

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

CPA(U) EXAMINATIONS

LEVEL FIVE

INTEGRATION OF KNOWLEDGE – PAPER 19

COMPREHENSIVE CASE STUDY

MORNING SESSION MATERIAL

THURSDAY, 23 JUNE 2005

INSTRUCTIONS TO CANDIDATES:

1. Time allowed: 5 hours 30 minutes.
9.00 – 11.00 a.m. (2 hours): Planning.
11.00 – 12.00 a.m. (1 hour) Break.
12.00 – 3.30 p.m. (3 hours 30 Minutes): Writing.
2. The following pages contain case study materials.
3. The case study questions are contained in a separate paper marked Afternoon Session Material.
4. The completed answers and any working papers, clearly labelled working papers must be handed in at the end of the afternoon session. Where working papers form part of your answer, ensure that they are appropriately cross referenced.
5. It is in your interest that you hand in all written materials prepared during the examination.
6. Please read further instructions on the answer book.

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TORORO ROCK PLASTICS LIMITED

1.0 BACKGROUND INFORMATION

On 3 May 2005, John Chwidi, the Managing Director of Tororo Rock Plastics Ltd, received a report from a Review Team he had appointed to investigate the purchase of a second hand coextrusion film casting machine. The report however did not confine itself to this issue alone. Three alternative courses of action had been identified by the team. Chwidi thought that he detected the influence of Peter Simiyu here. The new Corporate Planner had already established a reputation within the company for stressing the broad picture and the wider issues. It was also clear that the team was divided about the right course of action. Although it was recommended that Tororo Rock buy the machine, the recommendation was hedged around with so many qualifications that it was clearly a committee compromise.

Chwidi, after a first quick reading, resolved to take the report home, and read it carefully that evening. He had two more days before he had to make a decision. This would give him time to go back to the team, individually if necessary. Over the short period that he had been in charge, he had also noticed a lot of uneasiness amongst his managers as a result of Simiyu's brashness and apparent arrogance. He had a lot of trust in his older and more experienced managers and did not want to rock the boat. Yes, change was inevitable, but it must be properly managed and should not cause social or work tension which would affect productivity in such a sensitive industry. The fact that technological changes were also apace was not lost on him. Either way, he looked at it, he had to make a decision, and that decision would be critical to his future in Eastern International Holdings. His assessment of the company's current performance (see exhibit I) had led him to believe that he was riding a tiger and he had to be careful.

Tororo Rock Plastics Ltd, was based in Tororo, near Busitema, and was the sole producer of films within the Plastics Division of Eastern International. Eastern International was originally a manufacturer of heavy and speciality chemicals, which had diversified into a number of related industries such as paper and plastics. The Plastics Division comprised seven companies involved in a variety of plastic conversion processes including blow and injection moulding, thermoforming and blowing and casting film. Eastern was not involved in the production of bulk polymer so there was no question of vertical integration. However, as a group, Eastern was beginning to feel the pressure from two major directions. First, were the effects of the Iraq war, which had shot the price of oil to pieces. Raw materials for the industry's processes were becoming more and more expensive. Second was the concern of environmentalists who were complaining that plastics were not biodegradable and were creating such a negative impact on the environment.

As a result the Government was under pressure to increase taxes on the import and production of plastics.

In the late 1980s, Tororo Rock had produced only blown films. This was done by melting a polymer such as polyethylene or nylon and extruding it through a thin annular ring. The result of this operation was a large, vertical, sausage shaped balloon, which was deflated over a series of rollers and wound onto a reel. This tube was then slit along one edge to produce a wide (up to 3 meters), thin (approx. 2.5/2,500 mm) film. The main products had been heavy-duty coloured polyethylene films for agriculture, building and industrial usage.

In 2002, Tororo Rock moved into cast extrusion. In this process, a curtain of melted polymer flowed from a heated barrel onto a chilled roller. The plastic cooled, set and was then wound up onto reels. Casting was more difficult than blowing and the capital costs were higher. However, the speed of production was much faster and this was the main reason for the purchase. It was also discovered that the quality of the films was higher and that the range of films that could be cast was greater.

