press

This 4-colour printing press (plate size: 785 mm. x 1030 mm.) has a rated capacity of 12,000 impressions per hour. It generally produces only 2,000 impressions per hour. The operator has reported running the machine at speeds up to 6,000 impressions per hour.

All printing machines mentioned above are maintained well.

A major problem in this Hall is lack of insulation. This has resulted in high air conditioning costs.

b. CUTTING AND CREASING MACHINES

i. Three cutting and creasing machines operate within the air conditioned area: an original Heidelberg with a small cylinder, an original Heidelberg with a large cylinder and a Bobst cutting and creasing machine. These three machines punch labels from printed sheets, and crease and punch boxes from printed boards.

ii. Two guillotine machines are located in this Hall:

1. a Polar guillotine machine and
2. a Seybold guillotine machine

Tea bag and ice candy sachets, butter-wrapping paper and light duplex-board cartons are manufactured in the vicinity outside the air conditioned area. Boxes used in transporting frozen seafood are waterproofed in this area by spraying the insides of corrugated boxes with molten wax.

Machinery to make the following products are located in this area

i. Tea Packet Forming and Printing

Tea packets, designed to hold 50 gms. tea, are made from yellow poster paper. The outer side of the packet is first printed with the brand name and other matter. The paper is then curled and glued along the side edges to form a continuous flat paper tube. The tube is cut and flapped at both ends. One end is glued shut leaving the other end open for filling tea.

The Befanco machine which makes these tea packets has a capacity of 10,600 packets per hour and employs 3 workers. It can be configured to make packets of different sizes including packets for ice cream sticks. The machine, though old, is in good operating condition. Should a second machine be purchased as standby,

its capacity can be absorbed to produce tea packets for which there is good demand.

ii. Butter-Wrapping Paper

Special paper used for wrapping butter, is printed in rolls and cut to specific sizes by this machine. The machine is old, but in good operating condition. It lies idle for want of orders.

iii. Light Duplex Board Box Forming

Two machines for folding and fluting small, light duplex board cartons used in boxing pharmaceutical, toiletry and cosmetics products are also located in this area. The newer of the two machines has a capacity of 68,000 cartons per 8 hour shift, while the older machine forms 32,000 cartons every 8 hours. Both machines were idle during the course of this study.

iv. Jagenberg Box Folder (fitted with a Glue Applicator)

After printing and creasing, die-cut duplex sheets are fed into this small-box forming machine. The sides are glued and bonded to form a box. The machine produces 4,000 boxes per hour and employs 5 workers per shift.

v. Thrissell Post Folder (fitted with a Glue Applicator)

This machine is used to form larger boxes than the Jagenberg machine. It constructs 4,000 boxes per hour and employs 5 workers per shift.

vi. Sheet Cutters

Three sheet cutters are positioned in this area. The one supplied by Strachan-Hanshan and the Flexo sheet cutter are functional. The third sheet cutter made in Pakistan does not function.

vii. Wax Coating Machine

The inside surfaces of corrugated boxes are sprayed with melted wax, waterproofing them for use in packing frozen seafood. This machine is now used rarely.

viii. Lacquering Cigarette Cartons

The complete production line for varnishing and lacquering of cigarette cartons has been sold. During the course of this study, it was being dismantled for dispatch.

A list of equipment located in the plant at Changombe may be found in Appendix XV.

2.3 The camera room

The camera room is well equipped to undertake artwork and prepare photo negatives. It does not have a colour separation facility.

An inexperienced artist, lacking in visualisation and colour sense, manages the camera room. As a result, the quality of output from the camera room is adversely affected.

VI. FINANCIAL ANALYSIS

1.0 The financial statements presented below clearly indicate the Company's declining performance. The amounts shown are at current prices, which do not reflect the impact of the falling value of the Tanzanian Shilling. It must be noted that the accounts for 1992 are unaudited accounts.

KIBO PAPER INDUSTRIES LTD.BALANCE SHEETS

(Value in TSh.)

	As at 31.12.92	As at 31.12.91	As at 31.12.90	As at 31.12.89
Assets				
Fixed assets (net)	685,139,625	745,136,155	728,139,226	734,721,465
Current assets				
Stocks	470,363,129	339,652,200	294,759,853	252,212,512
Debtors & other advances	268,582,368	185,048,719	148,079,546	66,415,412
Cash & bank balances	2,014,196	504,386	201,848	115,475
Income tax recoverable	29,625,775	29,625,775	11,686,529	-
	770,585,468	554,831,080	454,727,776	318,743,399
Less: Current liabilities				
LC payable	78,591,608	-	-	-
Bank overdraft	43,900,090	43,192,414	26,366,224	9,365,464
Creditors & other liabilities	426,922,566	228,353,875	166,762,558	110,037,510
Current maturity of long term loan	304,005,798	256,446,205	142,566,221	108,672,364
Provision for taxation	-	-	-	22,113,503
Dividends payable	34,539,202	34,539,202	34,539,202	34,539,202
	887,959,264	562,531,696	370,234,205	284,728,043
Net current assets	(117,373,796)	(7,700,616)	84,493,571	34,015,356
Less: Long term loans	246,190,615	315,750,208	345,428,343	366,380,160
Net assets	321,575,214	421,685,331	467,204,454	402,356,661
Represented by:				
Share capital	248,325,740	248,325,740	248,325,740	42,277,000
Advances towards share capital	247,279,929	247,279,929	120,338,350	234,214,427
Staff housing reserve	17,147,000	17,147,000	17,147,000	17,147,000
Fixed assets revaluation reserve	137,122,711	137,122,712	137,122,711	137,122,711
Accumulated losses	(328,300,166)	(228,190,050)	(55,729,347)	(28,404,477)
	321,575,214	421,685,331	467,204,454	402,356,661

KIBO PAPER INDUSTRIES LTD.PROFIT & LOSS ACCOUNT

(Value in TSh.)

	For the year ended			
	Dec. 31, 1992	Dec. 31, 1991	Dec. 31, 1990	Dec. 31, 1989
Sales	752,897,532	741,514,289	789,761,298	697,256,776
Less: Cost of sales	521,398,658	649,384,757	614,337,674	594,903,999
Gross profit	231,498,874	92,129,532	175,423,624	102,352,777
Less: Operational expenses:				
Admin. & establishment expenses	186,787,887	167,286,751	121,733,144	96,925,772
Selling & distribution expen.	9,416,562	11,630,363	9,870,570	10,804,990
Financial charges	136,866,261	87,589,032	72,893,742	39,245,639
	333,070,710	266,506,146	204,497,456	146,976,401
Operating loss	101,571,836	174,376,614	29,073,832	44,623,624
Other income	1,461,720	1,915,911	1,748,962	8,299,057
Loss for the year	100,110,116	172,460,703	27,324,870	36,324,567
Sales in US \$	2,151,135	3,223,976	4,045,908	3,768,956
Losses incurred during the period 1989 - 1992	336,220,256			

ANALYSIS OF ADMINISTRATION EXPENSES, FINANCIAL
CHARGES, AND STOCKS & SPARES FOR 1988-1991
KIBO PAPER INDUSTRIES LTD.

Values in Million T.Sh.

Item	1988		1989		1990		1991		1992	
	% of sales	Value	% of sales	Value	% of sales	Value	% of sales	Value	% of sales	Value
Sales	-	512.6	-	697.3	-	789.8	-	741.5	-	752.9
Cost of sales	77.2	396.1	85.2	594.0	77.8	614.3	87.6	649.4	69.3	521.4
Admn. & establish ment expenses	16.0	82.1	13.9	96.9	15.4	121.7	22.6	167.3	24.8	186.8
Selling & distbn.	1.5	7.5	1.6	10.8	1.25	9.9	1.57	11.6	1.3	9.4
Financial charges	3.8	19.6	5.6	39.3	9.2	72.9	11.8	87.6	18.2	136.9
Stocks & stores	30.15	154.6	36.2	252.2	37.3	294.8	45.8	339.7	62.5	470.4
Debtors & advances	-	-	9.5	66.4	18.6	148.1	25.0	185.1	35.7	268.0

The financial analysis above indicates the mounting administration expenses, financial charges and stocks & stores

The total stock of raw materials and finished goods have been going up and have increased from 30% to 62.5% of sales, i.e., 7 months stocks are maintained. A detailed evaluation of stocks have to be done and sales generated to liquidate old stocks of finished goods, scrap and un-used raw materials and stores items. Ideally, the stocks and stores should be brought down to 15% of sales.

Trade debtors have gone up from 9% to 35% of sales over the years and write off of bad debts has also increased. Ideally, debts should be brought down to 8-10% (30-40 days).

KIBO PAPER INDUSTRIES LTD.ANALYSIS OF FIXED AND VARIABLE COSTS 1989-1991
(BREAK EVEN ANALYSIS)

(Value: Million TSh.)

	1990	1991	1992
A. Total sales	789.8	741.5	752.9
B. Variable Cost			
1. Cost of production	495.0	499.0	382.6
2. Selling & distribution	6.6	6.5	5.2
Total	<u>501.6</u>	<u>505.5</u>	<u>387.8</u>
C. Contribution - value	288.2	236.0	365.1
- as % of sales	36.5	31.8	48.5
D. Fixed cost			
1. Direct labour	25.2	31.3	36.7
2. Factory overhead	94.2	118.7	102.1
3. Administration & establish- ment expenses	121.7	167.3	186.8
4. Selling & distribution	3.3	5.1	4.2
5. Financial overhead	72.9	87.6	136.9
Total	<u>317.3</u>	<u>410.0</u>	<u>466.7</u>
E. BEP (Sales val. Mill.T.Sh.)	869.3	1289.3	962.3
F. Actual sales as % of BEP	90.9	57.5	78.2

The above analysis shows an improvement in operations in 1992 with variable costs dropping from 68.2% in 1991 to 51.5 % in 1992 which has reduced the break-even point from T.Sh. 1289.3 million to T.Sh. 962.3 million. It must be noted that the accounts for 1992 are unaudited accounts.

VII. MARKETING ANALYSIS

1.0 PERFORMANCE

1.1 KIBO Paper's marketing efforts have not succeeded for the following reasons:

- The deteriorating economy of the 1970s and 1980s saw the Tanzanian Shilling depreciate rapidly. This placed a strain on the Company's finances and its ability to import essential spares and production materials.
- After 1984, marketing activities were neglected. Large customers were not visited, new orders not canvassed and efforts to collect amounts due from trade debtors were not undertaken.
- Poor production and materials management resulting in sub-standard products and delayed deliveries.

2.0 ANALYSIS OF COMPETITION

A brief analysis of the strength and weaknesses of the five major competitors follows:

Paper Products Limited

STRENGTHS:

- good market reputation
- low operating costs
- good management team

WEAKNESSES:

- all the plant and machinery are old, except for the corrugator line.
- weak financial position
- dependent on imported fluting and liner board

Twiga Paper Products

- STRENGTHS:**
- good financial position
 - produces one product: corrugated board; can, therefore, concentrate efforts
 - small company, low operating costs, higher profit margins

- WEAKNESSES:**
- dependent on imported fluting and liner board

Mifuko Limited

- STRENGTHS:**
- raw material readily available from affiliate company in Kenya (esp. sack-kraft)
 - low operating costs
 - good financial condition

- WEAKNESSES:**
- dependent on imported raw materials
 - faces severe competition from imported and local products

Tanzania Litho (in Arusha)

- STRENGTHS:**
- market demand for labels produced is good
 - financially good
 - good management

- WEAKNESSES:**
- far from the main consumer centre in Tanzania

Continental Printing and Packaging Ltd. (in Mwanza)

- STRENGTHS:**
- brand new plant and machinery
 - dominates the Lake Zone
 - may penetrate Uganda and Burundi
 - good management

- WEAKNESSES:**
- faces high transport costs
 - dependent on foreign currency transactions as almost all raw materials are imported

3.0 KIBO PAPER'S MARKET POSITION

KIBO Paper has pioneered the packaging industry in Tanzania. Till 1983, KIBO Paper held a monopoly position in the packaging industry. Since then, with the Tanzanian economy declining and rapid depreciation of the Tanzanian Shilling, KIBO Paper faced severe working capital problems. As imports of materials and spares were tightly controlled, production dropped and the Company was not able to meet customer demand. New enterprises making corrugated boxes and multi-wall sacks emerged in the meanwhile. These units operating with overheads much lower than that at KIBO Paper eroded the Company's market share.

However, KIBO Paper still retains its unique position in Tanzania as the only manufacturer of a range of packaging materials that also manufactures a part of its requirements of paper.

A comprehensive market survey on packaging products manufactured by KIBO Paper is not available. Analysing KIBO Paper's products against the competition reveals the following:

- The multi-wall sack division faces competition from Mifuko Limited; poly-coated bags for packing animal feed are available from Polysack Company Ltd., Tanzania Food Co. Ltd., Coast Feed Ltd. and Jukita National Milling Co. Ltd. KIBO Paper supplies only 61% of the Tanzanian market for multi-wall sacks, the balance being supplied by a competitor, Mifuko (30%) and imports (9%).

The demand for multi-wall bags is estimated at 25.5 million bags per year and is influenced by:

- production of cement, fertiliser, sugar and animal feed
- the pricing and availability of imported bags

- The market for corrugated paper products is shared between KIBO Paper, Paper Products Ltd. and Twiga Paper Industries Limited. Growing imports threaten this market: e.g. corrugated boxes used in packing products for exports are now imported.

- Competition for both the printing and packaging products (e.g. cigarette carton, bottle/can labels, tea bags, etc.) comes from both imports as well as smaller factories. Although customers for these products are geographically scattered, a preliminary estimate indicates an annual market of TSh. 2 billion.

The market for packaging products in Tanzania is expected to grow along-with the growth of the economy. As import duties have been reduced/removed recently competition from imported packaging materials has increased.

4.0 MARKET SHARE ANALYSIS

The following is an estimation of market share of 7 major companies:

TABLE - 1

Market share

(tonnes per year)

Company	Corrugator		Packaging & Labels		Multi-wall Sacks	
		%		%		%
KIBO Paper	1557	45	825	33	2742	61
Paper Products	720	21	750	30	-	-
Twiga	912	26	-	-	-	-
Tanzania Litho	-	-	150	6	-	-
Commercial Printing	243	6	450	18	-	-
CPPC-Mwanza	-	-	250	10	-	-
Mifuko	-	-	-	-	1334	30
Imports	40	2	75	3	394	9
T O T A L	3472	100	2500	100	4480	100

Source: Company records

5.0 THE IMPORTANCE OF THE MARKET FOR MULTI-WALL SACKS

The manufacture of multi-wall sacks is very important to KIBO Paper. Continuing orders for 50 kg. multi-wall sacks from the cement industry has sustained KIBO Paper since 1985.

Cement companies in Tanzania import part of their requirements of multi-wall sacks. Tanzania's largest cement Company, the Tanzania Portland Cement Co., imports most of its requirements of multi-wall sacks, buying occasional small lots from KIBO's smaller local competitors.

The size of the multi-wall sack business may be determined from the orders placed by Mbeya Cement Company, a medium sized enterprise: 2.5 million sacks (approx. 600 M.T.) were ordered between July 1992 and June 1993, worth TSh. 250 million.

6.0 DIVERSIFICATION INTO NEW MARKETS: SUGAR BAGS

The successful diversification into the manufacture of sugar bags stands out as a major achievement of this assignment with KIBO.

While brainstorming sales opportunities for multi-wall bags, veteran employees at KIBO Paper pointed out that one of the two machines used for forming cement bags could be converted to make bags for packaging sugar.

The minimum estimated annual requirement of 50 Kgs. multi-wall bags for packing sugar in Tanzania is 1 million. Kilombero Sugar Co. (a parastatal) and other sugar companies currently import these sacks from South Africa, Swaziland and Kenya.

The minimum landed cost of imported bags is TSh. 200 per bag (see Appendix VIII for prices of multi-wall bags). At this price the potential annual volume of business would be TSh. 200 million. It may be noted that setting up a plant for manufacture of multi-wall bags today is estimated to cost TSh. 600 million. (Source: Company Records).

The project to manufacture Sugar Bags was launched on January 2, 1993. The Assistant Production Manager coordinated the project with a task force of technicians from the Engineering and the Multi-wall bag forming section. The Acting General Manager sanctioned time, funds and incentives for this project.

On January 20, 1993, the Acting General Manager, the Assistant Production Manager, the Senior Technician and the Senior Consultant visited Kilombero Sugar to test the first batch of sugar bags. The bags withstood the tests, conducted under the supervision of the Production Manager at Kilombero Sugar.

During the subsequent meeting, the Finance Manager at Kilombero Sugar expressed his willingness to enter into a supply agreement with KIBO Paper. Business negotiations were to be finalised by March/April 1993 for supply of up to 600,000 sugar bags between September and December 1993.

VIII. MANAGEMENT PRACTICES AT KIBO PAPER

A. MANAGEMENT IN THE FACTORY

1.0 PROCUREMENT AND MATERIALS MANAGEMENT

1.1 On receiving the internal sales order, the planning department prepares a production job card. This card is sent to both the production department and stores. The job card lists and describes materials to be used in executing the order, noting the quality and weight needed for each material listed.

1.2 The production department prepares a Requisition Memo and draws the materials specified after being authorised by the Department-in-charge. Requisitions drawn are not always verified and checked on completion of the job and checks on actual issues, final production yield and process loss are not conducted.

1.3 The most expensive raw material used by KIBO Paper is the imported sack kraft paper. Some printing paper and glazed duplex boards are imported either from Sweden or Germany. Other requirements of paper and board are procured either from the Company's own paper mill or from Southern Paper Mills, Mufindi.

1.4 Consumables used in the process of printing and forming of cartons (printing inks, flexographic printing rubbers, adhesives, copper staples, fuel oil and chemicals) are all imported.

2.0 MANAGEMENT OF STORES

2.1 There are 9 stores scattered around the Changombe plant. Monitoring the movement of materials and assuring their safety and security is a problem. Pilferage is difficult to detect.

2.2 The spare parts store contains a large number of spares bought for machines that have now been sold or scrapped, as also machine parts cannibalised from old machines. Essential spares, however, have not been bought for stock between January 1992 and November 1992. This has resulted in long machine downtime.

2.3 During the course of this study, 3 machines broke down on the same day, highlighting the problem above: one machine stopped due to a broken spring, the second because of ball bearing failure and the third caused by chain link malfunction. Replacements for these damaged items were not in stock had to be procured from the city.

2.4 Record keeping and audit verification practices for spares is poor and inadequate due to the scattered locations of spare parts. The practice of dating chemicals is not regulated.

3.0 MAINTENANCE MANAGEMENT

3.1 The maintenance workshop is fully equipped to undertake repair work. Simple machine parts can also be fabricated. The workshop employs experienced machinists and fitters. Layout of the maintenance workshop is given over leaf.

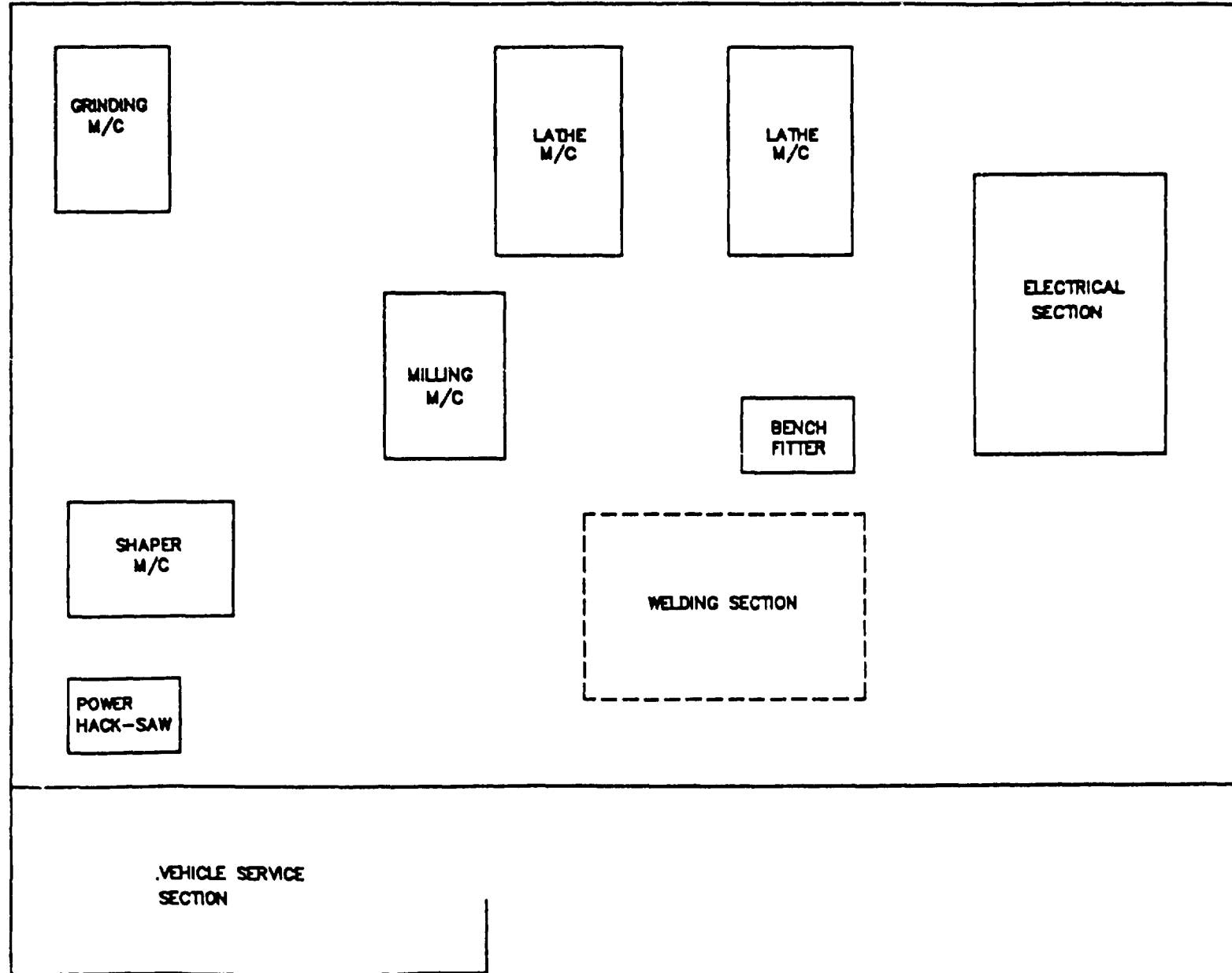
3.2 Shortage of crucial spares for many of the workshop machines is a severe handicap.

3.3 A preventive maintenance scheme for plant and machinery has not been effectively implemented.

3.4 Company vehicles and material handling equipment are overhauled and maintained in-house.

MAINTENANCE DEPT.

CHANG'OMBE



3.5 The die shop is well equipped to make creasing and cutting dies.

3.6 As the die shop does not have drafting equipment to sketch the shape of the die on die boards, the quality of punched, creased and embossed boards is adversely affected.

3.7 The factory faces severe power cuts resulting in long machine down time during working hours which hampers production.

4.0 MANPOWER PLANNING

On analysing machine manning at both factories, the figures below indicate the labour required to operate these machines at varying levels of plant utilisation:

Percentage of plant capacity	Labour Required
20 (present utilisation)	400
30	400
40	450
50	525
60	550
70	575
80	600

Source: Derived from Company records

NOTE: - Present labour force 526

4.1 The above indicates that no further manning is needed to increase production to almost full capacity.

B. MANAGEMENT OF THE ORGANISATION

1.0 This section of the report presents and analyses:

- the organisational structure
- the administrative system
[see Annexures IV(A) - IV(F)]
- human resource development activities

2.0 The workers and managers at KIBO Paper have come to appreciate the problems facing the Company and are willing to work to overcome these problems. Our SC addressed a meeting of managers and supervisory staff (at which the Chairman of the Workers Association was also present) to explain the purpose of this study and the Company's financial health. All those present at this meeting understood the Company's precarious position and resolved to work towards improving it. (Minutes of this and other meetings are attached as Annexures V, VI and VII).

3.0 Management teams commissioned to operate KIBO Paper through the 1970s and 1980s had left behind a strong work ethic and corporate culture.

4.0 The organisation structure at KIBO Paper is pyramidal and concentrated (see Annexure IV). The General Manager has ten departments reporting to him, including security.

5.0 The following is the age distribution of the 526 employees at KIBO Paper in 1992:

Age	No. of employees
Under 21	-
21 - 30	70
31 - 40	304
41 - 50	149
Above 50	3
TOTAL EMPLOYEES in 1992	526

Source: Company records, 1993

The above chart indicates that there is little chance of redundancy because of age. However, there is tremendous scope for upgrading a large cross section of employees who still have considerable service potential in the Company.

6.0 Most managers and supervisors are well qualified. While KIBO Paper does not conduct any in-house training programmes, management has begun encouraging staff to attend career and skill enriching programmes offered elsewhere. In 1991, 28 employees attended a variety of training programmes ranging from 1 week to 9 months. In 1992, 49 employees were selected to attend training programme, of whom 6 were to attend training programmes abroad.

7.0 TKAI, the major shareholder, sponsors the largest number of candidates for training. While TKAI sponsors employees for individual courses and programmes, they also invite employees to attend a variety of group training programmes.

8.0 Two factors have contributed to the Company's decline during the last decade. These factors, though independent, have fed upon each other:

- Senior management has not provided the leadership necessary to direct the enterprise and motivate employees.
- Activities and functions, vital to the health and growth of any business were neglected. These include the neglect of:
 - * customer visits and sales calls
 - * regular cost monitoring
 - * collections against sales

9.0 Attrition and turnover in all categories of employees in 1991 was:

Department	Category(*)	
	A	B
Personnel	4	1
G.M.'s Office	1	9
Production	10	3
Finance	9	-
Paper Mill	3	4
Engineering	3	-
Supplies	5	-
Marketing	-	3
TOTAL	35	20

Source: Company records 1991

(*) A: Senior & Skilled; B: Semi skilled and unskilled

The table above indicates an employee turnover rate of 9.2% in 1991.

IX. RECOMMENDATIONS FOR REHABILITATION

1.0 PRESENTATION OF RECOMMENDATIONS

1.1 Recommendations for the rehabilitation of KIBO Paper are presented for the enterprise as a whole: the paper mill at Pugu Road and the printing and packaging plant at Changombe.

