

# THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

*A Committee of the Council of ICPAU*

## CPA(U) EXAMINATIONS

### LEVEL FOUR

#### INTEGRATION OF KNOWLEDGE – PAPER 16

#### COMPREHENSIVE CASE STUDY

#### MORNING SESSION MATERIAL

**TUESDAY, 14 JUNE 2011**

#### INSTRUCTIONS TO CANDIDATES:

1. Time allowed: **6 hours**.  
9.00 a.m. – 11.30 a.m. (2 hours 30 minutes): Planning.  
11.30 a.m. – 12.30 p.m. (1 hour): Break.  
12.30 noon – 4.00 p.m. (3 hours 30 minutes): Writing.
2. The following pages contain case study material.
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 material prepared during the examination.
6. Tables are provided on page 13.
7. Please read further instructions on the answer book, before attempting any question.

## **SUKARI UGANDA LTD**

### **Overview and Background**

Sukari Uganda Ltd (SUL) is a member of the Sukari Africa Group. The group is Africa's biggest sugar producer and has extensive agricultural and manufacturing interests in the sugar industry in more than 10 African countries.

In Uganda, SUL is listed on the Uganda Securities Exchange, and is one of the pioneer companies at the exchange. This was after the Government of Uganda divested its interest in the then Uganda Sugar Company. With total assets in excess of Shs 95 billion (See appendix 1), SUL is the leading producer of sugar on the Ugandan market. The most recent independent survey on the Ugandan sugar industry puts SUL in pole position at 40% market share. The company also exports sugar to neighboring markets, mainly Congo, Rwanda, Burundi and South Sudan. These export destinations together account for about half of the total turnover. Jaberu Ban Badi has been the managing director for over a decade, having taken over one year before the initial public offering.

### **History**

Until the early 2000's, SUL operated under the name Uganda Sugar Company. The company had initially been a medium-sized sugar mill owned by the Manbhai family of Indian origin. Its operations then served the greater northern Uganda region, but were short of country-wide market reach. Like most agro-processing industries at the time, the company's success was attributed to the strong cooperative movement of the 1960's. By that time, Uganda was ranked a model country in as far as mobilization of citizens through cooperatives was concerned. Sugarcanes were grown and marketed through the cooperatives, which often played key roles such as price negotiations, and provision of farm inputs. Back then, it was rare for the company to deal directly with the farmers, but rather through the cooperatives. It was widely believed that this arrangement increased the bargaining power of the farmers.

Following the ideological shift by the government in 1972, the Uganda Sugar Company was nationalized after the expulsion of the Asians by the then Ugandan President. Subsequently, the government expanded the operations of the company with massive capital injections which boosted the operations and propelled it to market leadership. Over the years, the company went through several performance cycles but still retained market leadership.

Unlike some other nationalized companies which were returned to the owners, the Uganda Sugar Company remained state owned until the early 2000's when the government decided that public participation would enhance the efficiency of

the company. The company's shares started trading on the Uganda Securities Exchange in March 2000. Fast forward to current times, SUL is among the leading local companies, serving a regional market. The company's shares are currently trading at Shs 2,300 per share.

### **Strategic Intent**

The company's vision is "to be the leading sugar producer in East and Southern Africa, producing at low cost and on a sustainable basis." It aims at being the market leader, meeting and proactively anticipating customer needs.

According to the annual report 2010, the following are the company's goals and objectives:

1. To enhance the wealth of shareholders.
2. To maintain a maximum debt ratio of 40%.
3. To achieve a competitive rate of return on equity, and increase profits sustainably.
4. To maintain a dividend cover of at least 1.8 times.
5. To ensure that the company is managed in an efficient, accountable, responsible, transparent and moral manner.
6. To promote the ongoing development of all employees, and ensure maximum output.

### **KEY OPERATIONS**

#### **Agricultural Operations**

SUL is based in the northern region of the country, where it owns some sugar estates. This direct involvement in cane growing started in the 1980's when the cooperative movement mobilized out growers against supplying sugarcane to SUL. The company severely suffered from this strike with no production going on in the four months that the negotiations took. After that bitter experience, the company decided to start its own agricultural operations in order to avoid full dependence on the farmers, and reduce their bargaining power.

SUL's agricultural operations account for approximately 40% of the 1.4 million tons of cane processed per annum. The independent out growers, as well as the few surviving community-based cooperative schemes supply an aggregate of 800,000 tons of cane per annum.