For a year or two, this potential was largely unrealised. The existing sales team failed to sell cast films into markets for which they were suitable. This led the newly appointed Managing Director, John Chwidi, to appoint a new commercial director, Paul Lule. Lule's background was in packaging and he quickly developed a marketing plan for penetrating the flexible packaging convertor market. These convertors married various types of film, paper and confectionery manufacturers. Success came fairly quickly and Tororo Rock became one of the leading film suppliers to what was an expanding market. Lule actually had made himself a byword for marketing in the company and this popularity appeared not to have gone down well with Simiyu, the new Corporate Planner. They had had several disagreements in the short time Simiyu had been with the company, but Lule was no push over and he was just biding his time.

In 2001, the Technical Manager of Tororo Rock had visited the United States of America (USA) with a group of Plastics Division technical experts. He came back very excited about the possibilities of coextruding film. Coextrusion casting required that two molten plastic 'curtains' were discharge treated as they fell into the gap between chill rollers. The cooled film then consisted of two bonded films. The comparative advantage of two-ply films was that the properties of the individual components could nicely complement each other. A film with good oxygen barrier properties could be married to one with high mechanical strength. A second advantage was that very thin films, which could not normally exist, of expensive polymers could be extruded onto a cheaper 'carrier' film.

Tororo Rock quickly entered into a know-how agreement with Carter Packaging Inc. of Seattle, USA and, after a traumatic period of design,

redesign, teething and commissioning problems, '**Chuma 1**', a coextrusion casting machine came on stream late in 2001. Tororo Rock was the first company in East Africa to install such a machine, although a number of coextrusion blowing machines were operating under a highly restrictive licence from a US company. The cast films had a small price advantage over laminated (or glued) two-ply films. The growing commercial department pioneered new uses and new customers expanding beyond the packaging field into such areas as electronics (printed circuit boards) and photography (film backing). Within two years **Chuma 1** was operating on three shifts.

Towards the end of 2004, John Chwidi appointed a '**Chuma 2**' Review Group. They reported early in 2005 and the results were a foregone conclusion. The principal problem had seemed to be one of containing demand until the new machine could be installed. In March 2004 Eastern authorized the capital and the machine with a capacity of 3500 tonnes was expected to be operational in late summer 2005. The Group also recommended that the position be reviewed midway through 2006 since market forecasts (see exhibit 2) indicated that it might be necessary to acquire a third machine in 2007.

On 8 April 2005, Patrick Kirasso, head of Eastern's plastics division, telephoned John Chwidi to tell him that the opportunity of buying a coextrusion machine 'off the shelf' had arisen. Eastern had been contacted by BMK Plastics who had bought a coextrusion machine efficiently. The sale was necessary to ease a cash flow position in the group. They wanted a decision within 10 days but would give Eastern first refusal. Patrick Kirasso made it clear that he thought the machine a bargain and he wanted either Tororo Rock or a South African subsidiary of Eastern to have it. John Chwidi was less sure and reconvened the **Chuma 2** Review Group adding to it the Corporate Planner, Peter Simiyu, a CPA, who had recently been appointed. The composition of the group was as follows:

Peter Simiyu	<i>Corporate Planner</i>
Don Emojong	<i>Production Director</i>
Alan Rugyendo	<i>Chief Accountant</i>
Vernon Onzi	<i>Market Analyst</i>
Paul Ariong	<i>Engineering Manager</i>
Ted Kweronda	<i>Coextrusion Department Manager</i>

A conspicuous omission from the team was Paul Lule, and this had surprised many of the older hands at the company. Lule's knowledge could not be ignored and he was senior to most of the team.

At the first meeting, they quickly agreed that 10 days was insufficient time. Don Emojong agreed to contact BMK and get an extension at the same time making an agreement for Ted Kweronda and Paul Ariong to run a week's trial on the machine to check it out. BMK agreed after some discussions. The

Group also agreed that the study would largely be an update of the **Chuma 2** study. Vernon Onzi was deputed to update his 10-year market forecasts and Alan Rugyendo agreed to check his value added, overheads, tax, grant and working capital estimates. This would mean some coordination between him and the technical members of the committee. Peter Simiyu was to put the data together and calculate net present values for the most likely, optimistic, and least likely forecasts as required by Eastern's capital application procedures. Eastern used a 17% discount rate for Plastic Division capital projects. There was great pressure from John Kirasso to make profitability the key operating criterion for companies in his division.