1.2 The recommendations are divided into the following sections:

- Part I: A Survival Strategy
- Part II: Improving production facility
- Part III: Restructuring the organisation
- Part IV: Other recommended changes

1.3 The Survival Strategy consists of short-term measures designed to improve KIBO Paper's commercial viability within a period of six months. The second part contains specific recommendations for improving production facilities at each of the two locations: Pugu Road and Changombe. The third part presents and discusses necessary changes in the organisational structure of KIBO Paper.

1.4 Data supporting these conclusions and recommendations may be found in the preceding pages of this report and the Appendices and Annexures at the end of this report.

PART I - A Survival Strategy

1.0 After detailed financial analysis (see Chapter VI), discussion of specific issues with bankers and government officials and numerous objective-based meetings with managers, supervisors and other employees of the Company, a survival strategy for KIBO Paper was launched in November 1992.

2.0 THREE OBJECTIVES PROPELLED THE SURVIVAL STRATEGY:

2.1 Use of existing raw materials to manufacture saleable products.

2.2 Generation of funds through the liquidation of excess stock of finished goods (see Appendices V and VI)

2.3 Collection of outstanding debts (see Appendices IV and VII)

This strategy concentrated on generating funds by deploying or recovering productive assets locked within the Company.

3.0 ACTIVITIES THAT CONTRIBUTED TO ATTAINING THESE OBJECTIVES WERE:

a. An immediate revival of marketing activities: making sales calls and visiting old customers, viz: Tanzania Cigarette Co., Matsushita Electric Co., Kilombero Sugar Co. and Interchick. KIBO Paper's Marketing Manager, Production Manager, and Quality Control Manager visited other important customers including the major cement companies.

b. An analysis of the current assets as on November 15, 1992 revealed the following:

	<u>million TSh.</u>
- Raw materials in stock that can be used to manufacture saleable products	250
- Finished goods in stock	18
- Dues from Trade Debtors	196
	<hr/>
TOTAL FUNDS TIED DOWN	464 (*)
	<hr/>

(*): Valuation of obsolete spares had not been completed and is not included.

c. A special task force from the Marketing Department was entrusted with the task of selling stocks of finished goods and collecting outstandings from customers. Between November 1 and December 31, 1992 the task force was successful in collecting TSh. 137 million.

d. Discussions were initiated with the Company's financing institutions, African Development Bank and Tanzania Investment Bank to find means to reduce/reschedule the large outstanding loans. Both Banks have responded positively to this move and are likely to consider a suitably prepared restructuring programme.

e. The Auditors' Report revealed that TSh. 741 million was due to the Sales Tax Department. A further amount of TSh. 140 million collected as sales tax from customers had also not been remitted to the Department. To recover this amount, the Sales Tax authorities moved the court and started confiscating Company vehicles. On behalf of KIBO Paper, the Acting General Manager appealed to the Sales Tax Department to settle matters amicably. At the time of writing this report, we have been informed that the Sales tax Department has agreed to cancel the demand of TSh. 741 million since KIBO Paper had claimed sales tax exemption on sale of multi-wall sacks on the basis of a Government order.

Part II: Improvement of plant and equipment

Recommendations for the improvement of plant and equipment are presented separately for the pulp mill on Pugu Road and the printing and packaging plant at Changombe.

A. Recommendations for improving production facilities at the pulp mill:

1.0 Changes and improvement which will directly affect the quality of paper produced:

1.1 To improve the quality of fluting boards: Starch should be sprayed on the web in the forming stage. Equipment to spray starch should be installed as part of this production line.

1.2 To reduce variations in the grammage of paper produced: Significant variations in the quality of duplex board produced have been noticed. These variations cannot be controlled without digital weight and moisture control equipment. This equipment should be bought and installed as soon as possible.

1.3 To reduce curling of Duplex Board: Flash steam should be routed directly to the first drying cylinder. The operator can thus control the heat. Increasing the temperature surrounding the board very slowly will reduce curling of the board.

2.0 Changes and improvements recommended to improve the performance and efficiency of the pulp mill are:

2.1 The existing pulp refiner in the line that produces pulp from waste paper should be repaired and commissioned immediately. Presently, for want of spare screens, the filter screens get jammed once every 2-3 hours. We recommend that a second refiner

be installed soon, to ease downtime delays, and cope with the extra load of refining brown-paper waste.

2.2 The virgin pulp line should be used only for preparing virgin pulp and pulp from well sorted, good quality, waste paper. It is suggested that **ONLY** the following kinds of pulp be used: unbleached kraft pulp, bleached kraft pulp and N.S.S.C. pulp, either in sheet or cake form.

2.3 A weighing scale should be installed near the slitter to assist in monitoring the production of each shift. Either a new weighing machine may be bought and installed, or the 2-tonne floor mounted scale at the waste paper collection point, may be relocated next to the slitter machine.

2.4 While a new connection from the main water line has recently been sanctioned to meet the large volume requirement of water, additional sources of water are still needed. Process water can be recycled by using improved methods of treatment/clarification. A waste water recycling plant will not only augment existing supply, but will also prevent the discharge of chemical-laden effluent into open drains.

2.5 The boiler in the pulp mill should be reconditioned and commissioned immediately.

2.6 A condensate pump removes the contents of the flash tank to the boiler-feed water tank. It should be replaced with a hot water pump, fitted with a stainless steel body and impeller.

2.7 The original two-stage reciprocating type air compressor can deliver 50 litres of air per second at an atmospheric pressure of 8.8 bar. This compressor is not in working order. It should be repaired and kept as stand-by.

2.8 Circuit breakers should be installed on all power supply lines, to protect motors and bus-bars in the event of any fault.

2.9 Condensate from the corrugator plant should be returned to the boiler feed water tank. A condensate return line (38mm x 40 metres long) should be laid.

2.10 Product quality testing is not being conducted regularly. Tests on the duplex liners and boards produced do not measure up to ISO 9000 norms. While it may be difficult to attain ISO 9000 standards immediately, KIBO Paper should commit itself to conform to the norms set by the Tanzania Bureau of Standards as a first step towards attaining ISO 9000.

2.11 The Quality Control sections at both the Pugu Road and Changombe plants should operate their own laboratories equipped with the necessary instruments and apparatus to:

- conduct regular tests on production output, and
- conduct investigative tests to improve product quality.

3.0 The recommendations below suggest changes in the maintenance of plant and equipment:

3.1 A regular programme to replace steam traps should be developed. At predetermined intervals of time, the steam traps should be removed in pairs and replaced with new or reconditioned traps. Used traps can be checked and repaired in the maintenance workshop. Two spare steam traps and 10 repair kits should be bought and kept in stock.

3.2 The rotary steam joint on the Yankee dryer should be greased carefully and regularly with high temperature grease (normal grease will burn, forming granules which wear out the bearings). Bearings used in this joint should conform to "C-3" clearance.

3.3 Excessive wear of the pump sleeve is common in paper mills. When a pump is opened and re-fitted, the "lybrant ring" should be re-positioned accurately. The sealing water-track should be cleaned regularly to ensure that cooling water flows into the lybrant ring.

Pumps and machines should be interlocked with a sealing water-line, pressure switch. An electric control panel prevents the starting of machines and pumps which use sealing water, unless the pressure-switch is first turned on.

B. Recommendations for improving production facilities at the printing and packaging plant:

1.0 The old corrugator line and the dead stock of materials in Production Hall-I should be removed. The hall may be converted into centralised stores for materials and spares.

1.1 The old corrugator line at Changombe has degenerated. If restored, it would serve as a standby facility, and provide additional capacity to meet market demand when needed. The other alternative is to sell it.

1.2 Restoring the auto stitcher machine in Production Hall-II would increase the output of larger bags.

1.3 Workers were found tying multi-wall sacks together with coarse rope. Manual handling like this damages the sacks. The automatic strapping machine had been repaired to rectify electrical and mechanical malfunctions and should be used.

1.4 On completion of each job, data on the production job card (material description, quality and weight) are not verified and checked. Checks on actual issues, final production yield and process loss are also not conducted. Internal audit procedures

should be set up to regularise the verification of issues from stock against consumption and process loss.

1.5 The printing and packaging plant at Changombe maintains stores of finished goods on behalf of the paper mill at Pugu Road. This practice should be discontinued. The paper mill should make necessary arrangements to store finished goods in its own premises.

1.6 The Die shop does not have drafting equipment to sketch die forms. Drafting equipment available locally should be bought and installed.

1.7 Six 30-tonne air conditioners cool part of Production Hall - III. This is excessive for the area to be cooled, resulting in high energy costs. Additional measures suggested for energy saving energy are:

- Two air conditioners in the printing bay are adequate
- The front door to the printing hall should be locked.
- Piles of corrugated boxes and other items blocking free air-flow should be removed.
- The air-compressor used for the printing machine should be moved out of the hall.
- Thermostat controls may be installed at various locations in the hall to control temperatures in different areas.

1.8 The air conditioned section of Production Hall - III comprising of the printing equipment should be partitioned and a false roof installed. This will reduce the volume of the room and reduce air conditioning costs as a result.

1.9 All cars are old. The annual cost of maintaining each car equals the cost of a new car. The old cars may be replaced in a phased manner.

1.10 Supplies department should have two small pickup trucks to handle movement of goods from vendors.

1.11 Lighting in the factory halls is grossly inadequate. Installing high pressure mercury vapour lighting fixtures should be accorded top priority.

1.12 Fire extinguishers, hose reels with rubber hoses and hydrant lines, appropriate for each type of fire at the paper plant, should be installed without any further delay. Security personnel should be trained in fire fighting techniques.

2.0 LIST OF MACHINERY AND EQUIPMENT TO BE ADDED OR REPLACED:

2.1 The Open Mouth Bottomer (OMB) machine (sack making machine) is very old and not able to match the production output from the tube plant. A new machine with higher volume output is needed.

2.2 One overhead electric crane (5 tonne capacity) should be installed to facilitate the handling and loading of paper rolls.

2.3 One 5-tonne capacity fork lift capable of lifting and positioning paper rolls, should be purchased.

2.4 Two high speed stitching machines are needed on the line that manufactures 2.50 Kg seed bags.

2.5 The Befanco machine used in forming and printing tea sachets is very old and spares are difficult to find. As the demand for tea bags and other square bottom sachets is large, a high volume, fully automatic machine should be installed soon.

2.6 Numerous die-cut and press tools are needed for the process of cutting label forms and shapes.

2.7 A typeset machine which can print on duplex board and flexible cartons may be purchased to save on sub-contracting costs. The success of this machine will depend on the availability of trained operators.

2.8 A 120 KVA generator should be installed to ease restrictions on production arising from power cuts and shortages.

Part III: Restructuring the organisation

1.0 KIBO Paper should be reorganised in a manner whereby the improved performance of each product in the market will contribute to the growth of the Company. This will best be achieved when the organisation structure is product and market oriented. The restructured organisation presented in Annexure - 1 can achieve this orientation. Highlights from the new chart are:

1.1 The Company should be led by a General Manager, who would be assisted by

a. Nine functional managers heading the following departments:

- administration,
- finance and accounts,
- internal audit,
- human resource development,
- marketing,
- quality control & customer service,
- purchase and materials,
- engineering and maintenance and
- security

b. Four division managers, each heading a distinctive product division as follows:

- the paper mill,
- the corrugated products plant,
- the packaging material & printing plant and
- the multi-wall bag plant.

1.2 The recommended organisation structure has eleven managers reporting to the General Manager. This situation will change over

the next two years as the General Manager through performance oriented leadership builds enough maturity and management skills within the organisation to spin off the product divisions into profit centres. At this point the Division Managers can report to the General Manager through a Deputy General Manager (Operations). At an appropriate time later, the functional managers handling Administration, Human Resource Development, Finance and Accounts, Marketing and Engineering can report to a Deputy General Manager (Corporate). The General Manager will then have five managers reporting to him: the two Deputy General Managers, Quality Control & Customer Service, Internal audit and Security.

1.3 Each division manager should be assisted by a product manager who will be responsible for the sales of the product of his division through the marketing department.

1.4 It is also proposed that the marketing department be provided with a market research executive and an export executive who will together promote business development in terms of data and action.

2.0 KIBO Paper is under the management control of its largest shareholder, Tanzania Karatasi Associated Industries Ltd. (TKAI), the holding Company for paper converting and printing related parastatal enterprises. TKAI has not provided KIBO Paper either the necessary management services, motivation, leadership or control to ensure good performance. We recommend that KIBO Paper be privatised and TKAI should divest its holdings in KIBO Paper. This will also result in direct savings in the latter's expenditure budget.

Part IV: Other recommendations1.0 MARKETING:

Kibo has large manufacturing capacity relative to the present sales, dictated in part by market size but in particular by diluted and indifferent marketing effort over the past few years.

It is apparent from the experience of the consultants that even the initial thrust given to marketing as part of the survival strategy has resulted in sustained improvement in sales & collection.

The marketing effort, therefore, must be relentlessly carried forward to aggressively tap both the domestic and export markets so that Kibo's current capacities can be fully utilised.

The priority product lines in terms of available idle capacity are multi wall sacks, corrugated packaging and printing.

For at least the next two years the marketing thrust must be provided personally by the General Manager in terms of building up relationship with key customers in Tanzania & abroad.

As a corollary to the above, existing product lines should be extended to include:

- multi-wall sacks for sugar/flour/animal feed packing
- printing labels for cans, bottles and other containers
- duplex board cartons for shoes, biscuits, tea, detergents and soaps
- coated duplex board for ice creams
- ice cream sachets, shopping bags (for export to Europe)
- laminated cigarette cartons for premium brands
- premium items like calendars, greeting cards, etc.

2.0 STORES DEPARTMENT

2.1 Centralised stores should be established at both plants for all in-coming and out-going materials.

2.2 The inventory records of the Stores department should be verified by the Internal Audit Department. Centralised stores will ensure that materials are inspected and checked before acceptance. The issue of dated chemicals can also be regulated.

2.3 The engineering stores should be divided into:

- stores for spare-parts, and
- stores for tools.

Proper record-keeping of machine spares should be made mandatory.

2.4 Critical spares for machines and equipment should be identified and ordered for stock. Outdated and surplus machine spares should be sold or disposed immediately.

3.0 TRANSFER PRICING

Fluting board, test liner board and duplex board are transferred to the production department at prices below their market value. The paper plant registers a loss on each transfer because of this erroneous pricing policy. In 1991, the paper plant produced 2,056 tonnes of board. At the transfer price of TSh. 80,000 per tonne, the value of production was TSh. 163,840,000. At this value, the paper mill registered a loss of TSh. 4,332,000. If the paper mill could realise the market price of TSh. 132,000 per tonne, the value of production would have been TSh. 271,392,000 and the mill would have realised a profit over TSh. 100 million.

4.0 RECALCULATING MACHINE HOUR RATES:

4.1 At present, machine hour rates are separately calculated based on 1:1 value for variable and fixed overhead. This presumption is wrong. Administrative overhead, factory overhead, selling & distribution overhead and the cost of money should be taken separately as a percentage of the cost of production after accounting for direct cost.

4.2 Machine hour rates should be calculated on direct operating expenses for power, utilities, repairs & maintenance, direct labour and consumables.

ACKNOWLEDGEMENTS

There are many people whose unstinted support throughout the course of the diagnostic study has been of immense value. Without their assistance it would not have been possible to complete the study within the prescribed time schedule.

We wish to place on record the professional cooperation rendered by Mr. J.A. Msanjo, Acting General Manager, KIBO Paper Industries Limited. We are also grateful to the staff and workers of KIBO Paper Industries Ltd., who gave their time and assistance, and accepted the team of consultants as part of themselves, making the latter's task easier and more productive.

Grateful thanks are due to the National Co-ordinator, Mr. J.G. Mrema and his colleagues in the Government whose cooperation and assistance have contributed significantly in the preparation of this report.

Our sincere appreciation, for the continuous guidance and encouragement given by the UNIDO Country Director, Mr. Alexandre Krassiakov and the Programme Officer, Ms. Anya Kostian.

July 1993
Bangalore, India


AMARNATH KAMATH & Co.

ANNEXURES

KIBO PAPER INDUSTRIES LIMITED

LIST OF ANNEXURES

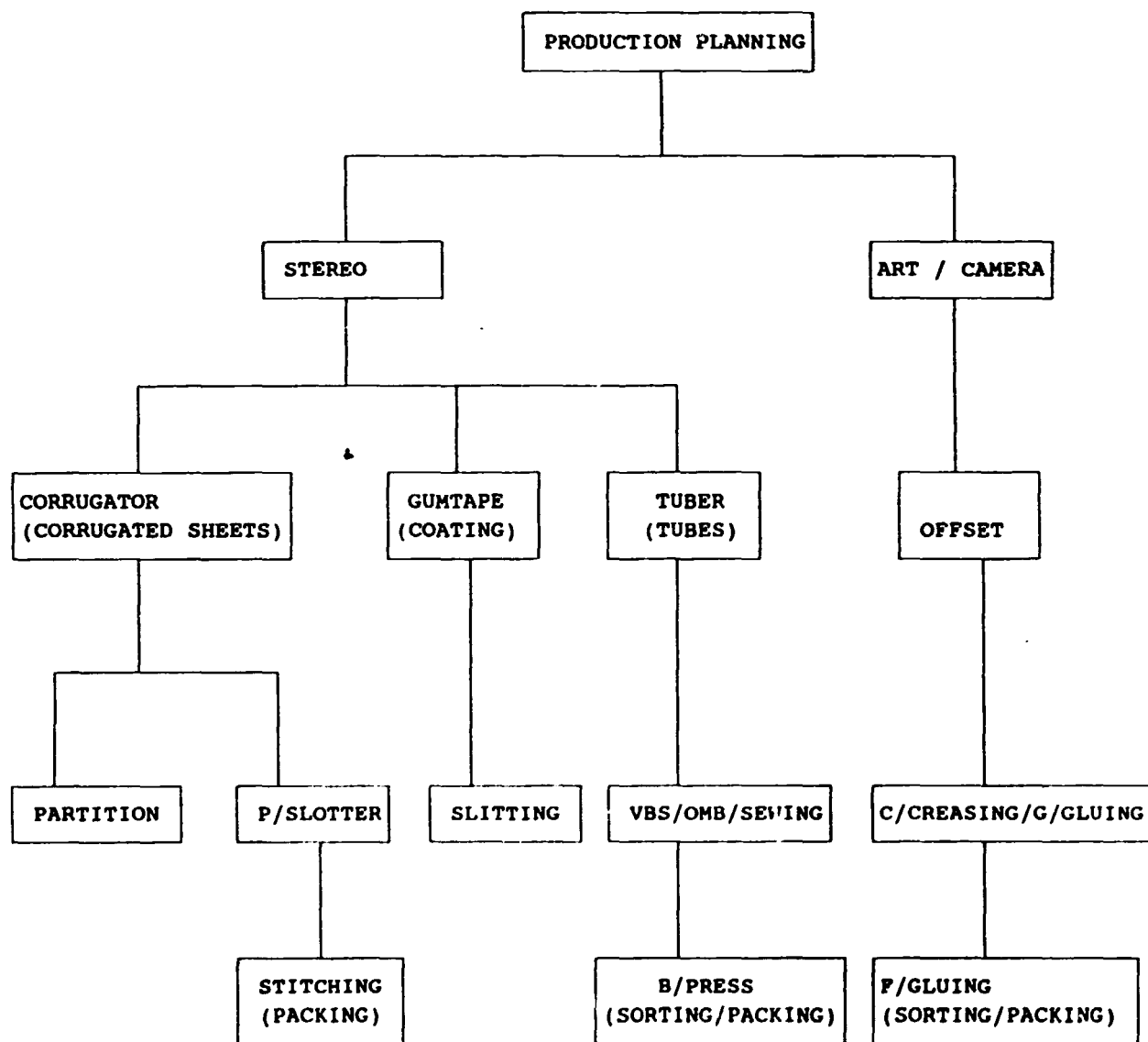
- I. LIST OF ORGANISATIONS, COMPANIES AND PERSONS CONTACTED
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- XVIII. PROGRESS REPORTS ON THE DIAGNOSTIC STUDY OF KIBO PAPER
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- XIX. GENERAL DESCRIPTION OF DIGITAL WEIGHT AND MOISTURE CONTROL EQUIPMENT

ANNEXURE-ILIST OF PRINCIPAL ORGANISATIONS, COMPANIES AND PERSONS CONTACTED
BY M/S AMARNATH KAMATH & CO.

Organisation/Company	Person(s) met
I. Government departments:	
Ministry of Industries and Trade	Mr. Cleopa Msuya Hon. Minister
	Mr. N'hasa Director
	Mr. Januarius G. Mrema Senior Industrial Economist and Co-ordinator for the project
	Mr. Uledi Economist
	Mr. Mbele Economist
UNIDO	Mr. Alexandre Krassiakov Unido Country Director
	Ms. Anya Kostian Junior Professional Officer
EADB	Mr. A.Z. Nkya Resident Manager - Tanzania
	Mr. Bernard M.O. Mboha Appraisal Officer/Economist
Tanzania Investment Bank	Mr. W.A. Mlaki Director of Projects Supervision
	Mr. Matembele G. Manager Project Implementation
Tanzania Cigarette Co. Ltd.	Mr. Timon M. Msangi General Manager
	Mr. Victor K. Mwambalasa Purchasing Manager
Matsushita Electric Co. (E.A.) Ltd.	Mr. K. Muto Managing Director
Kilombero Sugar Co. Ltd.	Mr. L.K. Sida Finance Manager
National Milling Corporation	Mr. V.M. Semesi Director General

Ubungo Spinning Mill	Mr. Stan F. Mwalongo Ag. General Manager
Interchick Co. Ltd.	Mr. Pinkerton General Manager
	Mr. John K.R. Shumbusho Chief Accountant
National Poultry Co. Ltd.	Mr. T. Bampamuchi Planning, Production and Marketing Manager
Rajani Industries Ltd.	Mr. Shimir J. Rajani Director
Kibo Paper Industries Ltd.	Mr. J.A. Msanjo Ag. General Manager
	Mr. H.K. Kannole Manpower & Admn. Manager
	Mr. A. Lipumba Mill Manager
	Mr. V.M.K. Lyakurwa Ag. Marketing Manager
	Mr. L. Malimi Quality Control Manager
	Mr. D. Chelele Asst. Production Manager
	Mr. C. Ng'wapaula Ag. Factory Engineer
	Mr. L. Kimaro Ag. Mill Engineer
	Mr. O.S. Mpandeni Financial Accountant
	Mr. A. Mbogo Senior Internal Auditor
	Mr. J. Kimaro Senior Supplies Officer
	Mr. E. Macha Supplies Officer
	Mr. H.O. Mkeiyo Security Officer
	Mr. R. Ally OTTU Chairman

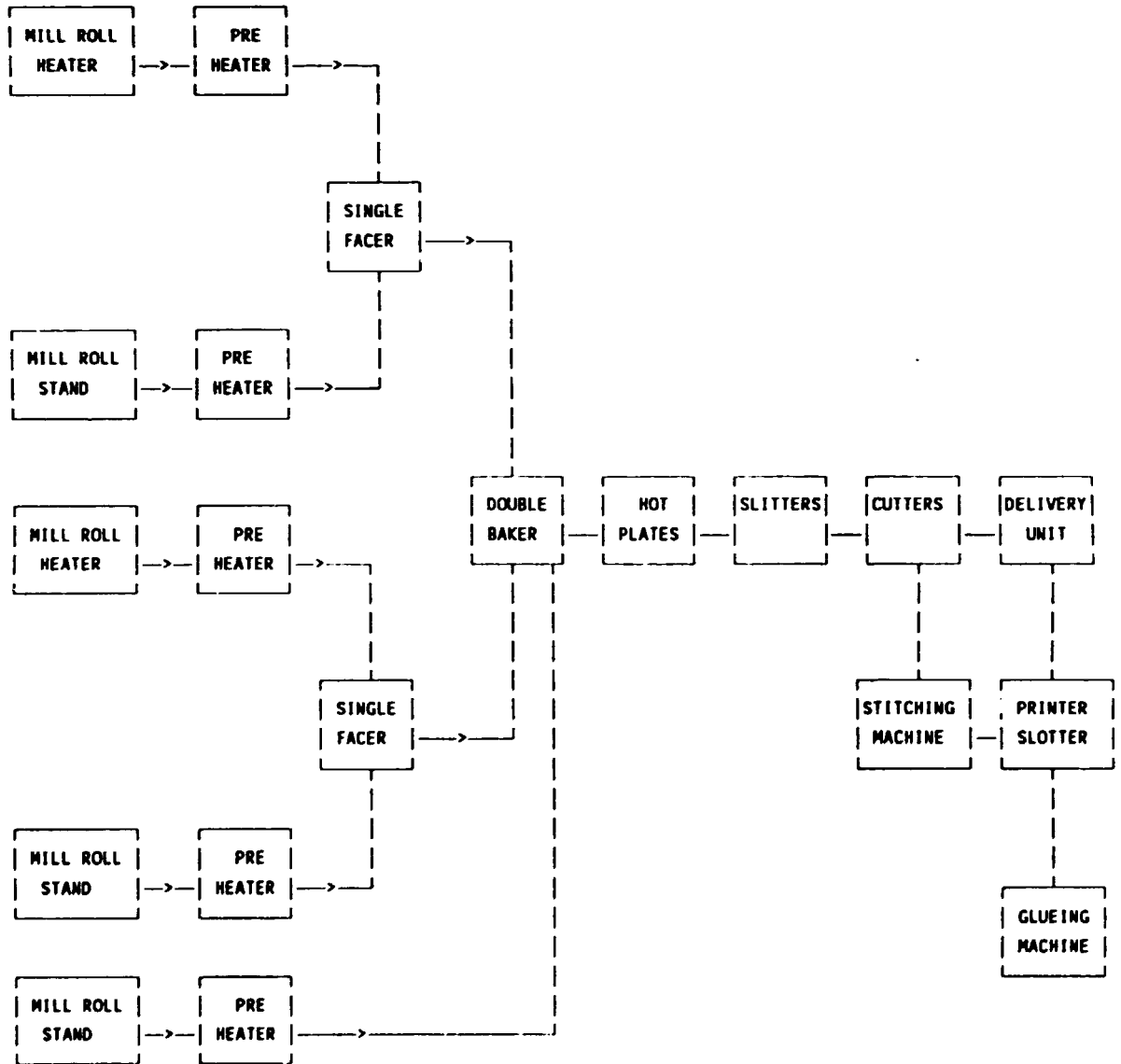
ANNEXURE II (A)