SUL has over time tried adopted farming practices based on field conservation guidelines issued by the National Environment Agency. These are meant to ensure agricultural production on a sustainable basis with minimum impact on the environment. The guidelines include the implementation of land use plans when developing new and re-establishing existing cane fields; the optimal

placement of field and access roads, the most suitable method of field establishment so as to conserve soil and water, the protection of existing environmental features such as rivers and catchment areas. However, press reports have on several occasions put SUL at fault regarding environmental conservation, with accusations of land reclamation, pollution and use of chemicals that adversely impact on the soil. Frequent re-planting without letting the canes grow off the existing roots has also been criticized since it leads to destabilization of the soil and exposure to soil erosion. The recommended practice is that the cane should grow off the roots of the parent cane for at least six years until the sucrose content is below the acceptable limits. Going by the press reports, this does not seem to be the case at SUL.

The other criticism has been based on the practice of cane burning immediately prior to harvesting. Critics have been pushing for the “green harvesting” techniques as adopted by some competitors in the industry. This has the benefit of the leaves and the tops of the cane plant being left behind in the harvesting process, providing for moisture retention and nutrients for the soil.

Commentators’ views about environmental conservation at SUL are conflicting, but this is not helped by the lack of clarity as to whether environmental conservation is part of the company’s strategic intent.

### **Relationships with Out growers**

SUL contracts farmers at the beginning of the year, with anticipated supply of cane agreed together with the prices and quality limits. Rarely are price changes accepted by the company, even when the out growers produce more tonnage of cane than anticipated. Other complaints have included delays in payment, low prices offered, absence of financial/technical/agricultural support from SUL. This has led to despair with farmers quietly complaining to local politicians. However, being a private company, there is little the politicians can do. The other reason for the seeming powerlessness is the fact that the region is just recovering from the war that ravaged it for decades. It appears the out growers are more than ready to take whatever is thrown at them.

All does not seem lost though for the farmers, they recently formed an association through which they plan to channel all their dealings with SUL. They hope that their grievances will be better addressed if they come out with one common voice.

One achievement registered so far, was the agreement with SUL, for the company to provide branded overalls and field boots to the out growers, with the repayment being netted off the amounts due to the farmers. This agreement is

yet to be formally signed off, but it should be effective within the next six months at the latest.

Cane prices also depend on the quality of the cane supplied, with the sucrose content being the main determinant of quality. The higher the sucrose content, the better the prices. The less water there is in the cane, the more the sucrose. In order to get better quality cane, farmers are encouraged to regulate the water in the fields since this determines the price to be paid. The challenge is that in an attempt to regulate the water levels, wetlands are reclaimed.

Northern Uganda has a generally dry climate. Consequently, cane growth is largely based on irrigation. However, the region has faced an unpredictable weather pattern over the past few years, with heavy rains being registered at different times every year. Indeed according to the ministry of disaster preparedness, more heavy rains have been predicted for the third quarter of this year. This is likely to affect the quality of cane, and consequently the prices.

### **The Production Process**

This production department is headed by Mr. Pakapaka Stamina. Upon delivery, sugarcane is weighed before acceptance by SUL, and allocated a batch reference number for identification purposes. It is thereafter loaded into the sorting machine to get rid of the dirt and leaves/husks. In batches, it is sent to the cutting machine, and then it moves by conveyor to the crushing machine. Juice is extracted, measured and tested for sucrose content before being sent to boilers.

After the sucrose has been extracted, the process enters the crystallization stage in which crystals are formed from the sucrose. Factory chemists are always on hand at this stage to ensure that the crystals are of the appropriate size. From here, the sugar is sent to the drying chamber where it is spread for 4 hours, and thereafter packed into the various sized packs.

The main by-products are molasses which are used in down stream operations. 80% of the molasses are sold to manufacturers of animal feeds, and manufacturers of ethyl. The other balance is used as fertilizer. Water is also a huge waste accounting for nearly 75% of the cane. Unfortunately for SUL, there is no mechanism of recycling this water within the factory operations, with the company entirely relying on external water supply.

When efficiently run, the process of manufacturing sugar from cane provides a unique sustainable advantage with minimal environmental impact. The fibrous residue after extracting juice (referred to as bagasse) can be used as a bio-renewable energy source to heat the boilers to generate electricity. This

electricity could be used to not only run the factory, but also to operate the irrigation systems, and maybe even the administration /staff quarters.

Up to 40% of the heating requirements at SUL are met from bagasse, with the rest being imported coal and hydro electricity. Hydro electricity is, however, quite expensive especially if used for running the irrigation systems during the dry seasons. Unfortunately for SUL, Uganda's hydro electricity shortage normally coincides with the dry seasons when the water levels at the hydro electric power dam. At such times SUL reverts to thermal power which is even more expensive. With the changes in Uganda's climatic patterns, the weather has continuously become unpredictable with floods and droughts predicted in various parts of the country.