On the 27 April the Review Group met to discuss Peter Simiyu's draft report. The net present values for purchasing the BMK machine were Ugx 445,000,000, Ugx 189,000,000 and Ugx 60,000,000 for the optimistic, most likely and pessimistic cases. Initially there was general agreement to recommend the purchase.

Peter Simiyu disagreed. He suggested that the decision wasn't whether or not to buy the BMK machine but how best, i.e. most profitably, the forecast demand could be met. The BMK machine only had a capacity of 2,100 tonnes. A better alternative might be to build C3, based on what they had learned from C2, with a similar capacity. Ted Kweronda commented that if other alternatives were being discussed then he and Paul Ariong had already talked about cannibalizing the BMK machine. Together with **Chuma 1** it would make a cheap additional machine with a capacity of about 2,900 tonnes. Vernon Onzi suggested yet another alternative - triple extrusion. He had been looking at the market for this type of material and it looked promising. One or two other suggestions were made but were quickly discarded on grounds of technical or market instability. After protracted discussion, Peter Simiyu agreed to calculate the net present values for all four alternatives and report back to a meeting on 2 May.

Peter Simiyu made the following notes on each alternative at the meeting:

1. Install BMK machine as is. Extra capacity 2100 tonnes. Working from mid-2006. No installation problems. Extra capital (Ugx 250,000, 000) and more labour required.
2. Build new coextrusion machine **Chuma 3**. Extra capacity 3500 tonnes. Working from mid-2007. More efficient than C2. (Improvements.) Heavy capital cost (Ugx 625,000,000), maybe not too much extra labour. Idle capacity for some time.
3. Cannibalize **Chuma 1** and BMK machines. Extra capacity 1100 tonnes. Working from early 2007. Low capital cost (Ugx 170,000,000) and little extra labour. Difficult engineering problems.

4. Triple coextrusion. Extra capacity 2000 tonnes. (Slow speed.) Working early 2008. High capital cost (Ugx 800,000,000) and extra labour. New technology, new markets.

On 2 May Simiyu reported that alternative 4 had negative net present values under even the most optimistic assumptions and it was quickly dismissed. The Net Present Values for each of the other alternatives had been calculated by Simiyu and are shown in exhibit 3. Alternatives (1) and (3) had, overall, better net present values than alternative 2 and the majority favoured recommending the purchase of the BMK machine. Simiyu still had doubts. He argued that the low net present value for alternative 2 was a result of the delay in installation. This delay could result in having a more accurate forecast and therefore this alternative was less risky than the other two. In addition **Chuma 3** would enable the company to develop its technological expertise. He was however overruled and agreed to write a report to John Chwidi recommending that Tororo Rock contact BMK immediately.

Exhibit 1a: Extract from Annual Report for Tororo Rock Plastics Limited

Statement of Directors Responsibilities for the Year Ended 31 December 2004

The Companies Act (Cap 110) requires that the directors prepare accounts for each accounting year, which give a true and fair view of the state of affairs of the company as at the end of the accounting year and of its operating results for that year. It also requires the directors to ensure that the company keeps proper accounting records, which disclose with reasonable accuracy at any time, the financial position of the company. They are also responsible for safeguarding the assets of the company.

The directors accept responsibility for the annual financial statements, which have been prepared using appropriate accounting policies supported by reasonable and prudent judgements and estimates, in conformity with generally accepted accounting practice and in a manner required by the Companies Act (Cap 110). The directors are of the opinion that the financial statements give a true and fair view of the state of affairs of the company and of its operating results. The directors further accept responsibility for the maintenance of accounting records, which may be relied upon in the preparation of the financial statements, as well as adequate systems of internal control.

Nothing has come to the attention of the directors to indicate that the company will not remain a going concern for at least the next twelve months from the date of this statement.