PRODUCTION FLOW CHART FOR THE PACKAGING PLANT

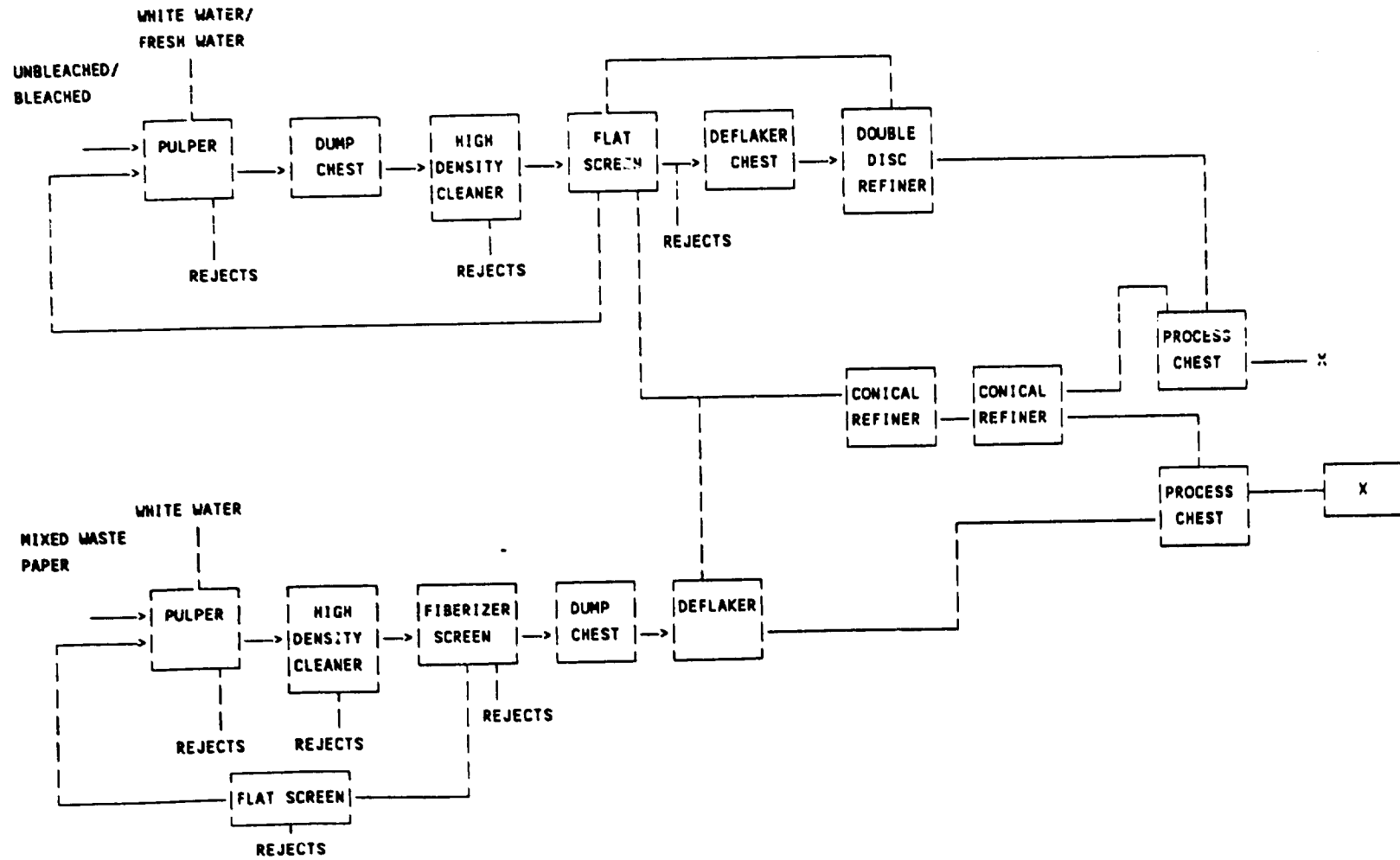
KIBO PAPER INDUSTRIES LTD.

PUGU ROAD DIVISION

FLOW DIAGRAM FOR CORRUGATOR II MACHINE



KIBO PAPER INDUSTRIES LTD.
PUGU ROAD DIVISION
FLOW DIAGRAM FOR PAPER MILL

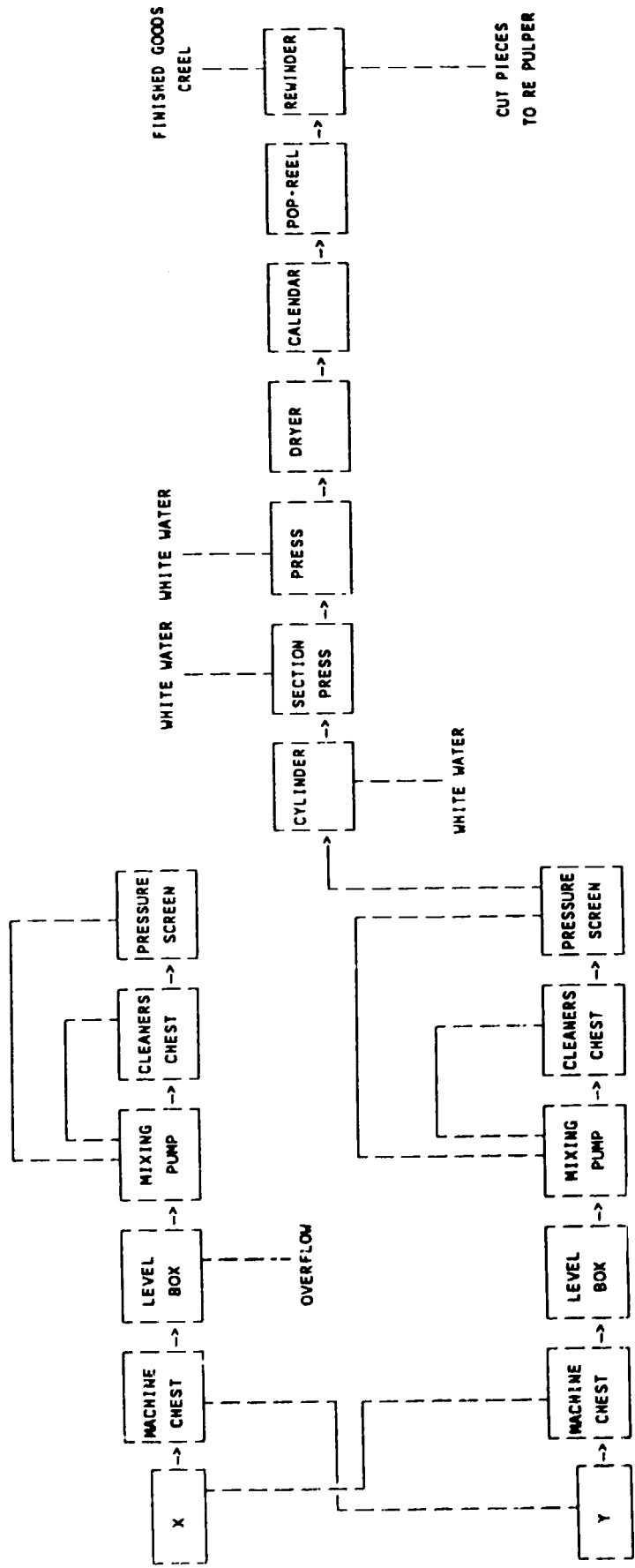


ANNEXURE II (B) (Contd.)

KIBO PAPER INDUSTRIES LTD.

PUGU ROAD DIVISION

FLOW DIAGRAM FOR PAPER MILL



ANNEXURE IIIPROPOSALMONTHLY INCENTIVE - PHASE I FEBRUARY - DECEMBER 1993

1. Applicable to all category of employees (permanent rolls)

a. Base performance figure TSh. 65 million (turnover achieved in December, 1992)

b. For the purpose of this incentive scheme, production and sales figures will correspond to sales turnover actually achieved less value of material rejected by customers. Quality control rejections will continue to be excluded from production and sales despatches to customers.

c. Incentive will apply to the difference in value between target sales. Turnover for the month less TSh. 65 million less shortfall in collection between value of sales and money collected from customers:

	TSh. Million
ex. Target TSh.	80
Less: Base figure	65
Balance	<u>15</u>
Less: Shortfall in collection 80 m - 72 m	8
	-
Amount qualifying for incentive	7
	-

d. However, if collection exceed target sales value, the excess will be added for incentive purpose:

ex. Target TSh.	80
Less: Base figure	65
Balance	<u>15</u>
Add: Excess collection 85 m - 80 m	5
	-
Amount qualifying for incentive	20
	-

ANNEXURE III (Contd.)

e. The percentage of salary and wages bill to total turnover in 1991 was approximately 5.9%. This will be rounded to 6%. The percentage of incentive amount from total qualifying amount will be 6%.

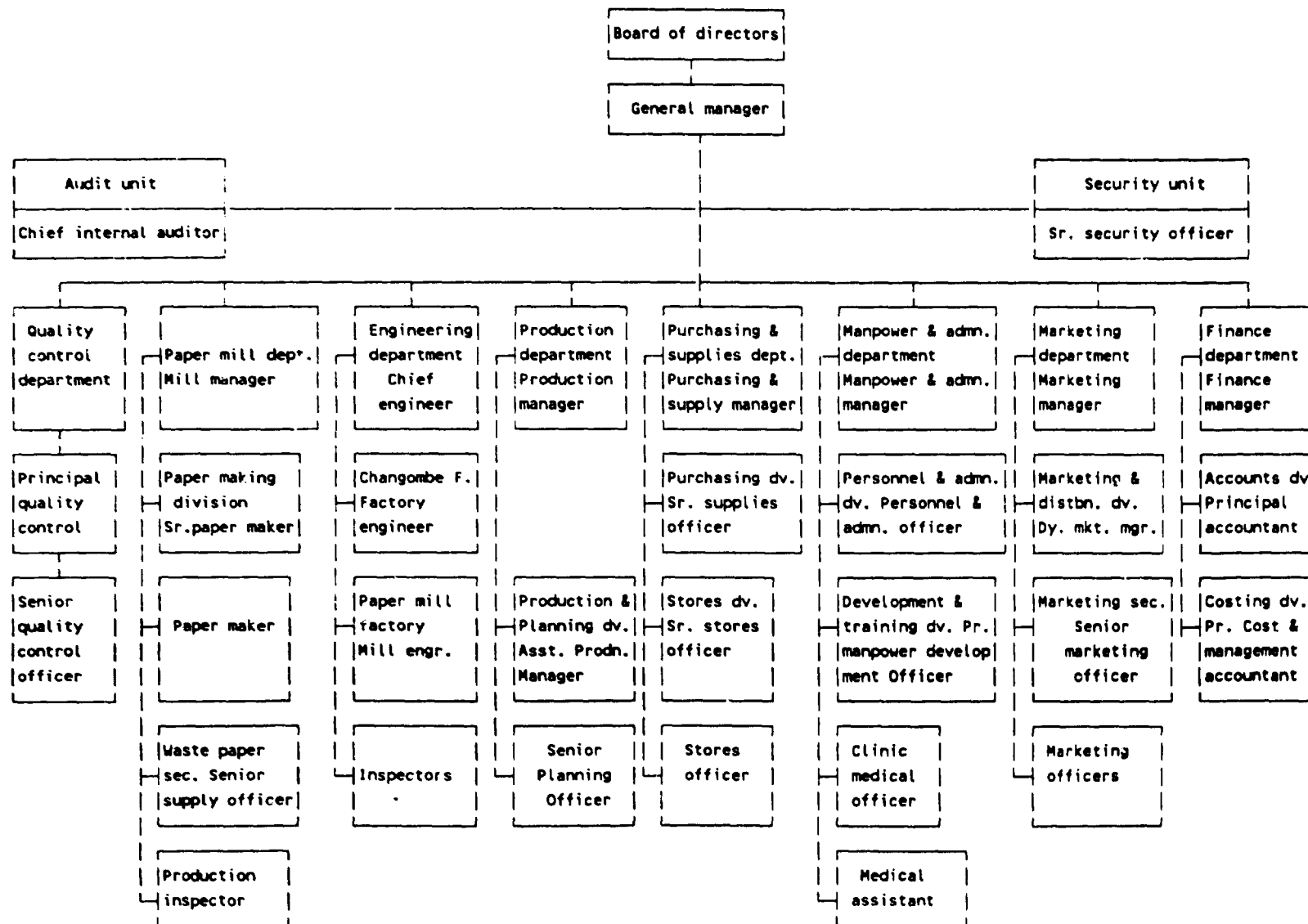
ex. A. Qualifying amount	7
Incentive amount	
6% of 7 m	0.42
B. Qualifying amount	20
Incentive amount	
6% of 20 m	1.2

f. No. of employees: 526 (as per finance department)

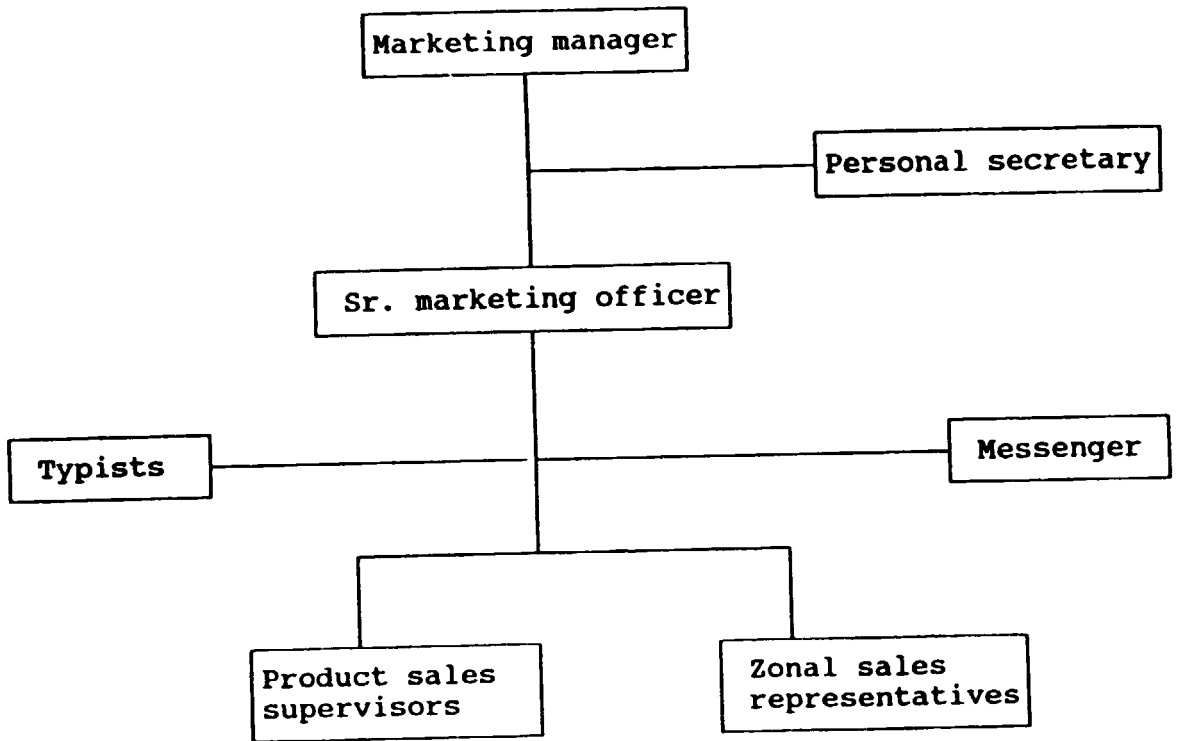
Incentive per employee: Case A : TSh. 798.50
 Case B : TSh. 2281.40

ANNEXURE IV

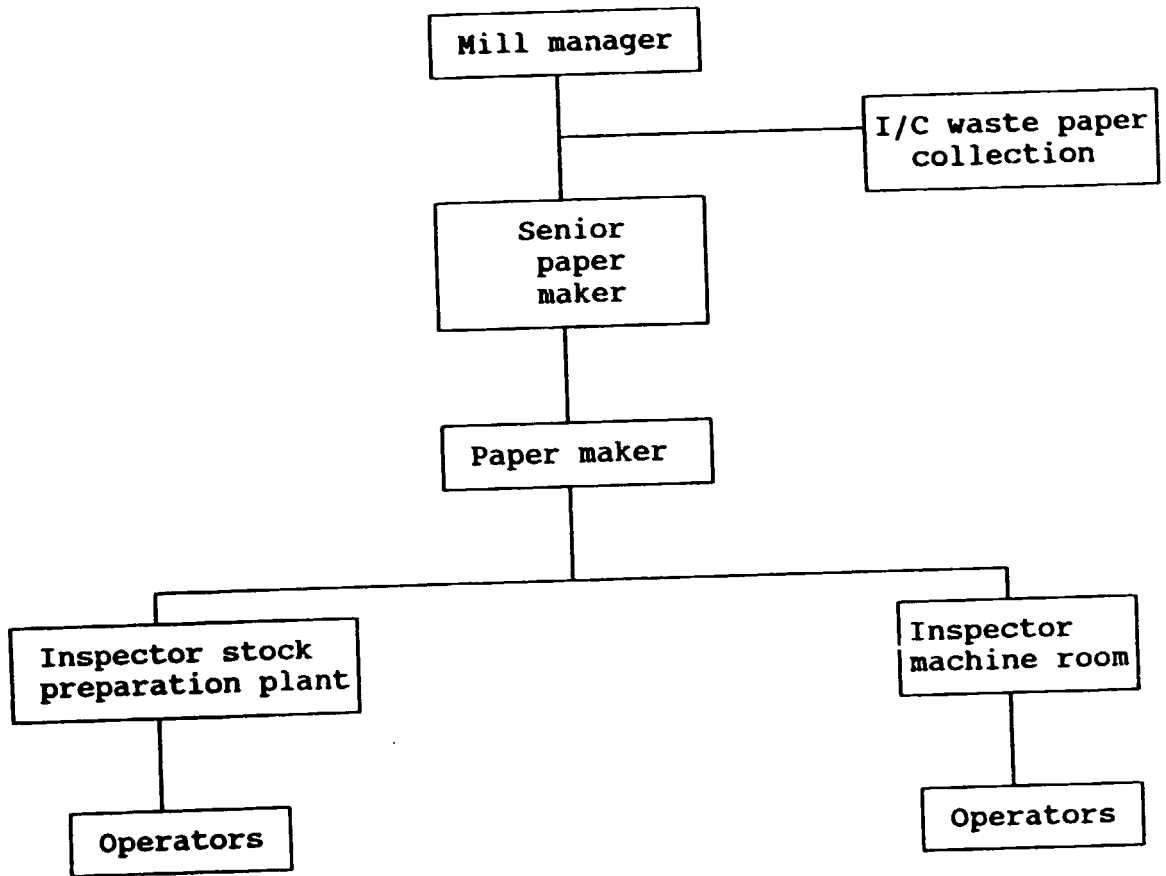
ORGANISATION STRUCTURE AT KIBO PAPER INDUSTRIES LTD.



MARKETING DEPARTMENT ORGANISATION STRUCTURE

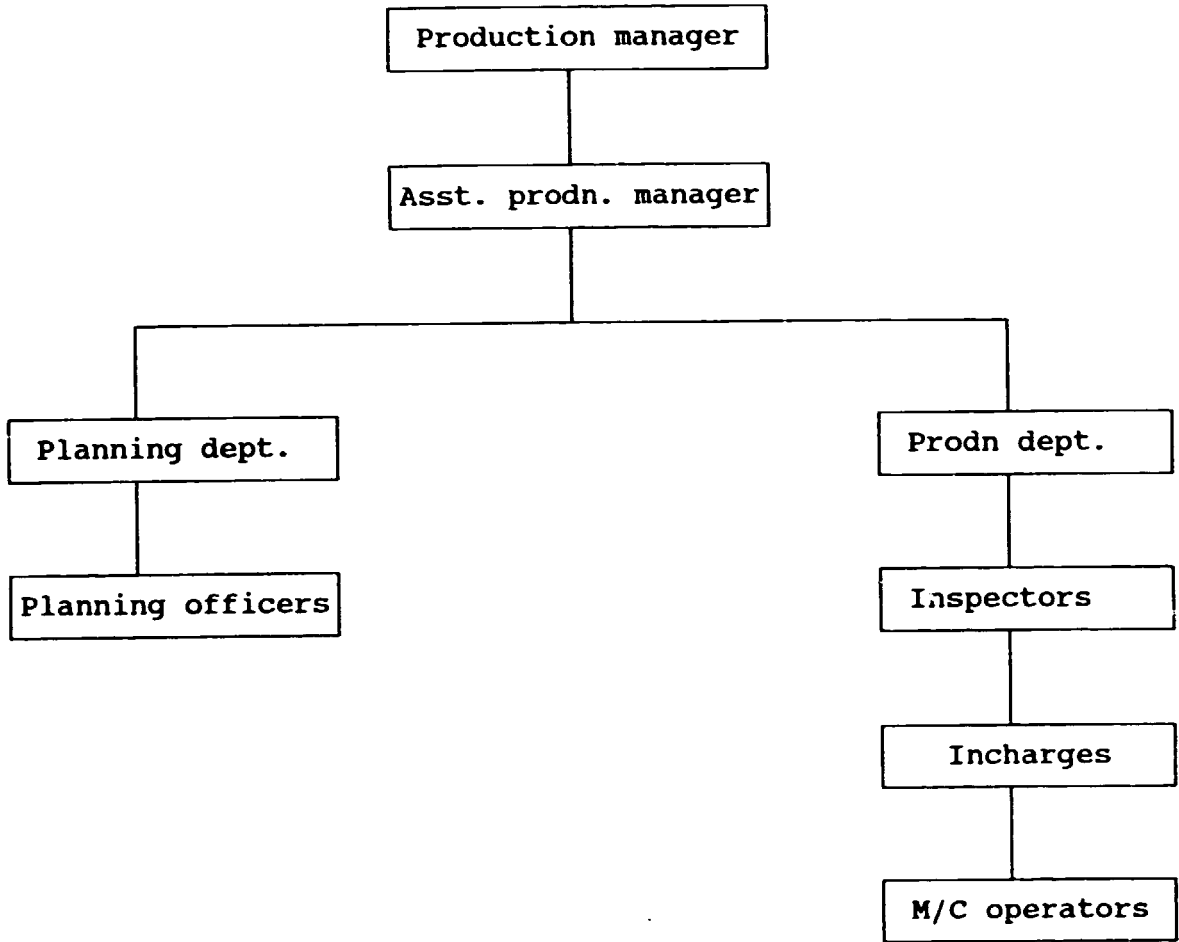


PAPER MILL ORGANISATION CHART



ANNEXURE IV (C)

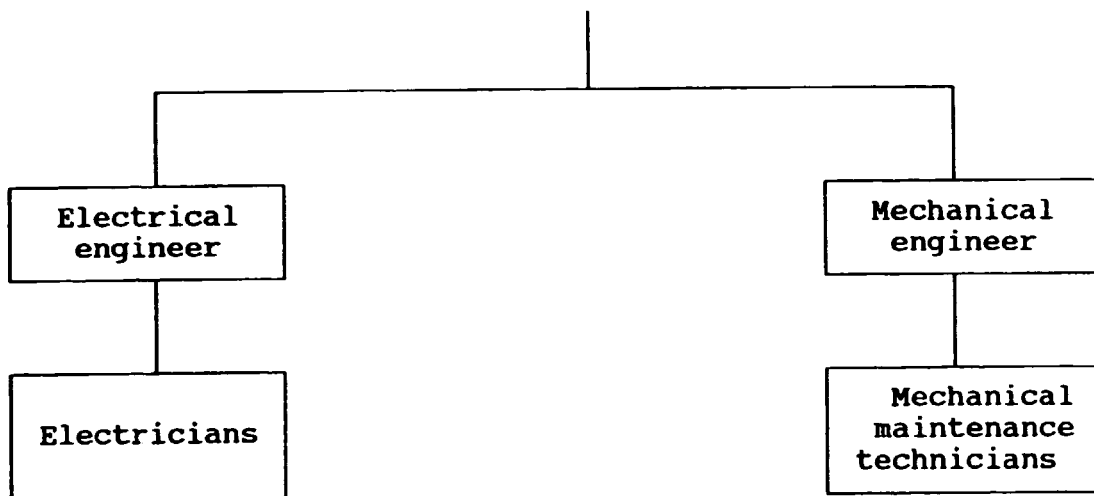
PRODUCTION DEPARTMENT



ANNEXURE IV (D)