### **Production Challenges**

According to the production manager, the main operational challenge is the electricity used in running machines. Uganda has faced electricity shortages for the past four years. This has led to increases in the cost of energy, yet the alternative thermal electricity is also costly given the global rise in oil prices, and the highly volatile foreign exchange rates. The fuel prices were further affected by the increased cases of Somali pirates attacking ships in the Indian Ocean. Consequently, a huge portion of the company's operating costs relates to energy. The other alternative that could be considered is to use steam to drive the machines instead of relying on the costly hydro electricity. But in the absence of a water recycling plant, this is not tenable. The above options have been discussed informally in management meetings and it was concluded that they are not feasible, although no formal evaluations were done or considered. The finance department was tasked with the responsibility of tabling the financials for discussion.

### **Maintenance of Machinery**

Responsibility for preventive maintenance currently lies with the engineering/risk management unit under the production department which comprises of over eighty staff working in three 8 hours shifts. This department is third in size after the field operations and administration departments. The department is also charged with risk management at SUL. However, this risk management only caters for the production operations.

Preventive maintenance is done once a week; on Sunday when there is no production going on. It is during this time that the entire production line is serviced. Due to pressure to control costs, there are plans to outsource the maintenance function. Asked about risk management at SUL, the production manager confidently says "Now that we are going to outsource the preventive

maintenance function it is unlikely that we shall see breakdowns again. Even if we did, the other parties will be wholly responsible. It will soon be history.”

In response to the above challenges, the Managing Director went on a working trip to Swaziland to study the operations of a company in a similar industry. His findings are highlighted in his back to office memo (See appendix 2).

### **Human Resource and Administration**

Administration is among the largest departments at SUL, and is headed by Mr. Bitama Paul a recently appointed personnel manager. The department is undergoing various changes, with several new innovations being rolled out. These include time sheets for all staff, a clock in/out register as well as monthly performance appraisal. These changes have not been well received by staff, with several people quietly complaining. This negative attitude could be attributed to the way the changes were introduced and communicated. It was all done over night with staff reporting to work and finding a staff notice that there were changes in the staff rules. In addition, a new Administrative Policies and Procedures manual was to be launched. According to Paul, there is need for a shift from personnel management to human resource management. Talking about the shift in philosophy, Bitama the new head of administration says “Human resources are the most important resources to an organisation. We must therefore ensure that we have the right quality of human resources, and that they are adequately and appropriately remunerated. Good performance must be rightly rewarded if the organizational goals are to be achieved. Gone are the days where all was about wages and work done alone. Going forward we have to manage performance all around”.

### **Distribution and Marketing Operations**

Unlike in some other African countries where sugar manufacturers brand and sell their own sugar, all sugar produced in Uganda is sold to the Uganda Sugar Association which then distributes it further down the value chain, at standard prices. This arrangement has roots in the protectionism philosophy of the newly elected government. It is argued that with all producers selling their sugar to a statutory authority, then government can determine at what prices sugar should be sold. Price control for some of the basic necessities of life was one of the key campaign points during the recent presidential elections. The biggest limitation with this arrangement so far has had to do with the quality of sugar.

Certain sections of the public have complained about the quality of sugar, but the authorities have turned a deaf ear. With no branding, one cannot tell who the producer is and therefore take appropriate action.

This arrangement may also explain why none of these companies are involved in any marketing or sales promotion activities or even corporate social responsibility.

### **Financial Operations**

The finance department comprises of 15 people, and is divided into two sections, financial reporting and management accounting.

Headed by Mr. Kataala Lamps, the department is currently pre-occupied with project evaluation for the water recycling plant. The challenge though has been the limited information available regarding some key forecasts. However, after his return from Swaziland, Jaberu Ban Badi the managing director has finally received the key estimates prepared by a consultant. (See appendix 3)

According to Lamps, this is a major break through which should enable the department finalise the project paper, advising management on the way forward, as well as the financing options available. Only a rights issue of shares had been tentatively considered, but it was unclear how it would work for a listed company like SUL.