.....
Director	Director

_____ 2005

Income Statement

	Notes	2003 Ugx 'millions	2002 Ugx 'millions
Revenue	1	1,699,650	956,094
Cost of Sales		<u>(1,178,337)</u>	<u>(707,951)</u>
Gross Profit		521,313	248,143
Other Operating Income		-	1,133
Distribution Costs		(58,835)	(37,309)
Other Operating Costs		<u>(354,228)</u>	<u>(233,833)</u>
Operating (Loss) / Profit	2 & 3	108,250	(21,866)
Finance Cost	4	<u>(7,006)</u>	<u>(15,228)</u>
(Loss) / Profit Before Tax		101,244	(37,094)
Income tax Expense	5	<u>(23,247)</u>	<u>(2,157)</u>
Net (Loss) / Profit		<u>77,997</u>	<u>(39,251)</u>
(Loss) / Earnings Per Share	6	<u>Ugx. 15.30</u>	<u>Ugx. (7.70)</u>

Director Director

Balance sheet

		2003	2002
	Notes	Ugx 'millions	Ugx 'millions
CAPITAL EMPLOYED			
Capital and Reserves			
Share Capital	7	5,100	5,100
Retained Profits		<u>193,246</u>	<u>115,249</u>
Shareholders Funds		<u>198,346</u>	<u>120,349</u>
Non-current Liabilities			
Deferred Tax	8	5,048	5,529
Borrowings	9	<u>47,085</u>	<u>43,826</u>
Total Non-current Liabilities		<u>52,133</u>	<u>49,355</u>
		<u>250,479</u>	<u>169,704</u>
REPRESENTED BY			
Non-current Assets			
Property, Plant and equipment	10	<u>27,366</u>	<u>34,759</u>
Current Assets			
Income Tax Recoverable	5	40,545	25,075
Inventories	11	146,077	121,695
Trade and Other Receivables	12	159,527	111,671
Cash and Bank	13	<u>49,049</u>	<u>1,656</u>
Total Current Assets		<u>395,198</u>	<u>260,097</u>
Trade and Other Payables	14	172,085	96,814
Bank Overdraft	9	<u>-</u>	<u>28,338</u>
Total Current Liabilities		<u>172,085</u>	<u>125,152</u>
Net Current Assets		<u>223,113</u>	<u>134,945</u>
		<u>250,479</u>	<u>169,704</u>

The financial statements were approved by the board directors on and signed on their behalf by:

Director Director

Statement of Changes in Equity

	Share Capital	Retained Earnings	Total
	Ugx '000	Ugx '000	Ugx '000
Balance at 1 December 2002	5, 100	115,249	120,349
Profit for the year	-	77,997	77,997
Balance at 30 November 2003	5,100	193,246	198,346

Exhibit 1b: Selected Notes to the Accounts

Accounting Policies

The principal accounting policies adopted in the preparation of these financial statements are set out below;

A Basis of preparation

The financial statements are prepared in accordance with and comply with International Accounting Standards.

The financial statements are prepared under the historical cost convention.

B Revenue recognition

Revenue represents the invoiced value of work done and goods sold during the year, net of VAT returns and discounts.

C Translation of foreign currencies

Transactions in foreign currencies during the year are converted into Uganda Shillings at rates ruling at the transaction dates. Assets and liabilities at the balance sheet date, which are expressed in foreign currencies, are translated into Uganda Shillings at rates ruling at that date. The resulting differences from conversion and translation are dealt with in the income statement in the year in which they arise.

D Property and equipment

All property and equipment is stated at historical cost less depreciation.

Depreciation is calculated on the reducing balance basis at annual rates estimated to write off the cost of each asset, to their residual values over their estimated useful lives. The annual rates used are:

	%
Office partitions	20
Equipment, furniture and machinery	20
Motor vehicles	20

Impairment of assets

Non-current assets other than deferred tax are tested for impairment.

An impairment loss is recognised whenever the carrying amount of an asset exceeds its recoverable amount. The recoverable amount of an asset is the higher of an asset's net selling price and its value in use. Value in use is the present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its life.