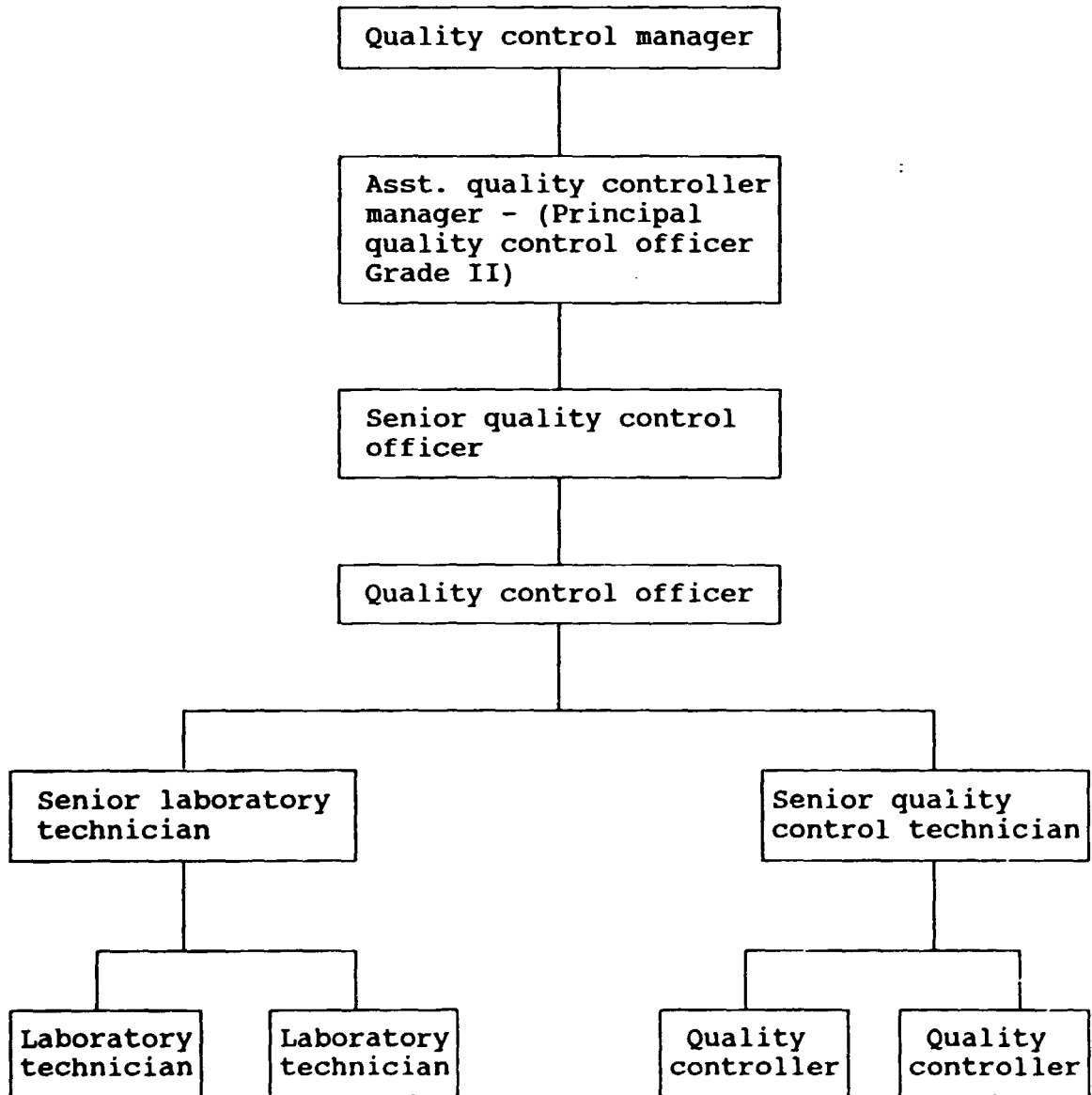
MAINTENANCE DEPARTMENT

Factory Engineer (Changombe)



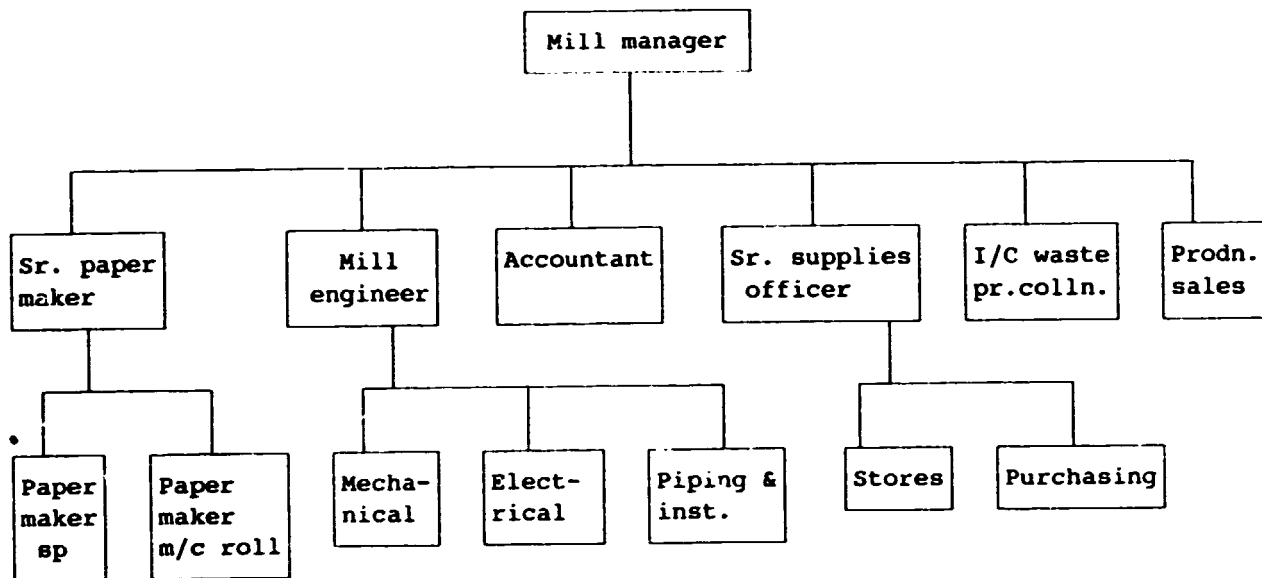
ANNEXURE IV (E)

QUALITY CONTROL DEPARTMENT



ANNEXURE IV (F)

ENGINEERING DEPARTMENT
PROPOSED ORGANISATION CHART



ANNEXURE VSUMMARY OF THE MINUTES OF THE MEETING HELD ON 10.11.1992
FOR INTRODUCING MR. RAJU SWAMY - SENIOR CONSULTANT

Prepared by Mr. H.K. Kannole

<u>PRESENT :</u>	Mr. Raju Swamy	- Senior Consultant
	Mr. J.A. Msanjo	- Ag. General Manager
	Mr. H.K. Kannole	- Manpower dev. & Admn. Manager
	Mr. A. Lipumba	- Mill Manager
	Mr. V. Lyakurwa	- Ag. Marketing Manager
	Mr. L. Malimi	- Quality Control Manager
	Mr. D. Chelele	- Asst. Prodn. Manager
	Mr. C. Ng'wapaula	- Ag. Factory Engineer
	Mr. L. Kimaro	- Ag. Mill Engineer
	Mr. A. Mbogo	- Senior Internal Auditor
	Mr. J. Kimaro	- Senior Supplies Officer
	Mr. E. Macha	- Supplies Officer
	Mr. O. Mkeiyo	- Security Officer
	Mr. R. Ally	- OTTU Chairman

1. Introduction by Ag. General Manager

The Ag. General Manager introduced Mr. Raju Swamy - Senior Consultant, to the senior staff who attended the meeting in the library of the company. Mr. Raju is a special consultant, expert in rehabilitating loss making industries. He has been sent to Kibo by the Ministry of Industries and Trade.

2. Self introduction by Mr. Raju Swamy

Mr. Swamy informed the senior staff who attended the meeting that he has been sent by UNIDO to work in Tanzania, Uganda, Zambia to rehabilitate loss making industries. In Tanzania he will attend to three industries only - two public and one private unit. It is fortunate that among the three industries, Kibo Paper Industries Ltd is included.

3. Working procedure

The expert Mr. Swamy will be using one of the marketing office presently occupied by Mr. Lyakurwa the Ag. Marketing Manager. Anybody who has problem to discuss with him can do so even without an appointment. However, he will be holding meetings with the senior staff every Tuesday at 2.00 p.m. or whenever the need arises to discuss important issues which will help to rehabilitate our company from loss making to profit making. Also for quality improvement the customers have the monopoly to decide which product is in a good quality he prefers. In general his mission is meant for evaluation of management or liberation in managing industries better than the current situation.

ANNEXURE VISUMMARY OF THE MINUTES FOR THE EXTRAORDINARY MANAGEMENT
MEETING HELD ON WEDNESDAY 11.11.1992

Prepared by Mr. H. K. Kannole

<u>PRESENT</u> :	Mr. J.A. Msanjo	- Ag. General Manager Chairman
	Mr. Raju Swamy	- UNIDO Consultant
	Mr. H.K. Kannole	- Manpower div. & Admn. Manager
	Mr. A. Lipumba	- Mill Manager
	Mr. V. Lyakurwa	- Ag. Marketing Manager
	Mr. L. Malimi	- Quality Control Manager
	Mr. D. Chelele	- Asst. Prodn. Manager
	Mr. C. Ng'wapaula	- Ag. Factory Engineer
	Mr. J. Kimaro	- Senior Supplies Officer
	Mr. Mpandani	- Financial Accountant

Agenda : Survival strategies for three months etc.1. Introduction

The Ag. General Manager informed the members who attended the meeting that our bank account has been blocked because of the imported sack-kraft L.C. of 114m/= which has been debited in the account without our knowledge. The transactions for the importation of 500 tons of sack-kraft from West Germany were processed by the General Manager Mr. Koromo who has been locked out of the office since 20.10.92. Unfortunately since the Ag. General Manager reported for duty there have been no briefing or handing over notes to him, consequently he knew nothing about the consignment. In the circumstances therefore we cannot operate our bank account. We shall have to operate on cash basis depending on our daily sales collections. He further reported that he has negotiated with the bank authority to extend the payment of the 114m/= for three months. In order to be able to clear the amount we need to have survival strategies for the next three months.

2. The possible survival strategies

i. Finished products: It was recommended that the finished goods should have zero inventory. Customers should be approached to collect their products they ordered. The Marketing Manager raised the problem of transport shortages. As a matter of urgency it was resolved that TX 11087 be used by the marketing department when the need arises. Also SU 26689 which is used by UNIDO Consultant may be used when it is free.

ii. Debts collections: Debts collections is the responsibility of the marketing department. At this crucial time debts collections should be one of the most urgent priorities. Supporting staff from finance department should be assigned to the Ag. Marketing Manager. Debtors owing the Company more than one year may be given a discount of 2%. For the purpose of improving our financial position quality control manager is assigned to visit Arusha and Tanga customers to check quality of boxes and make possible collections of debts.

iii. Auctioned fixed assets: There were machines and motor vehicles which were auctioned on 05.09.92. The amount for the assets approved by the board should be collected. MDAM to follow up immediately.

iv. Sack-kraft consignment: The consignment should be collected without delay, processed and sold in order to get money to pay the bank. Otherwise we will not be allowed to open any other letter or credit.

v. Utilisation of idle hours: Manual work should be planned in order to utilise idle hours when there is no electricity. Also in the absence of electricity it is good time for machines cleaning and other maintenance.

vi. New customers: Any customers who come must pay in advance. Credit facilities should not be encouraged. Good customers (A class) should be invited to have discussion with the General Manager on matters pertaining good relationship and regular payments. The Ag. Marketing Manager informed the members expected collections/sales per week as between 25-30m/=.

vii. Disposal of uncollected boxes: It was reported that there are boxes which were made for some customers and they have not collected them for long time some ever a year. Resolved that all possible means should be sorted out to sell them.

viii. Manufacture of envelopes: In order to increase our sales we should introduce the production of envelopes. Sizes and production coats should be worked out without delay and present them to the Ag. General Manager.

ix. UNIDO Consultant: Mr. Raju Swamy is a consultant sent to Kibo to rehabilitate the Company in all departments in order to make profit. It was therefore emphasized that we should made use of him whenever he is available at the company. He will be at Kibo for one month. He is a competent expert whom will help to improve our company. No appointment is needed in case someone especially heads of departments want to see him and discuss about any problem or idea which arises.

ANNEXURE VIIMINUTES OF THE MEETING BETWEEN UNIDO EXPERTS AND
ACCOUNTS DEPARTMENT LEADERS HELD ON 27.11.1992

Prepared by Mr. M. M. Amani

PRESENT :

Mr. J.A. Msanjo	- Ag. General Manager
Mr. Raju Swamy	- UNIDO Consultant
Mr. Phiroze Bhathena	- UNIDO Consultant
Mr. C.R. Seetharam	- UNIDO Consultant
Mr. Bruno Mwgofi	- Ag. Finance Manager
Mr. L. Mbawala	- Cost Accountant
Mr. M.M. Amani	- Senior Internal Auditor

Agenda : Financial health of the Company.

TOPIC	REMARKS AND DECISION
1. TIB and EADB Loans	<p>Long term loan dues from the two banks on 31st May 1992 stood at T.Shs. 187 million</p> <p>Default in repayment of the long term loans, has been caused by some financial hardship/constraints</p> <p>By now, negotiations are being carried out to re-schedule payment terms</p> <p>Thus, it was resolved to make distinct breakdown of the TIB & EADB loans, in respect of principal interest, arrears outstanding etc. Such information must be disclosed to management for any meaningful action</p>
2. Sales Tax Dues	<p>Sales tax overdue by 31st May 1992, was approximately TSh. 170 million</p> <p>Of course the above figure needs proper scrutiny and subject to adjustment before full settlement because there was a technical dispute relating to multiwall sacks</p> <p>NB: Acting General Manager has insisted to settle other current sales tax promptly. That applies (also) to all statutory dues</p>

ANNEXURE VII (Contd.)

TOPIC	REMARKS AND DECISION
3. Bank overdraft	<p>Our overdraft limit approved by bank is only T.Shs. 50 million</p> <p>Unfortunately by Nov. 27th, 1992 our balance was at a critical position, i.e. it stood at TSh. 72 million</p> <p>Thus consultants stressed to have strong action plan to curtail the position i.e. to review credit-policy & strengthen debt collection procedures</p>
4. Financial analysis (a) Sales	<p>Analysis of sales from 1988 to 1991 reveals that the increase in sales value was only caused by change in prices, since there was a decline in volume of products sold</p>
(b) Cost of sales	<p>Cost of sales to net sales percentage for the fiscal years 1988 to 1991 were on the higher side, i.e. upto 89%. Under such circumstances it is difficult indeed to realise any profit. It was resolved that careful cost reduction exercise must at least be applied</p>
(c) Administration & establishment expenses	<p>Such expenses increased from 16% (1988) to 22.6% (1991). Resolved that significant contributing factors must be highlighted by "MDAM" etc. in order to monitor or control such costs</p>
(d) Stocks & stores	<p>Analysis of raw materials and finished goods from 1988 to 1991 showed increase in percentage from 30% to 46% respectively</p> <p>Resolved that detailed evaluation has to be made, so that old stocks, idle finished goods and scrap including wastes be sold to generate revenue</p> <p>NB: According to standards, stocks and stores are supposed to be maintained at 15% only. Above this percentage there will be cost/burden to the Company</p>

ANNEXURE VII (Contd.)

TOPIC	REMARKS AND DECISION
(e) Selling & distribution expenses & financial charges	Analysis of these expenses from 1988 to 1991 revealed substantial increase in percentage.
(f) Trade debtors	Trade debtors shot up from 9% (1988) to 25% (1991). The write off for bad debts also increased substantially NB: Ideally debts should be brought down to 8% or 10% (30-40 days) only. That is a phenomenon for business control
(g) Sales, fixed & variable costs Vs. break even point (BEP)	In this case, analysis from 1989 to 1991 showed that sales have been falling and BEP increasing. That is a critical situation as far as business is concerned
(h) Conclusion	According to above discussion, it is a challenge to management. Thus let all company workers be made aware of the situation and up-date their attitude towards work to revive this company

ANNEXURE VIIIOFFICE MEMORANDUM DATED 27.11.1992

Ref: SIA/92/34

From: Senior Internal Auditor

To : Ag. General Manager

Re: Finished goods lying in factory godown for a long time

Please, note that by 13th November 1992, values for finished goods, lying in the factory godown for a long time amounts to T.Shs. 18,075,881/-.

Values in respect of each division as hereunder:

Division	Amount in TSh.
1. Packaging	2,586,560.00
2. Partition	4,327,817.00
3. Corrugator I	8,014,000.00
4. Corrugator II	2,907,600.00
5. Guntape	239,904.00
	<hr/>
Total	18,075,881.00
	<hr/>

Details of such goods in respect of job-card, customer's name, quantity, respective values and some remarks as shown in the attached Exhibit I.

Please, we forward this information to you for perusal and any management action necessary i.e. either to allow sale to other parties or disposal (re-cycling).

Thanking you,

M.M. AMANI

C.C.: Assistant Production Manager

C.C.: Ag. Marketing Manager

C.C.: Ag. Finance Manager

C.C.: Mill Manager

ANNEXURE IXMEETING WITH UNIDO EXPERTS ON NOVEMBER 30, 1992

Prepared by Mr. C. Ng'wapaula

<u>PRESENT</u> :	Mr. Raju Swamy	- UNIDO Expert
	Mr. Phiroze Bhathena	- UNIDO Expert
	Mr. C.R. Seetharam	- UNIDO Consultant
	Mr. Chelele	- Asst. Prodn. Manager
	Mr. J. Kimaro	- Senior Supplies Officer
	Mr. Macha	- Supplies Officer
	Mr. Kimaro	- Ag. Mill Engineer
	Mr. C. Ng'wapaula	- Ag. Factory Engineer

Technical experts observations:1. Stores

Stores are located in small nine areas which makes the control of materials and efficiency in general to be poor.

Comments

- i. Leaking the possibility of centralisation by locating the incoming goods and outgoing goods in one roof.
- ii. Engineering consumable goods eg. nuts, washer, pins etc. to be manned by engineering department.
- iii. All finished goods from machine hall should be transferred to store as incoming goods and the left over pieces eg. reels as well as returned to store for future processes. Despatching of goods should be done from stores (while transfer notes can be applied if necessary)
- iv. Suggested that all finished goods be kept under marketing department then through inspection of the goods (finished) should be done to avoid mixing with rejected or poor quality goods. Rejected goods/materials should never be under marketing.

Safety requirements

- i. Goods could not be left lying on the floor to avoid dust, humidity (water) etc. eg. finished sheets.
- ii. Customers should not be allowed to get in the factory to check their goods only authorized visitors may be allowed to see our machines, goods in progress etc.
- iii. Customers service room should be allocated.
- iv. Paper mill and corrugator II must be allocated with a store to preserve finished goods.

v. Establishing a list of spare parts in store which will no longer have a value to our company for disposal.

vi. All spare parts should be identified according to their machine/models.

vii. Spare parts procurement per year should be increased in the company budget.

Painting shop

Suggestions

1. Air conditioned machine room should be kept clean, free from dust.

- remove all finished corrugated boxes
- at least two boys should be made responsible for cleanliness
- All incoming doors should be closed all the time to control the temperature of the room

2. L/M machine should be shifted from the packaging (offset) room to avoid dust from corrugated boxes.

ANNEXURE XMEETING WITH UNIDO EXPERTS HELD ON 8TH DECEMBER 1992

Prepared by Mr. Ng'wapaula

PRESENT :

Mr. Raju Swamy	- UNIDO Expert
Mr. P. Bhatena	- UNIDO Expert
Mr. Msanjo	- Ag. General Manager
Mr. Cheiele	- Asst. Prodn. Manager
Mr. Kimaro	- Senior Supplies Officer
Mr. Ng'wapaula	- Ag. Factory Engineer

Technical experts observations - Mr. P. Bhatena1. Multiwall division

Production volume at both VTB's and new tuber is very low. While new tuber produces less than 30,000 tubes per day and two VTB's produce less than 30, tubes per day (each VTB is supposed to produce at least 20,000 tubes and tuber machine at least 45,000 per day).

It was recommended that technicians to be very close to the machine to clear noted fault immediately to avoid much downtime. As well as the new tuber gripping shaft must be rectified to get rid of poor gripping which result to a substantial amount of wastes. Factory Engineer will liaise with production manager for a suitable machine stoppage to remove the shaft and take specifications.

2. Glue tank at the tubing machine

The glue tank and pot which is left aside since the installation of the machine should be utilised to reduce travel distance from the existing glue mixing room to the machines. A new water supply system and allocation of the tank within the division should be allocated. Factory engineer have to look for all possibilities for the installation of the tank and pot.

3. Strapping machine

The strapping machine (balling sacks) in multiwall division is not used due to lack of its typing thread. The supplies personnel were looking for an adequate type of thread.

4. Flexo printings

It was noted that the flexo printings from tuber machines are not properly kept. A production manager was told to look for the possibilities of hanging them to maintain their quality.

5. Fire hoses

Most of fire fighting equipments are not carefully maintained eg. water hoses, fire extinguishers etc. The security section should take appropriate action to ensure all fire fighting gears are in order.

ANNEXURE X (Contd.)6. List of disposed items (products)

The supplies department should finish up the list of all items to be disposed.

7. Poor lighting system

All our machine rooms have poor lighting systems due to failure of tubelights. It was suggested to install new tube fittings at the packages division. The exercise can be carried in phases.

8. Manpower inventory

The manpower inventory should be made throughout the industry to know exactly everybody with his activity.

9. Cutting dies

The die pressing machine which is grounded due to unavailability of dies should be kept in use. The factory engineer has to find areas where dies can be obtained eg. HPTC, UDSM etc.

10. Pressure gauge for auto stitcher

The pressure gauge of the compressor for the multiwall auto stitcher is not in place. The factory engineer was asked to ensure the part is replaced and the machine is kept on operation.

11. Drawing board for die making room/engineering department

Quotations for the above will be completed soon. The factory engineer is taking care.

12. Cleanliness

General cleanliness at the machine rooms (multiwall and packaging) should be strengthened. The assistant production manager was reminded for this.

ANNEXURE XIOFFICE MEMORANDUM DATED 04.01.1993

From: APM - Project Coordinator

To : Acting General Manager

Ref: Sugar bag project

Kindly note that the above project will start on 02.01.1993 with 3 workers from engineering 3 from multiwall and a project coordinator from production.

For the success of the project the group members has asked me to forward to you the following:

- a. Time has been reduced to from one month to two weeks
- b. Each project member to be given 4000/- daily
- c. Funds for spares to be readily available
- d. Transport specially the mini-bus to take them home if need arises
- e. Upon successful completion of the project and successful testing by Kilombero Sugar Company the group to be rewarded T.Shs. 300,000/-.

Lastly the group members wants to see you on 05.01.1993.

Best Regards,

D. CHELELE

ANNEXURE XIIOFFICE MEMORANDUM

Dated: 24.11.1992

From : Acting Marketing Manager

To : C.T.M.

Ref: Marketing department staffing proposal & restructuring

We have proposed to have two different categories of staff in the marketing department. There will be product Sales Supervisors & Sales Representatives. The following are proposed names for both categories.

1. Product Sales Supervisors

Packaging - Mr. Lukwaro Masambaji
Multiwall - Mr. A.P. Nyanganyi
Corrugator - Miss O. Mataro

2. Sales Representatives

Lake Zone - Mr. J.O.B. Osseri
Northern Zone - Mr. Jella Gumbo
Eastern Zone - Mr. M. Shija
Western Zone - Mr. S.O. Yalomba

Mr. Karanga Simbano who is a Senior Marketing Officer will assist the Acting Marketing Manager on day to day marketing activities.

Thanking you,

V.M.K. LYAKURWA
ACTING MARKETING MANAGER

ANNEXURE XIIIOFFICE MEMORANDUM

Date: 26.11.92

From : MDAM
To : Acting General Manager

Ref: List of members of Kibo Paper Board of Directors

Sl. No.	Name	Job position	Place of work
1.	Mr. H.K. Senkoro	General Manager	Tanganyika Development Finance Company
2.	Mr. D.K. Mollel	Director General	Tanzania Karatasi Associated Industries
3.	Mr. T.M. Msangi	General Manager	Tanzania Cigarettes Company
4.	Mr. M.S.C. Nshange	General Manager	Workers Development Corporation
5.	Mr. J.K. Lisso	Director of Markg.	National Milling Corp.
6.	Mr. M.A. Mzese	Group Marketing Manager	Tanzania Saruji Corpn.
7.	Mr. N.M. Msemwa	Director of Plang. and development	Tanzania Investment Bank
8.	Mr. M.S. Kassanda	Asst. Regional Secretary	Organisation of Tanzania Trade Unions
9.	Mr. B.Mombone	Project Officer	EADB
10.	Mr. P.K. Mpepo	Finance Officer	Tanganyika Development Finance Company

Thanks,

H.K. Kannole

ANNEXURE XIV

OFFICE MEMORANDUM

Dated: 30.11.1992

From : Acting Marketing Manager
To : Sales Staff
C.C. : C.T.M.
C.C. : UNIDO Consultant

Ref: Daily & weekly sales report

The sales staff is required to prepare and submit daily and weekly sales report to the head of department as follows:

1. The Sales Representatives are to prepare and submit daily sales report on order bookings and collections as per attached sales report format.
2. Likewise the product sales supervisors are required to prepare and submit weekly sales report as per attached format.

Please note that this exercise will be effective from December 1, 1992.

V.M.K. LYAKURWA

I Weekly sales report for the month to date 28.01.1993

	TSh.
a. Corrugator division	5,185,395
b. Guntape	344,260
c. Packaging division	7,234,215
d. Multiwall division	20,041,000
e. Paper Mill	-
	<hr/>
Total	32,804,870
	<hr/>

II Total collection for the month to date 28.01.1993

Cash & Cheques	Sh. 46,863,367
Old debts collection	
C.U.T.	53,814
Tanzania She Co.	200,000
Print Pak	510,000
Dawa ya mbu	250,000
	<hr/>
Total	1,013,814
	<hr/>

Proposed monthly targets for Marketing division for
February/March/April 1993

	Quantity	Approx. Value
1. Folding cartons	300,000	2,550,000
2. Labels	6,000,000	9,900,000
3. Tea satchets	2,000,000	4,600,000
4. Butter wrappers	200,000	1,300,000
5. Chick boxes	20,000	6,100,000
6. Waxed cartons	20,000	2,100,000
7. Corrugated boxes	75,000	18,750,000
8. Gum tapes	2,000 rolls	840,000
9. Layer pads	150,000	2,700,000
10. Cement bags	200,000	18,000,000
11. Flour bags/Sisal bags	50,000	6,750,000
12. Fertiliser/Animal feed bags	30,000	4,800,000
	<hr/>	<hr/>
	Total	78,390,000
		<hr/>

NOTE:

1. Targets have been fixed after capacity analysis by Mr. R. Mchome - Senior Planning Officer

2. Approximate value has been provided by Mr. V.M.K. Lyakurwa - Acting Marketing Manager

ANNEXURE XVOFFICE MEMORANDUM DATED 29.12.1992

From: Senior Planning Officer

To : General Manager

C.C.: Personnel Manager

C.C.: Marketing Manager

C.C.: Mr. Raju Swamy

Ref: Diversification of products manufactured by
Kibo Paper Industries Ltd.