Appendix 1: Extracts from the SUL's Financial Statements 2010  
Statement of Comprehensive Income

	2010	2009
	Shs 000	Shs 000
Revenue	<u>4,867</u>	<u>4,301</u>
Gross profit	798	986
Operating costs	(823)	(554)
Net financing costs	<u>(185)</u>	<u>(136)</u>
Profit / (loss) before tax	<u>(210)</u>	<u>296</u>

Statement of Financial Position

	2010	2009
	Shs 000	Shs 000
Assets:		
Property plant and equipment	44,410	40,870
Cane roots	11,000	11,320
Investment and loans	1,800	1,500
Current assets	25,790	28,940
Cash and cash equivalents	<u>13,450</u>	<u>6,550</u>
Total assets	<u>96,450</u>	<u>89,180</u>
Equity and liabilities:		
Equity	55,020	27,730
Non-controlling interests	8,120	6,710
Deferred tax	6,850	7,010
Borrowings	11,310	30,660
Term borrowings	<u>15,150</u>	<u>17,070</u>
Total equity and liabilities	<u>96,450</u>	<u>89,180</u>

Direct costs:		
Electricity	2,034.50	1,657.50
Water	813.80	663.00
Diesel	1,017.25	828.75
Others	<u>203.45</u>	<u>165.75</u>
	<u>4,069.00</u>	<u>3,315.00</u>

Operating costs:		
Marketing and sales promotion	82.30	55.40
Staff costs	493.80	332.40
Others	<u>246.90</u>	<u>166.20</u>
	<u>823.00</u>	<u>554.00</u>

## Appendix 2: Back to Office Memo

To: All Managers  
From: Managing Director  
Subject: Back to Office Memo

I greet you ladies and gentlemen,

I travelled safely and had a wonderful working trip to Swaziland, filled with learning opportunities which I hope will benefit SUL. How I wish every one of you could go through the same experience I have had, but alas, our financial condition may not permit.

Thank you all for the work you have done in my absence. Special regards to Mr. Kataala, who was acting managing director in my absence; of course I understand that it was a team effort from all of you. I intend to use such acting appointments as training /learning opportunities for you, and I hope you relish the challenge. Remember I have been at the helm for over a decade! May be it is time to give way!

I bring you greetings from Swaziland; specifically the management and staff of Ibombo Sugar Factory, who were my hosts.

Back to my trip, I was tremendously challenged by what I saw. Nearly every aspect of our operations has room for improvement. Here below, I will briefly highlight the key areas that may take priority. Hopefully this memo will be the basis of future management discussions for performance improvement.

### **Organisational Focus**

We may need to broaden our focus as an organisation. We are too focused on the financial aspects that we often forget that there are multitudes of stakeholders who impact on our performance. Giving 100% focus on financial matters does not project the best image out there. I understand the shareholders have a significant impact on this but as management it is our role to advise them. I am not happy about the increased focus on the financials, ignoring the other key stakeholder groups.

### **Production Costs**

I am not happy about the huge operational costs. We are so inefficient in our operations. Look at our juice extraction rate for example. At Ibombo they target 80% extraction, while here, we probably have no target rate. The last time it was mentioned by Mr. Pakapaka, he indicated that we were extracting juice at 50% efficiency. I am not sure whether it is the production machinery or just negligence, but we must sort it out sooner rather than later. In this regard, one

of the things we need to urgently consider is the outsourcing of the engineering/risk management unit. Hopefully, we shall produce more efficiently if this is done by outsiders whom we can easily hold accountable. In addition it may assist in reducing operating costs.

I was also impressed by the way Ibombo Sugar Factory has embraced risk management. Their definition of risk is so broad that it made me wonder whether we have any risk management in place. Ours is probably “machine breakdown risk.....” After outsourcing the engineering unit, we need to consider setting up a risk management unit with clear terms of reference.

### **Self Reliance**

Related to the above, I was struck by the extent of self reliance at Ibombo. Electricity, fuel and even water are generated at the factory! In fact, they are planning to supply electricity to the Swaziland national grid! It was awesome! I know we had informally discussed a project to consider water recycling late last year, but I understand the finance team had not made any headway in the absence of credible statistics and forecasts. The consultant has sent me some preliminary figures which I have appended to this memo. I will send through my thoughts on the financing options in an email later this afternoon.

I am sure that if this project is viable, it will give a huge boost to our cost reduction efforts in the long run. I am sure Mr. Kataala and his team will get underway immediately, as we wait for the detailed write up from the consultant.

Appendix 3: Estimates from the Consultant

MH & Co Certified Public Accountants

Client: Sukari Uganda Ltd

Project: Preliminary Projections for the Water Reticulation Plant:

Job Code: 2011/June/p.16

Job Owner: Mubarak Hamisi; CPA

*Project Summary*

- The expansion will make SUL self sufficient in terms of energy production. In future SUL could as well sell some electricity to the national grid.
- The Managing Director will initiate discussions with the Electricity Transmission Company regarding the sale of electricity to them.