Impairment losses for an asset are based on the recoverable amount of the cash generating unit to which it belongs. Cash generating units include goodwill allocated to each unit. Impairment loss is primarily attributable to the goodwill related to the unit impaired.

E Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined by the weighted average cost method. Net realisable value is the estimate of the selling price in the ordinary course of business, less the costs of completion and selling expenses.

F Trade receivables

Trade receivables are carried at anticipated realisable value. An estimate is made for doubtful receivables based on a review of all outstanding amounts at the year end. Bad debts are written off in the year in which they are identified.

G Deferred tax

Deferred tax is provided, using the liability method, for all temporary differences arising between the tax bases of assets and liabilities and their carrying values for financial reporting purposes. Currently enacted tax rates are used to determine deferred tax.

Deferred tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

H Employee entitlements

Employee entitlements to annual leave are recognised when they accrue to employees. The estimated monetary liability for employee's accrued accrual leave entitlement at the balance sheet date is recognised as an expense accrual.

I Cash and cash equivalents

For the purposes of the cash flow statement, cash and cash equivalents comprise cash in hand and deposits held at call with banks, net of bank overdrafts. In the balance sheet, bank overdrafts are included in current liabilities.

Selected Notes forming part of the financial statements**5. Income Tax Expense**

	2003 Ugx '000	2002 Ugx '000
Current Tax	23,728	-
Prior year under-accrual	-	2,416
Deferred tax prior year adjustment	-	(1,270)
Deferred tax (debit)/charge	<u>(481)</u>	<u>1,011</u>
	<u>23,247</u>	<u>2,157</u>

The tax on the company's profit differs from the theoretical amount that would arise using the basic tax rate as follows:

	2003 Ugx '000	2002 Ugx '000
(Loss) / Profit before tax	<u>101,244</u>	<u>(37,094)</u>
Tax calculated at a tax rate of 30%	30,373	-
Prior Year Tax Uplift	-	2,416
Tax effect of:		
Tax Loss b/f:	(9,945)	-
Expenses not deductible for tax purposes	5,041	-
Deferred tax	(481)	1,011
Deferred Tax Prior Year Adjustment	-	(1,270)
Wear & Tear allowance	<u>(1,741)</u>	<u>-</u>
Income Tax Expense	<u>23,247</u>	<u>2,157</u>

For further information about deferred tax see note 8.

The movement in the current tax recoverable / (Liability) is as follows:

	2003 Ugx '000	2002 Ugx '000
Balance at the beginning of the year	25,075	10,383
Payments made during the year	39,198	17,108
Current tax charge	(23,728)	-
Under accrual of prior year tax	-	<u>(2,416)</u>
Balance at the end of the year	<u>40,545</u>	<u>25,075</u>

Selected Notes forming part of the financial statements (continued)**6. Earnings per share**

Earnings per share is calculated by dividing the net profit attributable to shareholders by the weighted average number of ordinary shares in issue during the year.

	2003	2002
	Ugx '000	Ugx '000
Net (Loss) / profit attributable to shareholders	77,997	(39,251)
Number of ordinary shares in issue	5,100	5,100
Basic (loss) / earnings per share	Ugx. 15.30	Ugx. (7.70)

8 Deferred tax

Deferred tax is calculated on all temporary differences under the liability method using a principal tax rate of 30%. The movement on the deferred tax account is as follows:

	2003	2002
	Ugx '000	Ugx '000
1 December 2002	5,529	5,788
Prior year Adjustment	-	(1,270)
Profit and Loss (debit)/charge	<u>(481)</u>	<u>1,011</u>
30 November 2003	<u>5,048</u>	<u>5,529</u>

Deferred tax assets and liabilities and the deferred tax charge/(credit) in the income statement are attributed to the following items:

	1 Dec. 2002	Charge / (Debit)	30 Nov. 2003
	Ugx '000	to profit and loss	Ugx '000
		Ugx '000	
Deferred tax liabilities			
Accelerated tax depreciation	5,817	(477)	5,340
Prior year adjustment	<u>(1,270)</u>	<u>-</u>	<u>(1,270)</u>
	4,547	(477)	4,070
Deferred tax assets			
Unrealized exchange gain/(losses)	<u>982</u>	<u>(4)</u>	<u>978</u>
Deferred tax liability	<u>5,529</u>	<u>(481)</u>	<u>5,048</u>