Enclosed herewith find a short suggestion on a small project meant to engage labour effectively on periods of power failure and at the same time save as a source of revenue generation to the Company.

While areas for packaging and corrugator are areas for our direct implementation, the carry bag project is brought to you as a suggestion for you to go through with finance and marketing experts and analyse on pros and cons to be realised after considering sales tax on the product.

We hope that upon scrutiny of cost effectiveness, our marketing department will be advised to make a formal order for which raw materials will be drawn accordingly.

Thank you,

R. Mchome

Diversification of products manufactured by
Kibo Paper Industries Ltd.

Objective :

To create a range of products that can be manufactured manually so as to make maximum use of labour at long periods of power failure.

To diversify the range of products manufactured by the Company such that labour can be adequately engaged during raw material shortage.

To design products that can be manufactured with low material utilisation.

Product No. 1

This product is a bag made out of sack kraft paper 70 gsm used as a carry home facility when a customer buys products at the shop. The bags are normally produced by the tiny industries whereby people engaged in their production do not even own licences.

Design

The bags are open mouth in nature, single ply. The existing size in the market is 300 x 400 mm (ready glued bag). The sheet size when the sheet is unglued is 640 x 440 mm.

Methods of making

Ready cut sheets are folded to create a tube and then adhesive applied in an L shape such that the base and one longer side are glued. The adhesive used will be starched, the glue used in the manufacture of cement bags and other bags in multiwall division.

Selling price for the bags

The current market selling price offered by the tiny (inlicensed) industry is TSh. 600 to 650 for 100 bags, that means TSh. 6 to 6.50 per bag. No sales tax is chargeable by the tiny industry.

Observation

This project will can be implemented by using one of the guillotine and cutting machine for cutting and creasing to cut sufficient sheets to the required unfolded sizes. This function will be done whenever electricity is availability. The machine will handle the capacity since it can cut at a rate of 4000 sheets per hour. Stocks of unfolded papers can be kept so that manual gluing to form bags can be done during periods of power failure.

If the guillotine machines will be so much occupied with label jobs to be processed then the labour for gluing the bags can be provided with strong cutting knives to cut after tracing the required sheet size by use of a pre-cut sample for size reference.

Advantages

This project will make maximum use of peel off material resulting from damaged outer layers of sack kraft reels.

It is a complete product (package) with minimum use of raw material since it requires single layer of paper (ply) to evolve. This being the case, a small stock of raw material will be sufficient to engage labour over long periods when raw material supply is a problem.

It will be another source of generating cash by the Company and any unskilled labour considered to be excess in any of the Company divisions can adequately be accommodated.

It will be a survival strategy at this period when most of our products we produce are facing stiff competition due to having a number of companies dealing with same lines.

Since the product (package) is not printed it has flexibility in that large stocks can be built and market for the same sought later on.

Markets for the bags are open since consumers visiting shops, markets, etc. always require such bags to serve as carry home facilities for products bought. The bags are separately sold by the shopkeepers and people would prefer using them to plastic bags which are sold at TSh. 50 to 60 per bag while the shopkeeper sell TSh. 10 to 15 for the paper bags.

Conclusion

While selling this idea to the workers it may need a special approach to make them realise that it is a way of product diversification and that they should not wrongly interpret it and mislabel it as a last resort to a decline.

They should realise that it is a paying project and that is why the tiny industry had been competing for raw materials for purpose of making the bags for sale in the past before the management decided to abandon selling the peel off papers and instead used it for making kraft liner board for corrugated boxes at our paper mill plant. Here again the management should see that we can serve both sides i.e. supplying the mill plant with the material and still make bags from fact that the bags will be using less material due to their being single ply (layer) in nature.

Product No. 2

This area covers a range of products manufactured in different divisions or sections. Here labour can be organised such that without electricity people become fully engaged with sufficient jobs. The sections can be subdivided as -

Packaging

1. Folding cartons that were to be processed through the machines will have to be manually glued. Since you can only make hand gluing on ready cut and creased cartons there will be need to work for extended hours so that we pile enough blanks to be manually glued at periods of power failure. The creasing machines will need to be operated at extended hours during periods of electricity availability. The operators will have to be educated on the necessity of taking part in similar operation.

Corrugator

This area can easily be adjusted by changing the tradition of relying heavily on stitched boxes. During long periods of power failure people can be engaged in applying glue on the corrugated boxes manually. The glue will be applied on small and medium size boxes. The supplies department will be required to get the right glue with a strong hold property so that once applied it holds firmly throughout the handling stages of use by the customers. There will be need for identifying customers whose end use for the boxes does not involve cold storage. Keeping of the boxes in cold storage will cause the glue to dissolve since most of the adhesive used are water soluble.

In the process of using glue we may need to give prior information to the various customers as most of them are used to see their boxes stitched with stitching wires. As such they may need to be assured that glue will behave similar to stitched boxes and even much better when properly applied.

DAILY NEWS DSH 01/23/1992



DAILY NEWS

Kibo Paper managers still locked out

Israeli blasts Lebanon

Range studies now December

Comment: DCs have big task on their shoulders

The Kibo Paper Company managers remain locked out of their premises as the union continues its strike. The company has stated that it is prepared to negotiate with the union, but only on the basis of a return to work. The union has refused this offer, claiming that the company's proposals do not address the core issues of the dispute.



officials against long drive



Committee and Hair Products
NEMAN'S LTD
The Official Hair Dresser of the
Tanzania National Football Team

19TH GRADUATION CEREMONY
The graduation ceremony of the
Tanzania National Football Team
will be held at the
National Stadium, Dar es Salaam
on Friday, December 11, 1992.

POLITICS

Kibo probe given more time

The investigation into the Kibo Paper Company's financial affairs has been extended. The Commission of Enquiry has requested more information from the company and its directors. The probe is expected to continue for several more weeks.

Daily News DSH

NEWS

KENYA

FRIDAY, OCTOBER 11, 1991

MACTRO PRODUCTS LTD



Board names Kibo Paper acting GM

The board of directors of the Kibo Paper Company has appointed a new acting general manager. The appointment is seen as a move to stabilize the company's operations during a period of uncertainty. The new GM is expected to take office in the coming weeks.

Party NEC meet Nov 6

The National Executive Committee (NEC) of the ruling party is scheduled to meet on November 6. The meeting is expected to discuss the party's strategy for the upcoming general elections. It is also anticipated that the NEC will address the current political and economic challenges facing the country.

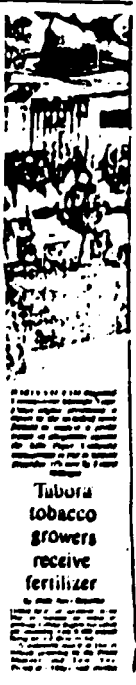
No deductions from Short circuit creates panic

Advertisement for a service or product, including contact information.

DAILY NEWS

Kibo GM, production head removed

The Kibo Paper Company has removed its general manager and production head. This decision follows a period of internal conflict and a decline in production. The company is currently in a state of transition, with a search for new leadership underway. The removal of these key figures is expected to have a significant impact on the company's future.



War arsenals should be destroyed now

Tabora tobacco growers receive fertilizer

Kibo Paper loses two buses for tax arrears

The Kibo Paper Company has lost two buses to the government due to unpaid tax arrears. This is the latest in a series of financial setbacks for the company. The government has taken this action to enforce tax laws and ensure that businesses pay their dues. The company is expected to appeal the decision.

The changing



Tanzania lacks

The country is facing a shortage of... (text continues)

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO

INDUSTRIAL MANAGEMENT AND REHABILITATION BRANCH

DEPARTMENT OF INDUSTRIAL OPERATIONS

(IO/IIS/IMRB)

Information questionnaire to be filled by an industrial enterprise
requesting UNIDO technical assistance in rehabilitation

IMRB/REHAB/04
September 1990

N.B

Information supplied by enterprises is strictly confidential and is meant to be used exclusively by Unido for formulation of technical assistance projects.

1. GENERAL INFORMATION

(a) Enterprise trade-name: **KIBO PAPER INDUSTRIES LTD**
 (b) Addresses: Headquarters: **P.O. Box 2557, DAR-EL-SALAAM**
 Plant(s): **Box 2557, D.S.M. (CHANGIMBE & PULIN R.I.A.S.)**
 (c) Telephone: **63884, 32716** Fax: Telex:
 (d) Type of activity: **PAPER PACKAGING**

(e) Legal status: public corporation* joint stock company
 proprietorship **Public Corporation**

(f) Date of establishment: **1972**
 (g) Initial equity/capital: **300,000/-** Present equity/capital: **495,000,000**
 (h) Owner(s) or shareholder(s):

Name:	Percentage of assets:
TICA	95
NMC	2.2
WDC	1.6
IDFL	1.2

(i) Name of Director General: **Francis Koromo**

(j) History of enterprise (describe briefly all major changes which affected enterprise such as extension, merger, new investment, relocation, lay-off, shut down of plants/workshops): **Started in 1972**
1976 - a 10 ton paper mill established
1982 - Paper mill expanded to 30 tons per day

(k) Has legal process because of insolvency been initiated against enterprise. If yes, describe proceedings and present legal status of enterprise:
NO.

* Please check the appropriate box

(1) Was enterprise already subject to external audit, strategic diagnostic:
 If yes, please attach copy of audit report and/or diagnostic report

(u) Has enterprise been already turned around?

If yes, please indicate when and describe results of turnaround.

(n) Has enterprise received technical assistance from national or international private partner and/or from multilateral or bilateral organization (UN system, European Development Fund etc...)

If yes, describe technical assistance received (name of donor, objective, results).

Assistance received from SIDA on rehabilitation of the printing plant, Corrugating plant and the workshop.
 Objective: increase production.
 Results: Capacity increased.

2. SALES

(a) Products (P):

(b) Sales by products (quantity and value)

	National market		International market	
	quantity (TON'S)	value(currency) 1 \$ = 1000	quantity	value(currency)
Year (n) 1991				
P1 Corrugated boxes	1471	22 651		
P2 Packaging materials	1128	17 419		
P3 multwall sacks	1650	34 472		
P4 Linc & fluting	2000	—		
Year (n-1) 1990				
P1 Corrugated boxes	1235	19 873		
P2 Packaging materials	356	12 758		
P3 multwall sacks	254	4 730		
P4 Linc & fluting	1938	—		
Year (n-2) 1989				
P1 Corrugated boxes	1388	103 422		
P2 Packaging materials	437	11 440		
P3 multwall sacks	3116	47 946		
P4 Linc & fluting	587	—		

Linc and fluting are transferred to Corrugator at cost price.

- (c) Main clients: All Cement Company, Mubushifu electric
Tanzania Cigarette, Seruni Industries, Biby
Coop, TIP Soap
- (d) Main competitors: Paper Products, Commercial Printing
works, Tanzania Litho Artists, Continental
Printing Co y mwanu.
- (e) Distribution network: Customers collect directly
from factory
- (f) Describe sales problems encountered, if necessary product by
product: Poor quality for packaging and
Corrugated boxes

3. PRODUCTION

(a) Production capacity and actual output:

Plants/workshops DIVISION	production capacity : TONS	actual output		
		year (n-2) 1989	year (n-1) 1990	year (n) 1991
Packaging	7366	437	356	1128
mult wall	10258	3116	2574	1650
Corrugator	8896	1388	1235	1471
Paper mill	7500	587	1938	2000

(b) Reasons why enterprise does not function at maximum sustainable production capacity:
 ① Lack of enough Working Capital to purchase raw materials
 ② Poor quality & long delivery times have deterred customers hence low orders

(c) Describe production processes and technology used:
 mainly conversion method

	<u>Material</u>	<u>Supplier</u>
(d) Raw materials:	1. Sack staff	SPIN
Main suppliers:	2. Liner & fluting	Paper mill
	3. Pulp	Printed
	4. Various papers	"

Materials	Unit	Product	consumption per product		
			year (n-2)	year (n-1)	year (n)
N		NA			

(e) Equipment: main facilities and machinery

Type	origin.	technology	Date of purchase	Present condition
Okibono	Japan	automatic	1980	good
Green bat tubes	Germany	Semi automatic	1972	fair
Champion Press	Germany	Automatic	1972	fair
Refined Press	"	Automatic	1972	fair

- (f) Reasons why deficient equipment does not function (preventive maintenance, repair, spare parts...):
 Most require spare parts which require foreign currency
- (g) Pollution problems and measures taken:
 No pollution problems
- (h) Energy (audit, savings and problems):
 Frequent power cuts

5. HUMAN RESOURCES

	technical (number)	administrative (number)
(a) Senior management	1	6
Middle management	2	12
foreman	8	—
workers	—	587

- (b) Main staff problems:
 ① Lack of proper training
 ② Lack of motivation eg incentives

6. FINANCIAL INFORMATION

- (a) Please enclose three last balance sheets, income statements and sources and uses of funds statements.
- (b) Outstanding loans (short and long term)

Creditor	loan currency	credit amount	amount still due	installments amount	
				year (n+1)	year (n+2)
ErroB	SDR	1538400	496854737	—	—
TiB	T.SITS	75342176 7500	75342176	—	—

- (c) assets mortgaged (description and value) Bank Loan (2000 \$ 118)
 ... secured by first and specific charge
 ... on all assets movable and immovable
non-current assets of the company to run
per plan.

7. REASONS FOR REQUESTING UNIDO TECHNICAL ASSISTANCE:

Describe briefly main causes of enterprise sickness (internal causes specific to enterprise, external causes specific to operating environment) and measures for turnaround already taken by management. Indicate in your opinion what role UNIDO should play in the turnaround process and what should be the objectives and results of UNIDO intervention:

Main causes of enterprise sickness

include

(1) Lack of working capital

(2) Lack of spares

(3) Obsolete machines e.p. mutual
division and aging machinery in
the paper mill which require
rehabilitation.

UNIDO should help in

(i) rehabilitation of machines

(ii) Improve quality of products

(iii) Train workers

(iv) Improve packaging technology.

ANNEXURE XVIII (1)**PROGRESS REPORT AS OF DECEMBER 10, 1992, PREPARED BY MR. RAJU SWAMY, SENIOR CONSULTANT, ON THE DIAGNOSTIC STUDY OF KIBO PAPER****I. Introduction:**

1. The Senior Consultant started work at KIBO on Monday, Nov. 9, 1992. He was introduced to the Acting General Manager, Mr. Jared Msanjo by Mr. J.G.Mrema, Sr. Industrial Economist, Ministry of Industry and Trade.

2. The Acting G.M. Mr. Msanjo had taken over on Oct. 30, 1992. The earlier incumbent had been locked out of the Company premises by the workers of the Company on October 16, 1992. The background to this incident is under investigation by a Government sponsored probe team. The report is said to have been submitted to the Government but the contents have not been made public as of date.

3. The consultant has not directly or indirectly concerned himself on matters that brought about the change in management with specific reference to the personalities involved.

4. Specific project activity began with the consultant Mr. Raju Swamy addressing all Managers, Supervisory staff and the Workers Association Chairman on the objective of the project, aspects of liberalization that made it important for the company to gear itself, and for the company and its employees to recognize the intrinsic strengths of the organization and exploit them to their full potential to survive, recover and grow. It was explained in detail by the consultant that as per the existing financial performance of the company which was very poor over many years, possibly arising out of sub-optimal operational efficiency at every stage, induction of fresh funds was not a solution. In any case the banks were unlikely to provide further funds for a long time unless the company proved by its performance that the funds would generate growth. In summary, they were told that it was probably their last chance to help the company survive and grow and they should exploit the UNIDO consultancy opportunity provided to the maximum for KIBO's benefit.

The Minutes of this meeting as drawn up by the Manpower & Administration Manager of KIBO is attached.

5. The consultant subsequently visited the two plants of the company - the paper mill at Pugu Road and the Packaging Plant at Chang'ombe. The Head Office is at the Chang'ombe location. The two plants have been visited on a number of occasions since the first.

II. Analysis of Situation:

1. The first impression of this consultant after examining the facilities, equipment and people (at all levels) was that the situation was not hopeless.
2. It was apparent from personal observation that at some point of time in the past there had been serious attempt in the company to establish an above average work and corporate culture.
3. The company again at some point of time has deviated from the path set and is today in utter chaos compounded by national problems of power shortage and to some extent devaluation which has aggravated the forex loan outstanding.
4. It is obvious however that the Chaos preceded (or exists irrespective of) the national constraints.
5. Majority of the Managers, Supervisors appear potentially promising but, as of now, they are blissfully ignorant (even innocently so) of Management practices. Management practices are clearly one of neglect and of failure to come to grips with any problem. Marketing and Production Planning are only paper departments. Customer Service does not appear even on paper. There is total ignorance of the logic and content of running a business, of updating costing and pricing practices. There is lot of space, lot of equipment and a lot of people all of good or acceptable quality being under-utilised, under-employed, lacking in direction and purpose. If the company were to be judged purely on printed performance data, it would be easy, logical and rational to recommend a closure through liquidation (the banks in fact may feel that they could then recover something).
6. However, this consultant, after debating with himself all factors and based on his experience with many other companies, public and private, came to a definite conclusion that if at all any parastatal in Tanzania or anywhere deserved an honest and powerful attempt at Rehabilitation, it was KIBO Paper Industries Ltd. It is intrinsically a good company with a good market and good people. Everything else required can be built around these two pillars of strength.

III. Approach to Rehabilitation:

1. As part of the terms of reference of this project the consultant, in the process of studying the organization for recommending solutions, has also to bring about improvements in the system during the period of study.
2. Accordingly, this consultant resolved to make a strong attempt with the active assistance of the Acting General Manager, Managers and Supervisors and all other employees to create the appropriate environment within the company to bring about drastic quantitative and qualitative improvement in the performance trend of the company before the end of January 1993.
3. Detailed technical inputs also began to be given with the arrival in KIBO of the project's Technical Consultant Mr. Phiroze Bhatena on Nov. 18, 1992. Mr. Bhatena continues to be actively involved at KIBO as of date.
4. A third consultant on the project, Mr. C.R.Seetharam, spent five days at KIBO and presented his Financial Analysis based on company data available in the balance sheets and based on his interaction with Costing Department. An important contribution made was the determination of the Break Even Point (BEP) at current levels of expenditure.
5. This consultant Raju Swamy also interacted with Top Management officials of Tanzania Investment Bank (TIB) and of the East African Development Bank to understand their points of view as the leading lending institutions to KIBO. The EADB has been seriously concerned about KIBO not meeting its commitments to the Bank and letters have been received by the company to this effect.
6. Meetings with the National Coordinator for this project, Mr. J.G. Mrema, Senior Industrial Economist in the Ministry of Industry & Trade, has helped this consultant understand the Government of Tanzania's concern on the subject.
7. Based on the inputs provided by the consultants and by inputs from inside and outside the company as listed above, it was decided to launch a Survival Strategy with immediate effect. A detailed Long Term Strategy would be drawn up as soon as Survival Strategy results became apparent - at least by the last week of December 1992.
8. Consequently, after many specific objective - based meetings with Managers, Supervisors and other employees of the company the Survival Strategy was launched. In fact, on December 12, 1992 there was a special meeting of all employees of the company (over 400 attended) where this consultant was present and where the Acting G.M. and the Trade Union Chairman acquainted the employees with the true state of affairs of the company which called for maximum contribution from within rather than from outside "donors" or banks.

IV. The Survival Strategy:**1. Generate funds from within:**

A thorough analysis of finished goods stocks, outstandings from customers, raw materials inventory and unwanted spares inventory was initiated.

The findings so far:

a) Finished goods stock	Tshs 18 million
b) Debtors statement	Tshs 196 million
c) Raw Materials in stock that can be converted to Manufactured Saleable Products.	Tshs 250 million
	—
Total	Tshs 464 million*
	—

* Unwanted spares valuation has not yet been completed.

Action:

a) A special task force has been created within an expanded Marketing Department for sale of old finished goods stocks and for collection of outstanding. This task force has been drawn from existing employees in different departments there is therefore no additional cost involved. The total collection in the whole of November was approximately Tshs. 48m. In the first ten days of December, collection has exceeded Tshs 41m.

b) The Production Manager and the Marketing Manager have been teamed together to ensure that all further orders are based on the raw materials already available.

c) The Acting General Manager has been advised to establish clear priority on the funds collected with emphasis on commencement of repayment of significant loan amounts to the three banks with which KIBO is dealing - EADB, Tanzania Investment Bank and National Bank of Commerce - before the end of January 1993.

The total loans outstanding with the three banks today approximate over Tshs. 1300 million including principal, interest and arrears. The highest amount is owed to EADB : Tshs 1062 million.

d) Meetings have been held with the Regional Manager of EADB and with the TIB and an informal assurance has been obtained that if KIBO were to show a positive trend in performance by the end of January 1993 which would also reflect in efforts at repayment, the banks would ease the pressure on KIBO and possibly look at restructuring of existing loans.

e) The second major priority on allocation of internally generated funds would be on purchase of raw materials to increase manufacturing and consequently sales volume. The level of production or sales have not exceeded TSh. 50 millions per month in the last two years - this is far below (less than 20%) production capacity as well as of the market potential available to KIBO. The present level of raw material inventory in the company is more than sufficient to double production or sales in December 1992 and January 1993 and start the raw material buying process from internally generated funds.

f) The third major priority on allocation of funds generated from within would be on Marketing or Sales Promotion. The Marketing Department was totally insignificant till now with at one time having just two doubtfully active employees. The Marketing Department has now been resurrected without additional personnel cost by transferring under-employed personnel from other departments. The Marketing Department now actively consists of a Marketing Manager, three Product Sales Supervisors who actively liaise between customers, production and deliveries and four Sales Representatives who will interact with customers for order booking and collection in their respective designated Sales Territories. With this reorganisation, the Marketing department will be able to service the whole country rather than concentrate on Dar Es Salaam as was done in past.

The country has been divided into four Marketing Zones: Lake Zone, Northern, Eastern and Western Zones. The allocation of internally generated funds is to ensure continuous coverage of markets by the travelling Sales Representatives.

The effect of reorganization of the Marketing Division is already apparent in the increasing number of customers calling at KIBO everyday in December.

g) The fourth priority on allocation of internally generated funds would be on employees incentives and welfare. However, work on this aspect is still going on to work out possibilities.

h) Establish continuous contact with 'A' class customers at the highest level : This action will be initiated by the Acting G.M. and this consultant later in December 1992. The Cement companies will be given priority as they require multiwall sacks in high volume and KIBO has both the capacity and the ability to manufacture good quality.

2. Diversification to Manufacture Sugar Multiwall Sacks: The equipment used for manufacturing multiwall sacks for cement can be converted with an accessory modification to also manufacture sugar bags. Even though this equipment was installed many years ago, this aspect was neglected by the company although the potential market is excellent. Today, sugar bags are being imported into Tanzania by the sugar mills.

Action:

A task force has been created for this project headed by the Production Manager. Our Technical consultant Mr. Phiroze Bhathena is giving priority on assisting the task force on this project. A breakthrough is possible hopefully by the third week of December 1992.

3. Printing as a Profitable Business:

KIBO is fully equipped with the latest machines and Camera/studio facilities for four colour offset printing. But for some unknown reason this business has been neglected and works far below capacity.

Action:

Printing will be spun off as a separate Product Division to procure business independent of the Packaging Division of which it forms a part. This action will be initiated before the end of December 1992.

4. Reduction in Energy Consumption by Air Conditioning Plants in the Packaging Division:

Our Technical Consultant in the early part of his study discovered that the capacity of the multiple air conditioning plants in the Packaging Division is far in excess of actual requirement. He has also analysed that poor maintenance of machines in the production shop, lack of cleanliness on the shop floor and presence of large quantities of waste paper has defeated the purpose of maintaining a dust-free environment. The presence of an air compressor inside the shop floor has added to the burden on the air conditioning system.

Action:

Our Technical Consultant through the Production Manager has already initiated action to:

a) Remove the compressor

b) Improvement in cleanliness - the Production Manager has put additional cleaning help in the production shop to ensure frequent removal of waste material.

c) Recommended installation of temperature indicators in various section of the shop floor to monitor temperature and consequently control operations of the air conditioning plant.

The Technical Consultant will make a more comprehensive recommendation at the end of his study.

5. Consolidation of Raw Material and Spares Stores:**Action:**

Our Technical consultant has identified the existence of at least nine different locations for production based stores which were adding to the inefficiency of operations. These nine stores are now being consolidated into less than five locations in line with the needs of movement of materials, speed of movement and safety from pilferage and theft.

6. The visit of our Team Coordinator and consultant Mr. C. R. Seetharam and his study of financial statements resulted in attention of the acting G.M. being drawn to:

a) Excess inventory holding: almost six months of average sales performance in the past.

b) Increase in Trade debtors three times over the last four years. Also increase in writing off of bad debts.

c) Defective costing.

d) Abnormal increase in financial overheads, Administrative Expenses.

e) The Break Even Point for Sales in 1993 will be a minimum of Tshs. 250 m. per month at current level of expenses and financial charges.

Action:

a) Exercise to reduce inventory has already begun by increased emphasis on order procurement for items that can be manufactured from stock. Sales operations have been extended geographically to collect higher volume of orders and thereby increase production.

b) A special task force is chasing up on old outstandings. Debtors position will show significant improvement from December onwards.

c) Costing norms have been revised and made more stringent. Other steps are also being contemplated.

d) Attempts at generating cash flow from within as indicated earlier are likely to bring down financial charges by end of January 1993 to some extent. The company is definitely facing a serious problem on this account and further strategies are being worked on.

e) Administrative overheads have to be investigated thoroughly - this has not yet been done but certain identified leakages are being plugged.

f) The concept of the Break Even Point does not seem to have been understood by the company management. Expenses have had no relation to Sales realization or vice versa. And Sales figures have always been quoted inclusive of government sales tax of 20% thereby giving on unrealistic picture of performance. Action has been initiated to establish the logic of business into KIBO operations. This consultant (Raju Swamy) is giving maximum priority the improvement of actual performance on the business front by January 31, 1993.