*Preliminary cost projections*

- Supply and installation of equipment USD 10,000,000
- Consultants fees: Shs 25,000,000
- Installation to take 3 - 6 months
- Estimated to save 80% of current electricity costs.
- To generate some income, through the sale of approximately 40 Megawatts to the Electricity Transmission Company.
- Will require periodic preventive maintenance estimated to cost USD 20,000 per annum in the first two years. This may rise as the equipment gets older.
- The project life projected at 15 years.
- Current tariffs indicate that the Electricity Generation Company sells power to the Electricity Transmission Company at Shs 200 per unit.

## Appendix 4: Financial Tables

**Table 1: PVIF- Present Value of Shs 1 Due at the End of n Periods**

Period	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	18%	20%
1	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.847	0.833
2	0.890	0.873	0.857	0.842	0.826	0.812	0.797	0.783	0.769	0.756	0.743	0.718	0.694
3	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.693	0.675	0.658	0.641	0.609	0.579
4	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.613	0.592	0.572	0.552	0.516	0.482
5	0.747	0.713	0.681	0.650	0.621	0.593	0.567	0.543	0.519	0.497	0.476	0.437	0.402
6	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.480	0.456	0.432	0.410	0.370	0.335
7	0.665	0.623	0.583	0.547	0.513	0.482	0.452	0.425	0.400	0.376	0.354	0.314	0.279
8	0.627	0.582	0.540	0.502	0.467	0.434	0.404	0.376	0.351	0.327	0.305	0.266	0.233
9	0.592	0.544	0.500	0.460	0.424	0.391	0.361	0.333	0.308	0.284	0.263	0.225	0.194
10	0.558	0.508	0.463	0.422	0.386	0.352	0.322	0.295	0.270	0.247	0.227	0.191	0.162
11	0.527	0.475	0.429	0.388	0.350	0.317	0.287	0.261	0.237	0.215	0.195	0.162	0.135
12	0.497	0.444	0.397	0.356	0.319	0.286	0.257	0.231	0.208	0.187	0.168	0.137	0.112
13	0.469	0.415	0.368	0.326	0.290	0.258	0.229	0.204	0.182	0.163	0.145	0.116	0.093
14	0.442	0.388	0.340	0.299	0.263	0.232	0.205	0.181	0.160	0.141	0.125	0.099	0.078
15	0.417	0.362	0.315	0.275	0.239	0.209	0.183	0.160	0.140	0.123	0.108	0.084	0.065

**TABLE 2: PVAF - Present Value of an Annuity of Shs 1 per Period for n Periods**

Period	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	18%	20%
1	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.847	0.833
2	1.833	1.808	1.783	1.759	1.736	1.713	1.690	1.668	1.647	1.626	1.605	1.566	1.528
3	2.673	2.624	2.577	2.531	2.487	2.444	2.402	2.361	2.322	2.283	2.246	2.174	2.106
4	3.465	3.387	3.312	3.240	3.170	3.102	3.037	2.974	2.914	2.855	2.798	2.690	2.589
5	4.212	4.100	3.993	3.890	3.791	3.696	3.605	3.517	3.433	3.352	3.274	3.127	2.991
6	4.917	4.767	4.623	4.486	4.355	4.231	4.111	3.998	3.889	3.784	3.685	3.498	3.326
7	5.582	5.389	5.206	5.033	4.868	4.712	4.564	4.423	4.288	4.160	4.039	3.812	3.605
8	6.210	5.971	5.747	5.535	5.335	5.146	4.968	4.799	4.639	4.487	4.344	4.078	3.837
9	6.802	6.515	6.247	5.995	5.759	5.537	5.328	5.132	4.946	4.772	4.607	4.303	4.031
10	7.360	7.024	6.710	6.418	6.145	5.889	5.650	5.426	5.216	5.019	4.833	4.494	4.192
11	7.887	7.499	7.139	6.805	6.495	6.207	5.938	5.687	5.453	5.234	5.029	4.656	4.327
12	8.384	7.943	7.536	7.161	6.814	6.492	6.194	5.918	5.660	5.421	5.197	4.793	4.439
13	8.853	8.358	7.904	7.487	7.103	6.750	6.424	6.122	5.842	5.583	5.342	4.910	4.533
14	9.295	8.745	8.244	7.786	7.367	6.982	6.628	6.302	6.002	5.724	5.468	5.008	4.611
15	9.712	9.108	8.559	8.061	7.606	7.191	6.811	6.462	6.142	5.847	5.575	5.092	4.675