Selected Notes forming part of the financial statements (continued)**10. Property and equipment**

	Furniture & Fittings	Equipment & Machinery	Motor Vehicles	Total
	Ugx '000	Ugx '000	Ugx '000	Ugx '000
Cost				
At 1 December 2002	<u>4,500</u>	<u>21,283</u>	<u>37,711</u>	<u>63,494</u>
At 30 November 2003	<u>4,500</u>	<u>21,283</u>	<u>37,711</u>	<u>63,494</u>
Depreciation				
At 1 December 2002	3,394	14,626	10,715	28,735
Charge for the year	<u>221</u>	<u>1,773</u>	<u>5,399</u>	<u>7,393</u>
At 30 November 2003	<u>3,615</u>	<u>16,399</u>	<u>16,114</u>	<u>36,128</u>
Net Book Value				
At 30 November 2003	<u>885</u>	<u>4,884</u>	<u>21,597</u>	<u>27,366</u>
At 1 December 2002	<u>1,106</u>	<u>6,657</u>	<u>26,996</u>	<u>34,759</u>

17 Cash Generated from operations

Reconciliation of profit before tax to cash generated from operations:

	2003 Ugx '000	2002 Ugx '000
(Loss)/profit before tax	101,244	(37,094)
Adjustments for:		
Depreciation (Note 10)	7,394	6,781
Exchange Difference on Loan	3,258	3,610
Interest expense (Note 4)	6,141	3,353
Changes in working capital:		
Trade and other receivables	(47,856)	(20,015)
Inventories	(24,382)	(20,281)
Profit from Disposal of Assets	-	(552)
Trade and other payables	<u>75,271</u>	<u>63,775</u>
Cash generated from operations	<u>121,070</u>	<u>(423)</u>

Selected Notes forming part of the financial statements (continued)**18 Related party transactions**

The immediate holding company and the ultimate holding company of Tororo Rock Limited is Eastern International Limited. The following transactions were carried out with related parties:

(a) Purchase of goods and services

	2003	2002
	Ugx '000	Ugx '000
Messe Corporation Limited	<u>811,343</u>	<u>498,497</u>

Purchases from related companies were made at terms and conditions similar to those offered to major customers.

(b) Outstanding balances arising from purchase of goods Payable to related parties

	2003	2002
	Ugx '000	Ugx '000
Messe Corporation Limited	<u>51,424</u>	<u>52,866</u>

Long term loan

Eastern International Limited (Note 9)	<u>47,085</u>	<u>43,826</u>
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No Interest has been charged on these amounts

(c) Directors Remuneration

	<u>47,399</u>	<u>43,200</u>
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19 Currency

These financial statements are presented in Uganda shillings.

Exhibit 2: Market Forecasts for Coextruded Plastic Films 2005-09 (thousand tonnes)

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Actual	Total market	4.8	9.2	15.0										
	Tororo Rock sales	1.2	1.8	1.8										
Optimistic	Total market: Forecast				24.3	28.4	31.4	33.0	34.3	35.0	35.0	35.0	35.0	35.0
	Tororo Rock: Forecast				6.0	7.1	7.9	8.3	8.6	8.8	8.8	8.8	8.8	8.8
Most likely	Total market: Forecast				21.0	24.1	26.2	27.5	28.7	29.8	30.5	31.0	32.0	32.5
	Tororo Rock: Forecast				5.3	6.0	6.5	6.9	7.2	7.5	7.6	7.8	8.0	8.1
Pessimistic	Total market: Forecast				19.3	21.7	23.5	25.0	25.5	26.6	27.5	28.4	29.2	30.0
	Tororo Rock: Forecast				4.8	5.4	5.9	6.3	6.4	6.7	6.9	7.1	7.3	7.5

Exhibit 3: Net Present Value

(Ugx million for each of Three Alternatives)

	Optimistic	Mostly likely	Pessimistic
Alternative 1	445	189	60
Alternative 2	384	131	-33
Alternative 3	192	192	137