7. Manpower Productivity/Redeployment.

a) On productivity, the power problem presents itself as a stone wall (or an excuse!) depending on our perspective. The immediate priority is to increase production and sales under existing constraints as per actions initiated as above - as a survival strategy, the short term increase in overall performance should be taken as an increase in overall productivity. However, as a long term measure, there is a long march ahead: equipment does not run on minimum economic lot sizes, people and machines are mismatched, maintenance is inadequate and not even remotely scientific, production planning is on a day to day hand to mouth principle, etc. There is much to be achieved in this direction -we will be able to initiate much as part of this project but more intensive recommendations will be made at a later stage.

b) Redeployment has started in right earnest and the least employed people are being put into areas where they can work. Marketing and Production Planning will get maximum personnel inputs under the redeployment strategy.

c) A poster campaign has been started inside KIBO premises to promote employee involvement in improving KIBO performance. This Consultant prepared in English a number of poster messages which have been translated in Kiswahili and displayed at important locations.

8. Re-Organisation:

Action has been initiated but more comprehensive work will be initiated in January 1993. Long term recommendations will also be made at that time. However, as an immediate short term measure to improve the efficiency of departments (and their work discipline), some departments may get suitably relocated to improve logistics. Marketing, Production Planning, Finance and Costing will be the departments that will be affected immediately.

9. Conclusion:

This interim report **highlights** certain actions - many other steps are either in the process of being initiated or are in the process of intensive study - some of the work being pursued by the Technical Consultant is more complex and requires time.

This consultant has to contend with many sensitive people and organizational issues all the time and yet ensure an undercurrent of a desire to improve performance from within the organization. We are trying to work as a team with the Company Managers and Staff rather than as experts from the top viewing with binoculars.

We are hopeful of a positive outcome.

RAJU SWAMY

ANNEXURE XVIII (2)**PROGRESS REPORT AS OF JANUARY 10, 1993, PREPARED BY MR. RAJU SWAMY, SENIOR CONSULTANT, ON THE DIAGNOSTIC STUDY OF KIBO PAPER****I. General:**

1. The Crisis situation arising out of the locking out of the earlier General Manager and some Senior Managers by the workers has now been resolved by the Government and tension has eased. The Acting General Manager Mr. J.A. Msanjo continues and has won acceptance of all employees.

2. In order to enable implementation of rehabilitation measures with acceptance and understanding at all levels this Consultant has begun interaction with the Board of KIBO Paper through Mr. D.K. Mollé, the Director General of the holding corporation Tanzania Karatasi Associated Industries (TKAI). A meeting was held with the Director General in the presence of Acting General Manager Mr. Msanjo on January 8, 1993. This Consultant has been invited subsequently by the Chairman of the Board of KIBO, Mr.H.K. Senkoro to make a presentation to the Board at their meeting on January 14, 1993. Implementation of recommendations will obviously become easier if the Chairman and Members of the Board find our approach acceptable.

II. Highlights of Achievements as a Direct Consequence of Consultants' Interaction since December 10, 1992.

1. The Sugar Bags Diversification Project has successfully developed the first lot of samples. The samples will be demonstrated before the largest potential Customer Kilombero Sugar Co. later this week and if accepted, a very large business potential will open out for KIBO. KIBO will be the only manufacturer of multiwall sugar bags in Tanzania.

The success of the project can be attributed to the determination of the special task force created from within KIBO with the active support of Acting Production Manager Mr. D. Chelele. Our Technical Consultant Mr. Phiroze Bhatena was instrumental in applying the required amount of pressure to initiate and hasten the project.

The significance of this achievement should be noted by the fact that if the Management of the Company had desired, sugar bags could have been manufactured twelve years ago! It is a mystery as to why the equipment's capability to manufacture sugar bags was pushed under the carpet.

2. The Automatic Stitcher in the Multiwall Section has been made operational after many years again due to efforts by our Technical Consultant Mr. Bhatena and a technical team from within KIBO. This machine increases the productivity of multiwall sacks when the manufacturing lot is very large as is the order from the Cement Companies. It should be noted that

this machine (automatic stitcher) had not been repaired for many years since its last failure.

3. Our Technical Consultant had also proposed the relocation of the Glue Mixer Tank in the Multiwall Division. This has now been implemented and increased efficiency by avoiding the transportation of glue daily from a different location.

4. Our Technical Consultant has drawn the attention of the Management to :

a) Total inadequacy of Fire-fighting equipment and trained staff for fire-fighting. This being a Paper Industry, the lapse is unexplainable.

b) There are no First Aid Boxes in any of the factory floors although a Dispensary with a Doctor is available at the factory entrance.

c) There are no Safety guards on any machinery/ equipment except on electronic equipment.

5. The Technical Consultant has appraised the condition of equipment available in the Company - the majority of equipment has been found to be in good condition. However, a detailed analysis and recommendation will be made available with our final report.

A copy of our Technical Consultant's initial recommendations are being provided to the Acting General Manager for early implementation where the problem is of procurement of spares or repairs by internal maintenance.

6. The Technical Consultant Mr. Bhatena has drawn special attention to the fact that the cooling from the air conditioning units in the Printing Section is far in excess of requirement resulting in heavy energy consumption.

His recommendations are yet to be seriously implemented. The situation of energy 'Waste' is further aggravated by the gross under-utilization of the expensive four-colour and two-colour printing machines which are of very high quality.

The background to the purchase and installation of this equipment is not clear as there is no evidence of a market study. As of now the four colour machine with its team of air conditioners are like a herd of white elephants in the company. A solution to this problem is likely to emerge as we go into restructuring strategies.

7. Our Technical Consultant has made certain recommendations for the Paper Mill but our final recommendations will also depend on the findings of a Paper Mill Expert Mr. T.P. Pai who will be with the Paper Mill from January 18th to 23rd. Broadly however, the main problems point to acute shortage of water for which solutions are being investigated like additional bore wells and a feasibility study on building a large reservoir. Progress has been slow on implementation although the problem has been existing for many years.

The Water Treatment Plant also does not appear to be functioning normally with consequent damage to the boiler in the long run. Consumption of oil is very high although the boiler is not running to full capacity. The boiler needs to be checked urgently for scaling. The Paper Mill is running at only 10% of its capacity.

8. Our Technical Consultant Mr. Phiroze Bhatena assisted KIBO from November 17, 1992 to December 31, 1992.

NON-TECHNICAL AREAS:

9. The Sales Turnover achieved in December 1992 was T. Shs. 65 million. In November, 1992 it was Tshs.55 million. This Consultant (RAJU SWAMY) joined the KIBO team on November 9th at a time when morale was low and tension was high, there was a new Acting General Manager who was also new to manufacturing operations (although experienced otherwise) and three Senior Managers (the Second line after the General Manager) had been locked out along with the earlier General Manager. Under such conditions the significance of the Sales Turnover achieved lies in the fact that the average sales from January to October 1992 was Tshs. 52 million. Production and Sales did not come down in November and in fact December has shown an increase over November as well as a large increase over the average for the year.

10. It should be noted that the company's average production and sale when there was no power problem was Tsh.52 million. The average for November and December 1992 is Tshs.60 million when the power problem has been at its worst.

11. The reason for sustaining and exceeding earlier performance by the Company lies in the Consultants having merged themselves "Operationally" as a strategy with the Company employees in restoring morale, leadership and direction. This task was definitely made easier by the Acting General Manager Mr. Msanjo who tactfully moderated certain pressures exerted by this consultant on getting the required performance.

12. The Cash inflow from Sales has also been sustained and improved - the average from January to October 1992 was Tsh. 65 million. In November it was Tshs. 66 million and in December it was Tshs.71 million.

13. On day to day operations, with the current more disciplined Management, the operational cash position has improved.

14. The effort from this Consultant on the Costing front led to reappraisal of the Cost of multiwall cement bags. The final price to the customer was 75 Shillings - initial investigation revealed the cost of raw material per bag was 67 Shillings! The Company's price was less than that of Competitors: Mifuko was 84 Shillings and imported Kenyan bags were said to be 90 Shillings.

In any case, as a start, KIBO has revised cement bags price

to 90 Shillings. However, things are not yet satisfactory on the cost front although some revision has taken place on all products.

15. The new expanded marketing team has begun covering the whole country instead of just Dar es Salaam.

16. The General Manager and this Consultant have re-established links with Tanzania Cigarette Co. and Matsushita Electric Co. who were earlier two of the three largest Customers of KIBO. Poor customer service had resulted in fall in business from them. New Orders started coming in from both the Customers from December 1992.

17. This Consultant has introduced into the Organization a Market and Customer Orientation - the Acting General Manager himself is also functioning with a Market Orientation while the new Marketing Division handles customers' visits to the factory with courtesy and relative speed. Customers are made to feel welcome.

18. A project has been initiated within KIBO with the assistance of Senior Planning Officer Mr. R. Mchome to bring about greater productive utilization of idle manpower during power cuts. He has submitted his first proposal.

III. Action Points in Process

1. Separation of Product Divisions into Profit Centres: Paper Mill, Corrugator, Packaging, Printing, Multiwall and Guntape, .
2. Market Estimation for each of the above Divisions.
3. Establishing maximum Production Capability for simultaneous production of different products per shift to establish Sales Targets in conjunction with Market Estimates.
4. Raw Material Planning for above.
5. Management Training.
6. Organization Restructuring.
7. Performance - based Incentive Scheme.
8. Loan Restructuring.
9. Company Restructuring (Shareholding).
10. Three - year Projection.

IV. PROBLEMS, PROBLEMS

One can make things look very easy in a report - but in fact this Consultant considers the achievements relatively insignificant if one looks at what we are up against.

1. The National problem of power shortage - there is power only three days a week, and not necessarily as per schedule. It is not clear when the problem will end.

2. While we are trying to improve cash flows and direct allocation of resources to productive purpose, millions of shillings have to be paid out by KIBO against Court judgements arising from total neglect by the Management in fighting and following-up on the cases - Example : The Company Doctor certified a Company worker as being afflicted with AIDS. The worker challenged this finding in court (possibly with justification). The court has awarded damages of Tshs.6 million in favour of the worker and to start with, pending payment, a Company truck has been confiscated ! This case was never fought by Company Lawyers - or an attempt made to settle out of court for lesser damages.

Earlier, a Company car was confiscated on a different count (court judgement).

I am stating the above to show the chaotic (or neglectful) manner in which the Company has been managed on all fronts as mentioned in my earlier Progress Report.

3. The Finance Department is non-existent. It will not be an exaggeration to say that none of the figures emanating from the Finance Department of KIBO can be believed. There has not been a Finance Manager for the last two years and the Department runs in a lackadaisical manner. As of today, the detailed Debtor Statement for November 1992 is not out let alone December.

The Audit Report from the Tanzania Audit Corporation for the year ended December 24, 1992 reads like a thriller on how companies become sick when management sleeps while the company is burning.

This Consultant had all along believed that KIBO's financial liabilities are confined to the Banks who are owed about Tsh.1.4 Billion and the strategy was being worked on this basis as far as financial restructuring was concerned. The Audit Report however, throws another bombshell: "Kibo Paper Industries Limited owned the Customs and Sales Tax Department a sum of Tshs. 741,339,000 being unremitted sales tax as incorporated into the Company's books of accounts and has not therefore, been reflected in the accounts. Accordingly, "Current Liabilities" shown in the Balance Sheet at Tshs. 562,532,000 are understated by Tshs.741,339,000 representing the unsettled liability".

4. Absence of a strong second line of Management:

Apart from a Finance Manager, there is a need for effective Manager in Administration and Human Resources Development. While our final report will show the new Organization charts and details, the above requirements are urgent. The types of personnel required can be finalized before this Consultant leaves on January 30, 1993.

There is also an urgent need for a Technical Advisor or Expert with outstanding operational management strengths who can develop the existing production leadership and tighten up the production and maintenance system.

The Costing and Internal Audit Departments are both weak and will have to be strengthened in line with the re-alignment of the Finance Department with a new Finance Manager.

5. Slow pace of work/lack of appreciation of the seriousness of problems confronting the Company:

It is apparent that years of neglect have led to the workplace at times almost being treated as a vacation centre ! This can only improve with improvement in Management leadership, with the starting of positive employee training at all levels and through constant communication to employees on Company situation and progress and about their role in its wellbeing.

6. Very Poor Salaries/Wages in a High Inflation Economy:

The company's employees are said to be one of the lowest paid among Parastatals in Tanzania - they had also not received increments or increases for the last five years !.

In December 1992, the employees were paid 50 per cent of normal arrears due for the last five years. Possibly, if the cash flow can be sustained in January, the balance can also be paid.

But the problem is much larger, with wider ramifications on attitude to work, on use of company property, on handling of company resources with the outside world, and so on.

V. CONCLUSION

1. Broadly, steps initiated by the Consultants has ensured an improved, sustainable activity in the short run.

2. Along with steps that are in process to make recommendations for long run sustenance and growth, immediate steps are required by competent authorities of the company - from the Acting General Manager right up to the Chairman of the Board - to provide the second line of management as well as the required speed to carry out decisions.

3. KIBO is not a Company that has become sick because of inadequacy of equipment or working capital, it is mainly sick because of mismanagement of company resources including human resources which by the country's standards are definitely good. "Rehabilitation" of KIBO will come from a rejuvenated management which in turn will raise further resources based on commercial capability and potential. KIBO is a large company with good human resources capability and potential which has been run in recent years as a petty shop.

4. It is not going to be easy to turn-around KIBO unless everybody tries, at every level, inside and outside the company. KIBO is a National Asset and deserves the attention that this Consultant is emphasizing.

ANNEXURE XVIII (3)**PROGRESS REPORT AS OF JANUARY 27, 1993, PREPARED BY MR. RAJU SWAMY, SENIOR CONSULTANT, ON THE DIAGNOSTIC STUDY OF KIBO PAPER****I. TIME IS RUNNING OUT**

1. KIBO's financial liabilities today are about T.Shs. 2 Billion out of which bank borrowings exceed T.Shs. 1.4 Billion and interest plus interest on interest is multiplying this amount at a geometric rate. The balance of liabilities as above is on unpaid Sales Tax for the last five years or more (Yesterday, January 25, 1993, the Sales Tax Authorities have confiscated two buses of KIBO through an attachment order from the Courts).

2. Fortunately, the infrastructure including equipment and facilities plus the human resources of KIBO are still in working condition. The Market is large and growing.

3. But, for more than five years, if not more, the higher authorities overseeing KIBO's welfare, including the holding company of KIBO, Tanzania Karatasi Associated Industries Limited and the Chairman and Member of the Board of KIBO, have for whatever reason, hopefully unintentionally, allowed the company to slide and it is now on the brink.

4. We believe at least for the present that we, with the active co-operation of the people at KIBO and the advice and encouragement received from the UNIDO country Director Mr. Krassiakov and his team and from the National CO-ordinator for the Project, Mr. J.G.Mrema and his team, have managed to hold KIBO from falling over..... but the weight is enormous and in spite of the strong Tanzanian sisal rope used, the hands may begin to bleed and the rope may slip. Therefore, this Consultant, after considering the delicate nature of the subject, but after equally considering his duty to promote the future prosperity of Tanzania through upgrading of professionalism in the management of industry in Tanzania, in all humility makes the following recommendations for immediate implementation by the highest applicable authorities to save KIBO before it is too late.

II. Most Important Recommendations for Immediate Action:

1. Reconstitute the Board.

2. The Chairman and Members of the Board must be drawn only from Organizations or Institutions that have a stake in the prosperity of KIBO.

3. The main Stockholders can be described as :

- Bankers : (the main creditors)
EADB, TIB, NBC.
- Customers : (the survival of the company is in their hands : they will also be the beneficiaries of a successful KIBO)
- Customs & Sales Tax Authority : (They should get their pound of flesh without killing the Company)
- Ministry of Industry : (They will have a chance to show how bureaucracy can actively promote rather than inhibit the growth of key industries in Tanzania).
- General Manager, KIBO Paper Industries Ltd.

4. By a special Government order or as is required by the laws of the land, this reconstituted Board of stockholders must be given full autonomy to discharge its duties with the specific objective of pulling the company completely out of the red in two years - by the end of December 1994.

5. In the process of its functioning, the new Board will also function as the Privatisation Authority for KIBO on behalf of the Government and in fact the beneficiaries of Privatisation of KIBO must be the stockholders on the Board of KIBO - the Bankers and the Customers.

To be more specific, the Board will determine the modalities of transfer of ownership of the company from the Government into the hands of some or of all Members of the Board on terms that the Board and the Government can negotiate.

6. The above would be a superior form of Privatisation to one where an unknown entity is allowed to take over and possibly cut up the company and sell the pieces or run the company but throw up a certain turbulence in the process.

7. However, the new Board will be a more competent authority to decide on what is best for KIBO.

8. The General Manager of KIBO will actively report to the Board and will also be a Member. This is to remove the mystery and suspense involved in Board Meetings vis-a-vis the non-involvement of the company concerned in the deliberations of the Board.

9. While the new Board will constantly monitor performance of the company they will also play an active role in promoting the interests of the company with the outside world in and out of Tanzania. They will also provide professional support and inspiration to the General Manager and employees of the company.

10. The New members of the Board must include General Manager of:

A: Parastatals:

- Tanzania Cigarette Co.
- Tanzania Portland Cement Co., Ltd.
- Mbeya Cement Co., Ltd.
- Tanga Cement Co., Ltd.
- Kilombero Sugar Co.
- Tanganyika Planting Co. (TPC)
- Tanzania Tea Blenders.

B: Private:

- Matsushita Electric Co. (T)
- Chemi Products Ltd.
- Hellas Tanzania Ltd.
- Tanzania Distilleries.
- Tanzania Sisal Spinning Co. (TASCO)

The above are either existing or potentially large customers of KIBO in the 'A' Category. Between them they can almost fully use the capacity of KIBO in all its divisions including the present "White Elephant" Printing Division which has the best (and possibly the only) four colour printing equipment in Tanzania.

They can also provide good Management inputs to KIBO particularly Tanzania Cigarette and Matsushita. KIBO Paper is the largest producer of multiwall cement bags in Tanzania. KIBO is also now the only producer of multiwall sugar bags in Tanzania. Purchasing from KIBO will save foreign exchange and reduce packaging costs.

11. This concept of a Participative Board of shareholders if implemented will definitely be a turning point in the fortunes of KIBO. The Banks will also develop more confidence in the company's future and consequently agree to restructure current repayments and support future plans.

III. Other Fronts :

1. Paper Mill:

Our Technical Consultant - Mr. T.P.Pai was with KIBO from January 18 to 23, 1993. The details of his findings will be analysed and provided in our formal report to UNIDO, but the following are highlights:

a) Waste Paper collection is inadequate. It is only 5 to 6 tonnes per day when it should actually be at least 15/20 tonnes per day to provide for production of at least 12 tonnes of paper per day with the current power constraints.

b) While the yield from waste paper can be 80-85% depending on the type of waste, the record of waste collection and production for 1990 and 1991 are interesting:

	1990	1991	1992
Waste Paper Collected	1477 T	962 T	1808 T
Paper produced	1938 T	2020 T	1511 T

In 1990 and 1991 the yield from waste paper collected was far higher than the waste paper itself, and more than doubled in 1991! the figure for 1992 is possibly influenced by the power problem in the last three months but a month by month analysis should be interesting.

c) Water is an acute problem as 25 to 30 Kgs of water are required to produce a kg. of paper. Presently KIBO's Paper Mill is drawing water from the municipal water supply and from only one working bore hole which delivers 5 - 6m³/hour. Out of a total of four bore holes sunk at KIBO three have failed: two of them were not even drilled properly though they must have been paid for - this could be checked. The third bore hole is closed since about 1980 because the pump and motor fell off the line and sank inside the bore hole. They could not retrieve the pump. Arrangement for water supply through more bore holes is unavoidable and urgent.

d) A Weigh Bridge is required to weigh waste paper and finished goods. Presently there is only a 2T floor mount scale and a spring balance. Waste paper delivered in trucks are weighted at NMC (8 kms. away) and at Aluminium Africa (2.5 Kms. away). Obviously, because of the transit involved, possibilities of leakage are many since there is no cross checking in the mill. The waste collection must be sorted, baled and weighed again before orderly stocking as per grades of waste. Waste requires continuous monitoring and cross checking to save possible leakage worth millions of shillings every year.

e) The power consumption given by the Mill Manager Mr. A. Lipumba of 625 units/ton is on the higher side when compared to standard parameter of 150 units/ton of paper produced.

f) By and large, the equipment is in good condition and is maintained well.

g) The present staffing appear to be in excess because of the limited working. But the staffing is apparently adequate for 24 hours working which is normal for a process plant like a Paper Mill.

h) There are quality problems on the duplex board of which the Mill Manager is aware. It is primarily a problem of improving the drying process and is under implementation. But progress is not satisfactory.

2. Sugar Bags:

The acting General Manager Mr. J.A.Msanjo and this Consultant along with the Acting Production Manager Mr. Chelele and Technician Mr. Paul Luanda visited Kilombero Sugar Co. on January 20/21, 1993 along with the initial samples.

Kilombero Sugar is currently importing the multiwall sugar bags from Swaziland and samples have also been received from Zambia and South Africa. Payment is in forex.

The Officers of Kilombero welcomed KIBO's development of Sugar bags. The sugar bag differs from the cement bag in the design of the filling system which is more complex and critical.

The initial test was to judge the effectiveness of the filling system. The tests were carried out on their automatic machines by their Production Manager Mr.Mtezo in full view of many of their employees. The design was successful in all the samples.

The next set of samples will be tested for strength and dimensional specifications.

The Finance Manager Mr. Sida has indicated a minimum requirement of 300,000 bags from KIBO after negotiation of prices. KIBO has indicated a minimum order request of 600,000 bags. The current imported price (excluding indirect costs of clearing etc) is about 200 shillings. The total business per annum will vary from Tshs. 60m to Tshs. 120m per year.

Other sugar companies are also being approached.

3. Matsushita:

Special effort is being made to strengthen relations with Matsushita both for procurement of large business and for promoting the transfer of management know-how from time to time to KIBO through training programmes.

It is also Matsushita's objective both in Japan and Tanzania to assist in the efficient running of supplier's operations so that they can ensure assured good quality supply of materials to themselves.

The acting General Manager Mr. J.A.Msanjo and this Consultant attended a Management Programme on Jan 25th jointly organised by UNIDO and Matsushita. A factory visit was also organized as part of the programme. There is much to learn from Matsushita by KIBO.

Mr. Moto, the Managing Director of Matsushita, is being invited to visit KIBO paper shortly. A large order for corrugated boxes has also been received.

4. A Management Development Programme on Managerial Skills was held on Jan. 18th. It was a participative programme attended by the Senior Managers of the company.

5. **AN OPEN HOUSE** Session will be held on Jan. 29th, at KIBO which will be attended by the Acting General Manager and all Managers where this Consultant will try and bring about a convergence of effort that has gone into the improvement of the company over the last three months. This Consultant leaves for India on January 30, 1993.

6. Sales Targets:

Product-wise monthly minimum Sales Target for 12 products manufactured by KIBO have been handed over to Marketing Department. The targets have been set after accounting for capacity available with the present power availability of three days a week.

These targets do not include the Paper Mill's proposed sale to outside customers as some more work is required on this. The targets will have to be once the power situation becomes normal. They can go up to two or three times the present minimum targets.

The approximate monthly sales value if these targets are met will be Tshs. 78m per month in Feb/Mar/Apr, 1993 assuming the power problem continues.

7. Incentive Scheme:

An Incentive Scheme based on increased performance over a base figure and applicable to all employees is under preparation. It is likely to be completed before this Consultant leaves. However, for the longer term, more comprehensive schemes from a number of well-run companies outside Tanzania will be sent to KIBO with our recommendations.

8. This Consultant has suggested to the General Manager that a house magazine be introduced into the company to be edited by employees and to act as a healthy media for two-way communication and for recognition of good work done. This will be implemented soon.

9. A meeting with the Chairman and Members of the Board of KIBO took place on Jan. 14, 1993. This Consultant addressed the Board on his impressions of KIBO plus the work carried out till then on the importance of the Board declaring a **State of Emergency** at KIBO and solving problems with the desired speed.

IV. UNIDO:

1. Mr. A.Krassiakov, Country Director and Ms. A.J. Kostian JPO visited KIBO Paper's Packaging Division and Head Office at Chang'ombe on Dec. 22, 1992. Mr. Krassiakov also visited the Paper Mill on Pugu Road on Dec. 23rd.

A Meeting was held with the General Manager and appropriate Officers at both locations after plant visits. Among the points that emerged :

a) Mr. Krassiakov specifically drew the attention of Company Executives to the need for good maintenance practices.

b) Mr. Krassiakov also made a specific recommendation on KIBO establishing a showroom for its large range of products as part of the overall marketing effort. A showroom was particularly important to enable a larger number of present and potential customers to come to a convenient central location and see for themselves the large range of products of KIBO. This showroom could also act as a Customer Service Centre.

The suggestion of showroom has been welcomed at KIBO but to start with a Showroom-cum-Customer Service Centre will be set up at Chang'ombe. As the economics improve, an additional location will be thought of.

2. On Jan. 21st, 1993, a meeting was held at Tanzania Karatasi Associated Industries the holding of KIBO, to discuss possibilities of further assistance to KIBO from UNIDO.

The meeting was attended by Mr.D.K.Mollel, Director General of TKAI, Mr..... Market Research Manager, Mr.J.A.Msanjo, Acting General Manager of KIBO.

UNIDO was represented by Mr. A.Krassiakov, Country Director, Mr. Raju Swamy, Senior Consultant, and Mr. T.P.Pai, Technical Consultant. the following points emerged:

a) Mr. D.K.Mollel expressed himself largely in agreement with the findings and recommendations as contained in the Progress Reports prepared by this Consultant.

b) However, he wanted quantitative backing on the water and waste paper problems as reported (some additional information has been given in this Progress Report).

He also made a correction on the repaired Automatic Stitcher and clarified that it was meant for use more for animal feed and sisal bags. This was duly noted and acknowledged by this Consultant.

c) Mr. D.K.Mollet made a specific request to Mr. A Krassiakov for UNIDO's help in providing for a specified time the following professionals:

i) Technical Advisor with outstanding operations experience to assist with quality with emphasis on increasing Exports.

The Technical Advisor must also possess outstanding Managerial capabilities.

ii) Finance expert : Operations Oriented.

iii) Marketing Expert : To also support export effort
(This requirement was added by KIBO Acting General Manager Mr. J. A. Msanjo) apart from training the present Marketing Manager and his team.

d) Mr. D.K.Mollet and Mr. J.A.Msanjo both expressed the wish that the term of this assignment be extended for rendering further assistance. Mr. Msanjo felt that the time allocated was too short.

e) Mr. A.Krassiakov replied:

i) Any further assistance required either for more experts or for extension of present assignment has to come as an official request through appropriate Government channels. Where Donor money can be made available for such assistance, the request has to come through the Treasury.

ii) Mr. A.Krassiakov suggested that the KIBO Management can talk to both Government and UNDP for further assistance.

iii) He stated that UNIDO was not a funding Organization but could provide assistance of experts provided funds were made available.

f) Mr. A. Krassiakov also made the following observations:

i) The need for performance-based salary systems as part of the liberalization process.

ii) Liberalization/Privatisation must go hand in hand with Authority and Incentives.

iii) KIBO is a good Company and has the potential to be self-sustaining.

g) Mr. Krassiakov enquired about the role of the holding company and the Board in company performance and operations.

h) Mr. D.K.Mollel felt that the holding company could perform its role better if adequately staffed.

i) Regarding KIBO once again, Mr. D.K. Mollel expressed the view that the printing machines should not be sold but their services should aggressively marketed.

j) Mr. D. K. Mollel requested UNIDO through Mr. A.Krassiakov for assistance in rehabilitating National Printing Co., on lines similar as was being done for KIBO.

3. UNIDO has been kept informed regularly of progress on this assignment. Mr. A.Krassiakov has been giving sound advice at various stages particularly on recording and monitoring the work done.

Ms. Anya Kostian, the JPO in charge of our Project has always worked in anticipation of a request so one does not have to wait for something to be done.

V. Ministry of Industry (Government of Tanzania):

Right from the day on November 2, 1992 when my colleagues from India Mr. Amarnath Kamath and Mr. P.D. Shenoy met officials of the Ministry including Mr. Ngasa, Director and Mr.J.G.Mrema, Senior Industrial Economist and the National Co-ordinator for this UNIDO Project, it has been smooth sailing. The target companies were selected with care and when this Consultant began operating from Nov. 5th, he had just to go on with the work. Unfortunately, by the time this Consultant started work, Mr. Ngasa proceeded on leave. A meeting could be held with him only in mid-January. But he was well informed and was most encouraging in his reaction. The role of Mr.J.G.Mrema has, to say the least, been outstanding. Primarily because he was interested in regular reviews of the project which took place almost on a week to week basis and reacted usefully to work done which to this Consultant was of great use. Mr. Mrema's appropriate introduction of this Consultant to KIBO through the new Acting General Manager Mr. J.A.Msanjo left for no ambiguity or incompleteness and assisted in the assignment taking off without a problem. Mr. Mrema and his colleague Mr. Uledi, Industrial Economist in the Ministry visited KIBO a second time on Dec. 21, 1992 for a meeting with the Acting General Manager Mr. J.A.Msanjo for an assessment of progress made on the assignment. Mr. Uledi has been most helpful and it has been interesting to debate with him on a number of issues related to liberalization, etc.

VI. Where do we go from here.....

1. KIBO's total rehabilitation is a long march with many bridges to cross. The future of KIBO is clearly in the hands of its Bankers, Customers and Employees. They have to form a working team through constant and productive interaction between the proposed new Board and the Company through its Acting General Manager and supporting Managers.

2. Induction of Outstanding Managers at the second level including an Operations-Oriented Technical Advisor, and a Finance Manager (supported by strong Costing and Internal Audit) is most urgent and assistance of International Agencies if required must be activated immediately.

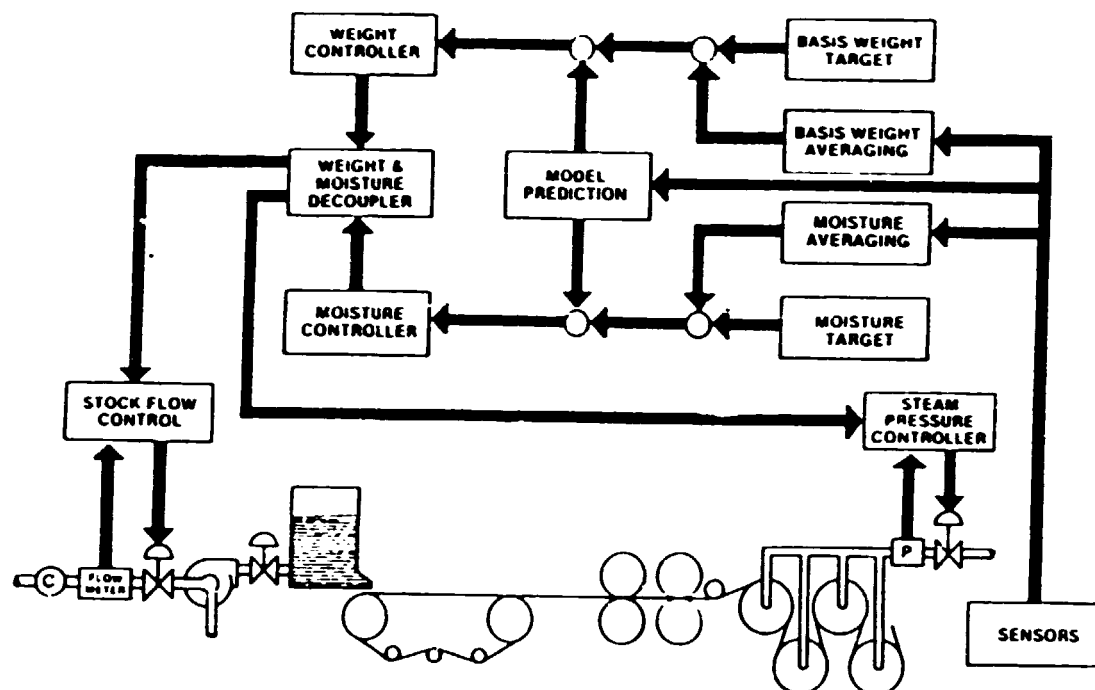
3. KIBO must be recognized as a vehicle of export promotion for the country and must be given assistance, encouragement and support from the Government to meet national objectives.

4. It is possible, if all the Agencies involved so far continue to co-operate, to set up KIBO as an example of a successful rehabilitation programme that used the intrinsic (but ignored) strengths of the Company to resurrect itself at little or no additional cost.

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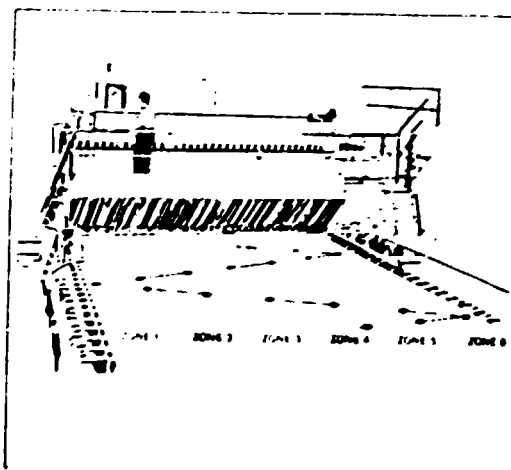
Digital Weight and Moisture Control



GENERAL DESCRIPTION

Based upon feedback from measurement sensors, adjustments are made to the paper machine's stock flow to control basis weight, and steam pressure to control moisture. Digital Weight and Moisture Control is optimized through four important features. Together they provide greater product uniformity while mill production stays closer to specified targets.

SCAN INDEPENDENT CONTROL — Allows control actions to occur as often as every 15 seconds, independent of scan speed. As the sensors scan the sheet, actual basis weight and moisture values are compared with targets at the boundary of each of up to six scanning zones established for the sheet. Control corrections are then based on the most recent data collected in each zone.



Scan Independent Control reduces high frequency machine direction variations with control actions as often as every 15 seconds while maintaining machine-matched scan speeds.

APPENDICES

KIBO PAPER INDUSTRIES LIMITED

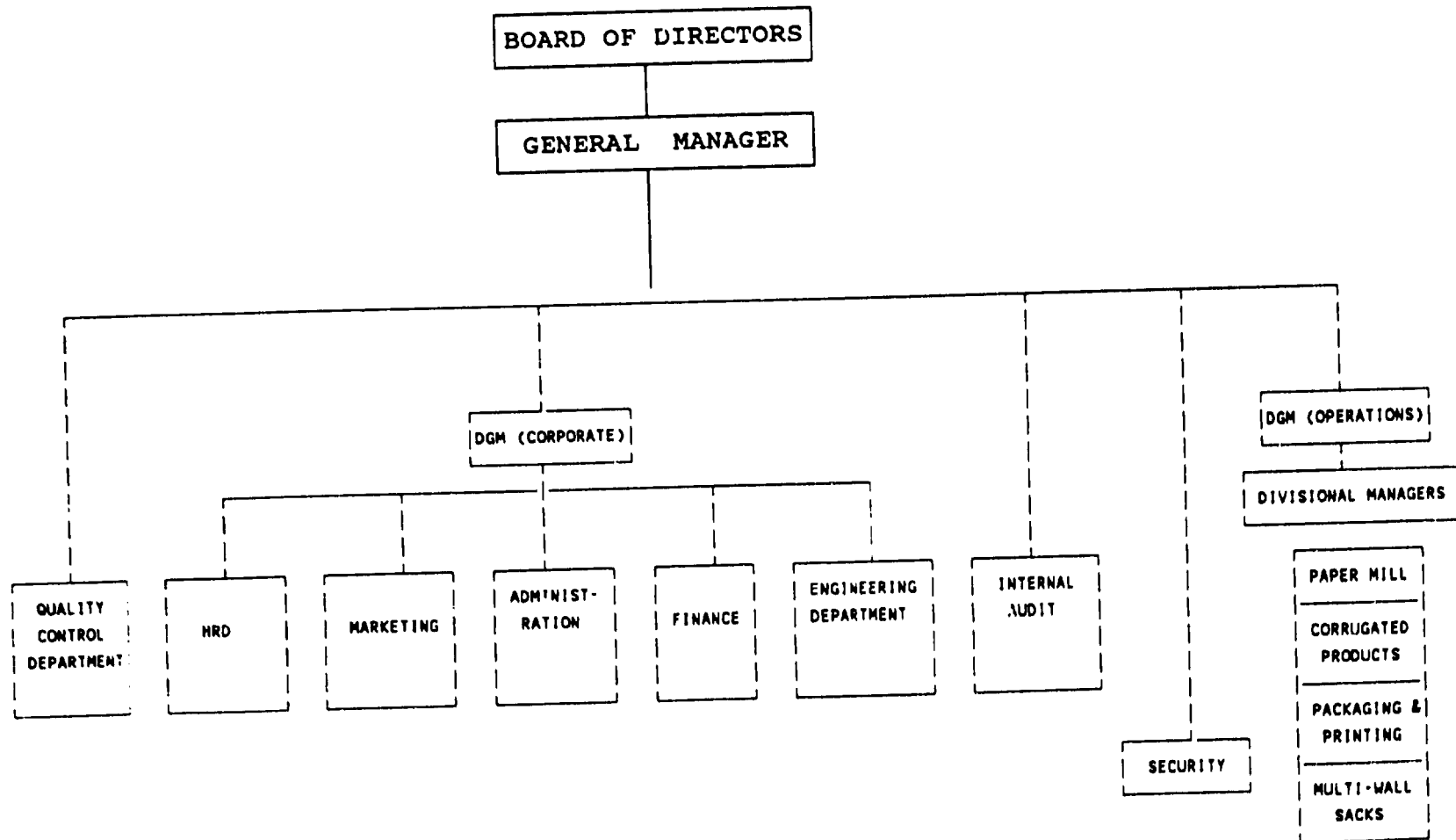
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- I. REORGANISATION OF THE MANAGEMENT STRUCTURE AT KIBO PAPER INDUSTRIES LTD.
- II. PROJECTION OF IMPROVED CASH FLOW
- III. COPIES OF LETTERS DATED AUGUST 10, 1992 & NOVEMBER 27, 1992 FROM EADB
- IV. SUMMARY OF RECEIVABLE STATEMENT FOR THE MONTH ENDED NOVEMBER 30, 1992
- V. PACKAGING PLANT - FINISHED GOODS IN GODOWN ON NOVEMBER 13, 1992
- VI. PACKAGING PLANT - STOCK STATEMENT OF UNSOLD FINISHED GOODS AS OF 11.01.93
- VII. LONG STANDING DEBTORS (GROUPED BY NEIGHBORHOOD)
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- IX. MONTHLY WASTE PAPER COLLECTION IN 1992
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APPENDIX I

KIBO PAPER INDUSTRIES LTD.

REORGANISATION OF THE MANAGEMENT STRUCTURE



APPENDIX IIKIBO PAPER INDUSTRIES LIMITEDPROJECTION OF IMPROVED CASH FLOW (T.SHS. 000')

	1994	1995	1996	1997	1998
Sales revenue	3,578,957	4,294,748	5,101,539	5,728,330	5,728,330
Less: Cost of sales					
Corr/Gumtape	802,989	963,587	1,124,185	1,284,782	1,284,782
Multiwall	1,047,487	1,256,981	1,466,478	1,675,974	1,675,974
Packaging	914,482	1,097,378	1,280,274	1,463,170	1,463,170
TOTAL	2,764,958	3,317,946	3,870,937	4,423,926	4,423,926
GROSS PROFIT	813,899	976,802	1,230,602	1,304,404	1,304,404
Less: Fixed/Semi					
costs	421,636	421,636	421,636	421,636	421,636
TIB TSh. loan	-	-	12,048	12,048	9,897
EADB loan	-	-	107,294	103,462	88,134
Financial					
charges	230,496	230,496	230,496	230,496	230,496
TOTAL: Fixed/Semi					
variable costs	652,132	652,132	771,474	767,642	750,163
Profit before tax	161,767	324,670	459,128	536,762	554,241
Tax 35%	56,618	113,635	160,695	187,867	193,934
Profit (loss) after tax	105,149	211,035	298,433	348,895	360,257
Retained profits (loss)	105,149	316,250	614,617	963,512	1,323,769

EAST AFRICAN DEVELOPMENT BANK



Country Office — Tanzania

DAR/PS/16F/43/I

10th August, 1992.

Mr. D.K. Mollel,
 Director General,
 Tanzania Karatasi
 Associated Industries,
 P. O. Box 2418,
 DAR ES SALAAM.

Dear Mr. Mollel,

RE-KIBO PAPER INDUSTRIES LIMITED (KPIL)

1. Please refer to your letter No. TKAI/A.4/Vol.VIII/159 of 28th July 1992 which evaluated briefly the recent performance of KPIL; the options for solving the liquidity problem and; on behalf of KPIL, requested EADB for a short-term working capital loan of TAS 500 million. We entirely agree with you that the performance of KPIL has been poor and leaves much to be desired; yet it is a company which is potentially very viable. There is no doubt that KPIL has excellent modern machinery and equipment capable of manufacturing a wide range of high quality products. Its domestic market is strong and growing and it can penetrate the export market.

2. The Bank has been closely monitoring the performance of KPIL and has had several rounds of discussions with its management team and at certain occasions TKAI. The Bank believes that, in as much as the on-going macro-economic reform measures have had serious adverse impact on the overall financial performance of the company, the liquidity problem is much more a consequence of poor capitalization and management deficiencies. You may wish to reflect seriously on the reasons which have forced the cement companies to import large quantities of ready made cement paper bags. You may also wish to find out why KPIL has not been efficiently successful in collecting waste paper for the Paper Mill. Be as it may, we hasten to state that a sustainable solution to the liquidity problem of TKAI is not additional borrowing from banks and financial institutions. Innovative and corrective measures including strengthening of the management, pre-financing of production inputs by cement companies and other big customers, proper costing of products, efficient collection of waste paper and additional cash equity from whatever source have to be undertaken immediately to ensure survival of KPIL.

Head Office
 4 Nile Avenue
 P.O. Box 7128
 Kampala Uganda
 Tel: 230021/5
 Tlx: 61074

Kenya Office
 Bruce House
 Standard Street
 P.O. Box 47685
 Nairobi Kenya
 Tel: 340642
 Tlx: 22689

Tanzania Office
 NIC Investment House
 Mirambo Street
 P.O. Box 9401
 Dar es Salaam Tanzania
 Tel: 91067-64 46621/3
 Telex: 4475 ✓
 Fax: 46623

Uganda Office
 4 Nile Avenue
 P.O. Box 7180
 Kampala Uganda
 Tel: 259761/
 230021/5
 Tlx: 61074

3. Unfortunately time is not with KPIL in so far as EADB is concerned. You will recall that through our letter ref. no. DAR/PS/161/43/3/I dated 16th March 1992 to the General Manager of KPIL and copied to you amongst others, EADB sent a notice to KPIL to clear all the loan repayment arrears by end of June 1992. On 7th May 1992, KPIL issued to us a cheque of TAS 10 million which, to our utter disappointment, was not honoured by its bankers! KPIL promised to replace the dishonoured cheque with three cheques and since then only TAS 6.5 million has been paid. As at the end of June 1992, the arrears were in excess of TAS 300 million. It is against this background and in the context of what we have stated in the foregoing paragraph that we regret to inform you the inability of EADB to consider positively your request for TAS 500 million short-term working capital loan for KPIL. In fact a fore closure of KPIL by EADB is no longer a distant possibility given its very poor track record of loan servicing. We therefore, take this opportunity to request you to ensure that KPIL pays off all the arrears immediately and as we have already stated, time is not with KPIL and EADB has reached the limit of its over stretched tolerance.

Yours sincerely,
EAST AFRICAN DEVELOPMENT BANK



A. Z. NKYA
RESIDENT MANAGER (T)

c.c. Principal Secretary,
Ministry of Industries and Trade,
P. O. Box 9503,
DAR ES SALAAM.

c.c. Chairman,
Kibo Paper Industries Limited,
P. O. Box 2557,
DAR ES SALAAM.

c.c. General Manager,
Kibo Paper Industries Limited,
P. O. Box 2557,
DAR ES SALAAM.

c.c. Director General,
East African Development Bank
P. O. Box 7111,
KAMPALA.

Country Office — Tanzania

DAR/PS/16E/45.372

27th November, 1992.

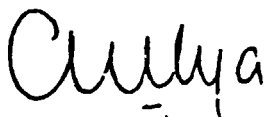
The General Manager,
Kibo Paper Industries Ltd.,
P. O. Box 2557,
DAR ES SALAAM.

Dear Sir,

RE: LOAN SERVICING:

You are certainly aware that your debt servicing performance for 1992 has been extremely poor to say the least. Much as the Bank appreciates your liquidity problem and other exogenous constraints, it is equally expected of you to appreciate the predicaments of the Bank in meeting its obligations as a result of your company's default. The Bank has up to now resisted in taking foreclosure measures to recover its loan but as a result of your perpetual inability to service the loan and the uncertain future of your company in the light of the on-going prarastatal reform in the country, the Bank wishes to put you on notice that unless you effect some payment on or before 15th December 1992, it will be at liberty to take measures it deems appropriate before the end of this year to protect its interests.

Yours faithfully,
EAST AFRICAN DEVELOPMENT BANK



A. Z. NKYA
RESIDENT MANAGER (T)

Head Office
4 Nile Avenue
P.O. Box 7128
Kampala Uganda
Tel: 230021/5
Tlx: 61074

Kenya Office
Bruce House
Standard Street
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Tel: 340642
Tlx: 22689

Tanzania Office
NIC Investment House
Mirambo Street
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Dar es Salaam Tanzania
Tel: ~~34062409~~ 46621/3
Telex: 41175

Uganda Office
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P.O. Box 7180
Kampala Uganda
Tel: 259761/
230021/5
Tlx: 61074

Fax 46623

KIBO PAPER INDUSTRIES LTD.SUMMARY OF RECEIVABLES AS AT NOVEMBER 30, 1992

	Government	Parastatal	Private	Total
<u>Debit balances</u>				
0-30 days	2,626,550.00	28,551,606.85	34,891,588.00	66,069,744.85
31-60 days	890,140.50	4,995,445.25	36,324,776.90	42,210,362.65
61-90 days	1,028,519.50	3,534,938.15	24,212,847.00	28,776,304.65
91-180 days	2,499,695.25	5,543,877.85	8,891,717.45	16,935,290.55
181-360 days	246,442.00	569,622.90	7,911,019.80	8,727,084.70
1 - 2 years	2,031,888.15	4,514,719.30	15,155,167.45	21,701,774.90
2 Yrs. & over	351,958.15	4,802,412.95	8,993,027.90	14,147,399.00
Total	9,675,193.55	52,512,623.25	136,380,144.50	198,567,961.30
<u>Credit balances</u>				
0-30 days	440,818.75	2,119,014.75	2,793,631.90	5,353,465.40
31-60 days	333,900.00	777,157.65	6,290,314.25	7,401,371.90
61-90 days	-	3,999,374.45	1,233,950.65	5,233,325.10
91-180 days	82,480.00	880,203.95	2,909,819.45	3,872,503.40
181-360 days	297,303.15	254,019.85	3,608,737.55	4,160,132.55
1 - 2 years	513,156.45	3,755,698.10	5,741,965.90	10,010,820.45
2 Yrs. & over	136,150.40	2,164,250.75	4,055,165.90	6,355,567.05
Total	1,803,808.75	13,949,791.50	26,633,585.60	42,387,185.85

Balance Dr. less Cr.

0 -30 days	60,716,279.45
31-60 days	34,808,990.75
61-90 days	23,542,979.55
91 -180 days	13,062,787.15
181-360 days	4,566,952.15
1 - 2 years	11,690,954.45
2 years & over	7,791,831.95
Total	156,180,775.45

KIBO PAPER INDUSTRIES LTD.PACKAGING PLANTFINISHED GOODS IN GODOWN SINCE 1990 AS ON NOVEMBER 13, 1992

Sl. No.	J.C.No.	Customer Name	Job description	Qty.	Value TSh.
1	1-31-513/90	Perma Sharp (T) Ltd.	Stainless blade	16,500	
2	1-31-513/90	Perma Sharp	Inners	24,500	214,500
3	1-31-222/90	Khanbhai Pharmacy Co.	Bera Salama cartons	15,600	46,800
4	1-31-27/91	Tz Tea Blenders	African Price cartons	600	
5	1-31-88/91	Light Source Co.	Nuru cartons 230	3,500	35,000
6	1-31-88/91	Haasa General Ents.	Blood lancer	9,500	23,750
7		Tz Cigarette Co.	Cresc. & Star label 1	414,000	331,200
8	212/91	Chandaria Inds.	Plain pads	141,600	226,560
9	1-31-211/91	Matsushita Elec. Co.	Display cartons	1,400	28,000
10	1-31-479/91	Aptice	Printed prawn boxes	3,360	218,400
11	114/89	Frewarb	Printed label boxes	2,200	220,000
12	1-31-138/91	Darital Trade Co.	Printed prawn box-top	2,000	132,000
13	1-31-138/91	Darital Trade Co.	Printed prawn box-bottom	2,000	120,000
14	1-31-349/90	Tafice	Printed prawn boxes	1,860	111,600
15	1-32- 14/90	Al-Talal	Labels for beans	6,500	48,750
16	1-15-293/92	Chrismill Farm	Tray pineapples	4,150	830,000
Total				276,670	2,586,560

PARTITION

1	2-11- 75/92	Twiga Chemical	L/Pads	3,300	94,050
2	2-11-414/91	Tz Cigarette	L/Pads(522x283)	4,400	62,920
3	2-11-338/91	Equatorial	L/Partitions	65,600	51,960
4	2-11-338/91	Equatorial	S/Partitions	91,700	171,580
5	2-11-288/91	Motsel	C/Pads		
6	2-11-439/92	Mamlaka ya Korosho	L/Pads	50,000	601,200
7	2-11-461/91	Kako Pharmaceutical	L/Pads	15,400	110,457
8	2-11-288/91	Tz Distilleries	L/Partition	33,600	302,400
9	2-11-341/91	Vitamin Food 295x245	L/Partition	41,800	418,000
10	2-11-454/91	Tz Distilleries	S/Partition	9,700	116,400
11	2-11-341/91	Vitamin Food 225x245	L/Partition	13,100	161,000
12	2-11-167/92	Tanganyika Dyg. & Wvg.	L/Pads	23,000	401,901
13	2-11- 68/92	Matsushita Electric	S/L	14,000	140,000
14	2-11-278/91	" Elec. 273x170		37,900	1,695,949
Total				488,000	4,327,817

KIBO PAPER INDUSTRIES LTD.PACKAGING PLANTFINISHED GOODS IN GODOWN SINCE 1990 AS ON NOVEMBER 13, 1992

Sl. no.	J.C.No.	Customer	Job description	Qty.	Value TSh.
<u>Corrugator CI</u>					
1	1-15-142	Cotra General Agency	Banana box - top	258	
2	1-11-471/92	Cotra General Agency	Banana box - bottom	240	114,000
3	2-11-232/90	Vitamin Foods	Cor.box for read pot	9,500	570,000
4	1-16-210	Sahara Co.	Cor.box printed	450	175,500
5	1-15-293/91	Chrismill Farm Ltd.	Pineapple box	13,900	2,154,500
6	390/91	Chrismill Farm	Pineapple box	23,000	
7	1-15-390/92	Chrismill	Pineapple box	2,000	5,000,000
Total				49,348	8,014,000
<u>Corrugator C II</u>					
1	2-11-344/90	Shirwa Co.	Cor. box - prawn cutter	520	29,240
2	2-11-337/91	African Flower	Cor. boxes	4,800	1,344,000
3	2-11-382/92	Post Office	Box. boxes - plain	1,750	140,000
4	2-11- 17/92	Romi Enterprises	Cor. boxes	616	138,600
5	2-11-121/92	Lake Tanganyika	Cor. boxes	800	60,000
6	2-11-212/92	Hollas Ltd.	Cor. sheets	7,000	1,225,000
Total				15,486	2,936,840
<u>Gum Tape</u>					
1	2-11-27/92	Tz. Distilleries	Gumtape rolls 2"	833	239,904

APPENDIX VIKIBO PAPER INDUSTRIES LTD.PACKAGING PLANTSTOCK STATEMENT OF UNSOLD FINISHED GOODS AS ON 11.01.1993

J.C.No.	Job description	Qty.	Customer	Value TSh.
347/92	Prawns	500	Tafico	37,500
479/92	Prawns	500	Aptico	37,500
138/92	Prawns	2000	Darital	120,000
300/92	Beans	500	Arusha Agro Foods	142,000
146/92	Papaya	2050	Global Vegetables	185,000
92/92	Passion fruits	1050	Global Vegetables	685,300
			Total	1,207,300

MULTIWALL

168/91	Well come Tz 4 ply	1,400	Coast Feeds	3,000
52/92	Tanga Cement 6 ply	400	TCC Tanga	54,800
85/92	Twiga Cement 3 ply	17,800	TPCC DAR	328,356
33/92	W.H.C.	1,400	WHC	126,000
101/92	Jumbo cement 4 ply	137,500	T.C.C. Tanga	12,375,000
78/92	NMC 3 ply	5,000	NMC DAR	450,000
96/92	Tangeed 4 ply	5,000	Tangeed Arusha	375,000
			Total	13,712,156

GUMTAPE

83/92	Plain gum 2x500"	1,060	KPIL	296,800
89/92	Plain gum 3x500"	348	KPIL	146,160
71/92	Plain gum 4x500"	60	Bakresa	57,960
27/92	Print gum 2x500"	60	Tz.Distillery	184,000
			Total	684,920

CORRUGATOR

381/90	Plain boxes	1,750	Pogta	227,500
417/92	Plain boxes-printed	4,000	African Flower	13,440
2/92	Plain boxes	616	Romi	154,750
272/92	Printed boxes	10,100	Mwanza coffee	495,000
317/92	Printed boxes	3,350	Tanzania Cig. Co.	569,500
184/92	Printed boxes	970	Sahara	218,250
269/92	Plain boxes	1,200	Harria Arusha	210,000
377/92	Plain boxes	700	NPC	157,000
			Total	2,045,440

APPENDIX VIIKIBO PAPER INDUSTRIES LTD.LONG OUTSTANDING DEBTORS(GROUPED BY NEIGHBOURHOOD)

A.	Baraza la Mtihani la Taifa	12,719.85	Mwenge
	Azipak Ltd.	165,562.50	Mikocheni
	Champsji Mulji & Sons	10,000.00	Mikocheni
	CCM Wilaya ya Kinondoni	35,000.00	Kinondohi
	Tanpak Inds. Ltd.	1,142,364.00	Mikocheni
	Ubungo Farm Implements	364,144.00	Ubungo
	Silver Sand Hotel	371,484.05	Kunduchi
		<hr/>	
		2,101,274.40	
		<hr/>	
B.	Commissioner for Customs & S/tax	4,574.60	C/Centre
	Agip (T) Ltd.	1,944,076.60	C/Centre
	Keko Pharmaceutical	1,726,985.92	C/Centre
	J.W.T.K. 511 KJ (SLO)	44,321.35	C/Centre
	Ministry of National Culture	6,235.80	C/Centre
	Ministry of Health	23,939.90	C/Centre
	Ministry of Works	58,900.00	C/Centre
	Ministry of Commn. & Transpntn.	472,500.00	C/Centre
		<hr/>	
		4,281,534.17	
		<hr/>	
C.	Ministry of Home Affairs	336,000.00	C/Centre
	Regional Land Dev. Officer	2,400.15	C/Centre
	Bhesco	50,239.10	C/Centre
	Board of External Trade	14,989.00	C/Centre
	B.O.T. Clinic	18,254.40	C/Centre
	N.D.C.	11,783.15	C/Centre
	Printpak (T) Ltd.	3,049,607.85	C/Centre
	Small Industries	19,976.00	C/Centre
		<hr/>	
		3,503,249.65	
		<hr/>	
D.	Tanzania Stationery Manfrs.	630,476.65	C/Centre
	Tanzania Saruji Corpn.	2,346.80	C/Centre
	Tanzania Leather Ass. Inds.	267,783.75	C/Centre
	TKAI	258,960.00	C/Centre
	Atcol Twiga Hotel	85,209.00	C/Centre
	A.S.G. (T) Ltd.	3,180.20	C/Centre
	Advert International	31,518.50	C/Centre
	Alan & Petronila Co. Ltd.	318,500.00	C/Centre
		<hr/>	
		1,597,974.90	
		<hr/>	

APPENDIX VII (Contd.)LONG STANDING DEBTORS(GROUPED BY NEIGHBOURHOOD)

E.	Akamba Traders	1,170.00	C/Centre
	Bayfield traders	566,147.00	C/Centre
	Chrismill Farm	1,684,810.00	C/Centre
	Express Enterprises	11,946.55	C/Centre
	Haji Associates	499,956.25	C/Centre
	Karimjee Jivanjee	1,175.65	C/Centre
	Lake Soap Industries	267.50	C/Centre
	Tanzania Scan Impex	27,000.00	C/Centre
		<hr/>	
		2,792,472.95	
		<hr/>	
F.	Vegetable Oil Inds.	119,245.00	C/Centre
	Polar Ice Pure products	81,700.00	C/Centre
	Swedish Embassy	4,940.00	C/Centre
	Tanzania Breweries Ltd.	18,782.00	K/Koo
	Rehamanji Industries	44,228.30	Keko
	Sabuni Industries	2,538,877.05	Shaurimoyo
	National Mfrs. & Sales Agency	6,732.10	
	Kirani Industries	709,550.00	Uhuru/Kalong
		<hr/>	
		3,524,054.45	
		<hr/>	
G.	Packaging & Stationary	636,060.00	Changombe
	Tanzania Printing service	35,458.80	Changombe
	Government Store	97,669.85	Keko
	Duka la Vitabu - Service	43,375.00	Keko
	Forodhani Primary School	3,165.65	K/Koo
	Dawa ya mbu Ltd.	6,266,341.00	Changombe
		<hr/>	
		7,082,070.30	
		<hr/>	
H.	Printpak (T) Ltd.	3,049,607.85	Pugu Road
	Light Source Manufacturers	36,055.30	Pugu Road
	Metal Products All Divisions	375,295.35	Pugu Road
	N.M.C. Head Office	513,718.80	Pugu Road
	N.M.C. Mzizima Branch	466,616.30	Pugu Road
	N.M.C. Bakery Branch	667,000.00	Pugu Road
	Tanzania Dying & Weaving Mills	450,581.30	Pugu Road
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		5,558,874.90	
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APPENDIX VII (Contd.)LONG STANDING DEBTORS(GROUPED BY NEIGHBOURHOOD)

I.	Tafico	409.00	Pugu Road
	Tangold Products	1,166,770.25	Pugu Road
	Tanita I Factory	43,208.40	Pugu Road
	Caltex Spinning Mills	178,934.80	Pugu Road
	Coast Feeds	327,275.00	Pugu Road
	C.M.B. Packaging (T) Ltd.	40,261.00	Pugu Road
	Dar Ocean Products	271,258.75	Pugu Road
	Dumus Wood Works	12,075.00	Pugu Road
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		2,040,192.20	
		<hr/>	
J.	Electrodes (T) Ltd.	87,969.55	Pugu Road
	J.V. Textile garments	135,330.00	Pugu Road
	J.V. Synthesis	59,656.20	Pugu Road
	Matsushita Electric Co.	831,229.25	Pugu Road
	Tropical Food Ltd.	12,974.35	Pugu Road
	Tanzania Brush Products	8,037.45	Pugu Road
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		1,135,196.80	
		<hr/>	
K.	Tanzam International	237,721.55	Pugu Road
	Tanzania Plastic Inds.	11,300.75	Pugu Road
	U.A.C.	2,500.00	Pugu Road
	Pan Africa trading	443,531.75	Pugu Road
	Sapa Chemicals	328,449.10	Pugu Road
	Washirika Printing press	53,814.10	Pugu Road
	Tanzania Shoe Co. Ltd.	2,209,604.85	Pugu Road
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		3,286,922.10	
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APPENDIX VIIIKIBO PAPER INDUSTRIES LTD.PRICES OF DIFFERENT TYPES OF MULTI-WALL PAPER BAGS
WITH EFFECT FROM 26.12.1992

Sl. No.	Type of bag	Size in mm	No. of ply	GSM	No. of colour	Price TSh.
1.	Cement bag	645 x 490 x 90	6	70	Two	139
2.	Cement bag	645 x 490 x 90	6	80	Two	154
3.	Cement bag	645 x 490 x 90	5	70	Two	115
4.	Cement bag	645 x 490 x 90	5	80	Two	125
5.	Cement bag	645 x 490 x 90	4	70	Two	90
6.	Cement bag	645 x 490 x 90	4	80	Two	98
7.	Cement bag	645 x 490 x 90	3	70	Two	75
8.	Cement bag	645 x 490 x 90	3	80	Two	79
9.	Sisal packing binder twine bags	740 x 520 x 240	4	70-82	Plain	156
10.	Sisal bags baler twine	640 x 520 x 240	4	70-82	Plain	150
11.	Sisal bags	820 x 520 x 240	4	70-82	Plain	162
12.	Mineral/Chemical bags	880 x 490	4	70	Two/ one	132
13.	Animal feed bags	1040 x 630	4	70	One	168
14.	Animal feed bags	1040 x 630	4	70	Plain	150
15.	Sisal bags	780 x 520 x 240	4	70-82	Plain	150
16.	Lime bags	690 x 490 x 210	3	70	One	96
17.	Foodstuffs bags	690 x 495 x 210	3	70	One	90
18.	Seed bags	600 x 360	3	70	One	40

KIBO PAPER INDUSTRIES LTD.MONTHLY WASTE PAPER COLLECTION IN 1992

Month	Tonnes
January	115.329
February	65.875
March	111.112
April	125.121
May	156.104
June	91.546
July	197.534
August	244.499
September	169.499
October	153.296
November	221.835
December	156.550
Total	<u>1,808.300</u>

Waste paper supplied by:

Corrugator division	50.20 tonnes
Multiwall	35.00 tonnes
Packages	36.56 tonnes

APPENDIX XKIBO PAPER INDUSTRIES LTD.DETAILS OF MONTHLY PRODUCTION OF PAPER IN 1992

Month	Tonnes
January	184.01
February	79.25
March	138.08
April	111.42
May	153.25
June	94.60
July	110.49
August	161.55
September	138.98
October	139.10
November	120.70
December	79.77
	<hr/>
Total	1,511.20
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Major reasons for production loss from their monthly reports include stock-out of waste paper, frequent power cuts and shortage of water.

APPENDIX XIKIBO PAPER INDUSTRIES LTD.ANNUAL RAW MATERIAL CONSUMPTION - 1990-1992

Year	1990	1991	1992
Waste paper (tonnes)	1,274	2,369	1,594
Bleached kraft pulp (tonnes)	13	22	26

Prices of imported kraft pulp

Unbleached kraft pulp	CIF	3800 SEK per tonne
Bleached kraft pulp	CIF	4665 SEK per tonne

APPENDIX XIIDETAILS OF PRODUCTION OF BOARD IN 1992

Type of paper	gsm	Tonnes
Fluting board (FB)	125 - 150	524.20
Fluting board (FB)	70	1.25
Test Line board (TLB)	150 - 175	899.65
White Test Line board (WTLB)	150	27.00
Duplex Board (DB)	250 - 350	59.10
Total		1,511.20

APPENDIX XIIIKIBO PAPER INDUSTRIES LTD.ANNUAL PRODUCTION OF VARIOUS GRADES OF BOARD

(All figures in tonnes)

	1990	1991	1992
FB	267	560	525
TLB	724	1,290	900
WTLB	33	46	27
DB	7	20	59
Total	<u>1,031</u>	<u>1,916</u>	<u>1,511</u>

FB, TLB and WTLB are used by corrugator plant. Transfer price of FB & TLB for 1992 was Sh. 140,000 per tonne and for WTLB was 145,000 per tonne.

DB is used by packaging division and transfer price for 1992 was Sh. 180,000 per tonne.

The Company sold 50 tonnes of FB to Twiga Paper Product at a price of Sh. 182,000 per tonne.

APPENDIX XIVKIBO PAPER INDUSTRIES LTD.PAPER MILL : LIST OF PLANT AND MACHINERY

The list of major plant and machinery is given below:

1. Pulpers - (2 nos) and 1 small

Batch pulper can pulp @ 4-5% consistency is about 450 kg-500 kg/batch approximate 30 minutes

2. High density cleaner - 2 nos.

Removes heavier particles like nail, staples, pins, etc.

3. Turbo separator - 1 no.

Connected in waste paper line removes heavier and lighter rejects like plastics, thermocol, rubber bands etc.

4. Vibrating screen - 4 nos.

Reclaims fibres from the light rejects from turbo separator and pressure screen

5. Deflaker - 2 nos.

Deflakes the pulp

6. Refiner - 2 nos.

Conical double disc and refining

7. Consistency regulators - 2 nos.

Regulates the consistency of the pulp while diluting

PAPER MILL : LIST OF PLANT AND MACHINERY

8. Low density cleaners

Waste paper line	1 degree cleaner	- 10 Kg.	-1
	2 degree cleaner	- 3 Kg.	-1
	Centricleaner	- 1 Kg.	-1
Virgin paper line	1 degree cleaner	- 6 Kg.	-1
	2 degree cleaner	- 2 Kg.	-1
	Centricleaner	- 1 Kg.	-1

Low density cleaner removes sand particles from the pulp in three stages. The rejects from the first state are diluted and fed to the second stage and the rejects of the second stage are fed to the centricleaner after dilution. The rejects from the centricleaner are discharged out.

9. Pressure screen - 2 nos.

Only fibres are filtered through this screen. It light rejects which goes to a vibrating screen. The "accepts" goes to the head box of the cylinder mould.

10. Cylinder mould - 5 nos.

Paper is formed

11. Suction press - 1 no.

The water from the paper is sucked by vacuum in the press roll. The press roll is hollow and has many holes, vacuum is applied to the roll at a particular point where water is extracted from the paper/board.

12. Plain press - 2 nos.

The paper is pressed on to the felt. The felt absorbs the water which is extracted by vacuum pumps.

APPENDIX XIV (Contd.)PAPER MILL : LIST OF PLANT AND MACHINERY

13. Dryers - predryers - 1.5 metre dia - 11 nos.
For drying paper/board these cylinder are heated by steam at 5 bar.
14. Yankee - 3 metre dia
It is also a drying cylinder with higher efficiency and the paper/board can be glazed on one side.
15. After dryer - 1.5 metre - 6 nos.
The paper is further dried here in the first 5 cylinders while the last cylinder is used as a cooler to cool the hot paper/board. The paper/board will have a moisture content of about 7 to 8%.
16. Vacuum pumps - 4 nos.
For sucking water from the felt and suction press
17. Boiler - one of 2 tonnes and another of 7 tonnes made by THOMPSON COCHRAN
18. Compressor -
1. Screw compressor by KAESER W. Germany 5.25 metre cube/min. at 10 bar
2. Reciprocating 2 stage made by Atlas Copco. Type BT3 50 litres at 8.8 bar pressure. Not in working condition
19. Rewinder/Slitter
Rewinds the paper from the jumbo rolls, and slits paper/board to required width and reel size.

APPENDIX XIV (Contd.)SUMMARY OF DEVELOPMENT PHASES IN PAPER PLANTS

PHASE I	PHASE II	PHASE III
<u>OUTPUT:</u>		
10 tonnes	30 tonnes	30 tonnes
<u>Paper Weight:</u>		
125/150 gsm	250 gsm	450 gsm
<u>Machinery Installed:</u>		
1 Small pulper		1 Regger
1 Big pulper	1 Big pulper	1 Turbo separator
1 Deflaker	1 Deflaker	1 Double disk refiner
1 Conical refiner	1 Conical refiner	
2 H.D. cleaner	2 Consistency regulator	2 Cylinder mould
3 Cylinder mould		
2 Plain press	Additional cleaners	Additional cleaner
	1 Suction press	2 Pressure screen
10 Dryers	6 After dryers	2 Vibrating screen
1 Rewinder	1 Yankee	
1 2.2T boiler		
1 Compressor	1 7-tonne boiler	1 Screw compressor

APPENDIX XVKIBO PAPER INDUSTRIES LTD.LIST OF PLANT AND EQUIPMENT AT THE PACKAGING PLANT

KP/M/c No.	Name	Location	Function	Cap.Inst. Capacity	Remarks
1101	Color Metal Champ 10 x 1000 hr	Packaging (Offset)	Offset Printing	Working Cap.10000 sheets/hrs	Good condition
1102	Roland Record (2 - colour) 12 x 1000/hr	Packaging (Offset)	Offset Printing	Working (12,000 sheets/hrs)	New machine (Excellent condition)
1103	Roland Record (4 colour)	Packaging (Offset)	Offset Printing	Working (12000/hrs)	New machine (Excellent condition)
1104	Roland Ultra	Packaging (Offset)	Offset Printing	Working (8000/hrs)	Some mechanisms need rehabilitation due to wear -some automatic controls not functioning
1201	Heidelberg	Packaging (C/C)	Cutt. & Creasing	Working (4000/hrs)	Low efficiency due to old age -no more spares from the supplier
1202	Heidelberg	Packaging (C/C)	Cutt. & Creasing	Working (4000/hrs)	-good state
1203	Bobst	Packaging (C/C)	Cutt. & Creasing	Working (6000/hrs)	Excellent condition
1204	L/M	Packaging (C/C)	Cutt. & Creasing	Working (300/hr) (Impression part)	Used for chick boxes and fruits
3020	Tuber (New)	Multiwall	Tube making	Working (5500 tube/hr)	-need rehabilitation at its cutting head, seam paster unit main drive -manufacturer not existing
3021	Valve Type Settemer (New)		Bottoming	Working	Good condition
3022	Valve Type Bottomer	Multiwall	Bottoming	Working (3500 bags/hr)	

APPENDIX XV (Contd.)KIBO PAPER INDUSTRIES LTD.LIST OF PLANT AND EQUIPMENT AT THE PACKAGING PLANT

KP/M/c No.	Name	Location	Function	Cap.Inst. Capacity	Remarks
2502	Slitting	Corr.	Slitting	Working (2800 sh/hr)	Good condition
2503	Slitting	Corr.		Working (800 m/hr)	Good condition
2001	Corrugator	Corr.	Corrugated box making	Not working (1500 m/hr)	Needs major rehabilitation
2101	Printer Slotter	Corr.	Printing and slotting	Working (1800 sh/hr)	Good condition
2201	Partition	Corr.	Partitioning sheets	Working (3000 sh/hr)	Good condition
2202	Partition	Corr.	Partitioning sheets	Working (3000 sh/hr)	Good condition
2205	Slitter	Corr.	Sheet slitting	Working	Good condition
2206	Slitter	Corr.		Working (2800 sh/hr)	Good condition
2301	Stitching	Corr.	Stitching sheet	Working (375 box/hr)	Good condition
2302	Stitching	Corr.	Stitching sheet	Working (375 box/hr)	Good condition
1110	Sheet Cutter	Packaging	Sheet Cutting	Working (300 m/min.)	Good condition
1112	Sheet Cutter	Packaging	Sheet Cutting	Not working	Under rehabilitation
1404	Flexo Printer	Packaging	Printing	Working	Good condition
1405	Waxing	Packaging	Sheet waxing	Working	Good condition
1406	Sheeting machine	Packaging	Sheet Cutting	Working	Good condition

APPENDIX XV (Contd.)KIBO PAPER INDUSTRIES LTD.LIST OF PLANT AND EQUIPMENT AT THE PACKAGING PLANT

KP/M/c No.	Name	Location	Function	Cap.Inst. Capacity	Remarks
3001	Tuber (Old)	Multiwall	Tube making	Working (3000)	Good condition Manufacturer not existing
3002	Valve type Bott.	Multiwall	Bottoming	Working (3500/hr)	Good condition Manufacturer not existing
3005	Auto Strapper	Multiwall	Strapping	Working (2800 bags/hr)	Not commonly applied due to unavailable threads
3010	Sewing	Multiwall	Sewing	Working (375 bags/hr)	Good condition
3011	Sewing	Multiwall	Sewing	Working (375 bags/hr)	Good condition
3012	Auto Sewing	Multiwall	Sewing	Working (1500 bags/hr)	Good condition
1106	Proof press	Packaging Offset	Printin_ sheets cards etc.	Working (10 sheets/hr)	Good condition
1210	Polar	Packaging C/C	Sheet cutting	Working (23000 sheet/hr)	Hydraulic system locally modified
1211	Seybold	Packaging C/C	Sheet cutting	Working (23000 sheet/hr)	No more spares from the manufacturer
1213	Jogging	Packaging C/C	Paper jogging	Working (23000 sheet/hr)	Good condition
1213	Label punching	Packaging C/C	Label punching	Net working (4000/hr)	Punching dies are not available Manufacturer not existing
1225	Jig Raw	Packaging (Die Making)	Sewing	Working	Excellent condition (New machine)
1301	Old Gluer	Packaging C/C	Gluing & folding	Working (12000/hrs)	Good condition
1302	New Gluer	Packaging C/C	Gluing & folding	Working (5000/hr)	Good condition
1408	Tea Bag	Packaging	Tea bag making	Working (40000/hr)	2nd colour mechanisms not functioning due to wear

APPENDIX XVI

KIBO PAPER INDUSTRIES LTD.

MACHINE UTILISATION AND RAW MATERIAL UTILISED

Machine no.	Optimum Cap utilised hours/annum	Product manufactured	Raw material	Manpower	Utilities
	1875	Label/Inners	Board/Labels paper	3	Electricity & water
1104	1000	Label/Inners	Board/Labels paper	3	Electricity & water
1201	1000	Label/Inners	Board/Labels	2	Electricity & water
1202	1000	Label/Inners	Board/Labels	2	Electricity & water
1203	1000	Label/Inners	Board/Labels	2	Electricity & water
1204	100	Corrugated Boxes for Fruits	Corrugated sheets	2	Electricity & water
3020	3500/hrs	Tubes	S.K.P.	8	Electricity & water
3021	1670/hrs	Bags	S.K.P.	8	Electricity
3022	585/hrs	Bags	S.K.P.	6	Electricity
2502	625 M/hrs	Reels/roll	S.K.P.	3	Electricity
2503	1612 Sq.M	Single corrugated	Fluting/Liner	12	Electricity
2001	11.25 Sq.M	Double Sheets			
2101	215/hrs	Double Sheets	Fluting/Liner	8	Electricity
2201	2015/hrs	Double Sheets	Fluting/Liner	6	Electricity
2202	2015/hrs	Double Sheets	Fluting/Liner	6	Electricity
2205	2015/hrs	Double Sheets	Fluting/Liner	6	Electricity
2206	2015/hrs	Double Sheets	Fluting/Liner	6	Electricity
2301	315 Boxes	Single Corrugated	Fluting/Liner	4	Electricity
	90 Boxes	Double Boxes	Fluting/Liner		
2302	315 Boxes	Single Boxes	Fluting/Liner	4	Electricity
	90 Boxes	Double Boxes	Fluting/Liner	4	Electricity
1110	2000/hrs	Sheets	Board/MF/Labels	2	Electricity & water
1405	100 m/hrs	Wrapper	Glassine Paper	2	Electricity & water
1405	200 sheets	Waxed inners	Board	2	Electricity & water
1406	1000/hrs	Butter Wrapper	Glassine Paper	3	Electricity & water
3001	2000/hrs	Cement Tubes	S.K.P./Polycoated		
3002	1670	Cement Tubes	S.K.P.	9	Electricity & water
3002	2000	Cement Tubes	S.K.P.	7	Electricity & water
3010	250	Bags	S.K.P.	3	Electricity & water
3011	250	Bags	S.K.P.	3	Electricity & water
3012	375	Bags	S.K.P.	3	Electricity & water
1106	30	Proof Sheets	Board/Labels	1	Electricity & water
1210	4000 sheets	Cards/Label	Board/Labels	2	Electricity & water
1210	35000 Labels				
1210	4000 sheets	Cards/Labels	Board/Labels	2	Electricity & water
1210	35000 sheets				
1101	1875 sheets	Sheets	MF/Label	2	Electricity & water
1102	1875 sheets	Sheets	MF/Label	3	Electricity & water
1301	4000/hrs	Inners	Board	5	Electricity & water
1302	4000/hrs	Inners	Board	5	Electricity & water
1408	10625/hrs	Satchels	MF/Wood Free Paper	6	Electricity & water
1101	1000	Labels/Inners	Board/Label	3	Electricity & water
1102	1875	Labels/Inners	Board/Label	3	Electricity & water

KIBC PAPER INDUSTRIES LTD.SUMMARY OF IDLE MACHINE HOURS FOR AUGUST, SEPTEMBER, OCTOBER 1992

Sl. No.	Reasons	Idle Hours for		
		August 1992	Sept. 1992	Oct. 1992
1.	Waste paper shortage	400.20	153.50	168.55
2.	Water shortage	80.05	58.42	86.05
3.	Machine cleaning	17.45	14.50	2.35
4.	Maintenance:			
	i. Mechanical	21.40	15.92	15.45
	ii. Piping & instrumentation	16.35	12.83	4.35
	iii. Electrical	03.40	11.33	5.05
5.	Power failure (TANESCO)	10.45	187.33	269.10
6.	Meeting (with the President OTTU Meeting)	05.40		-
7.	Operational due to staff inefficiency	04.20	10.58	4.10
8.	Public holiday (Maulid day)	-	24.00	-
9.	Replacement of couch roll for C.M. No. II	-	14.50	-
10.	Shortage of bleached short fibres and cores	-	11.00	-
11.	Kibo Paper Meeting	-	5.58	-
12.	Failure of boiler operator to report on duty	-	12.00	-
13.	Transport problem	-	9.00	-
14.	Stock preparation for T/L	-	-	15.45
15.	Blockage of pressurized screen	-	-	8.75
	Total	558.90	540.49	579.20

Remarks:

- The machine was idle for 23.368 days and in operation for 7.632 days in August, 1992.
- The machine was idle for 22.52 days and was in operation for 7.48 days in September, 1992.
- The machine was idle for 24.17 days and was in operation for 6.83 days in October, 1992.