

COMMON MARKET FOR EASTERN AND
SOUTHERN AFRICA
LEATHER AND LEATHER PRODUCTS INSTITUTE
(COMESA-LLPI)



UGANDA FOOTWEAR CLUSTER:
BASELINE ANALYSIS
June 2012¹

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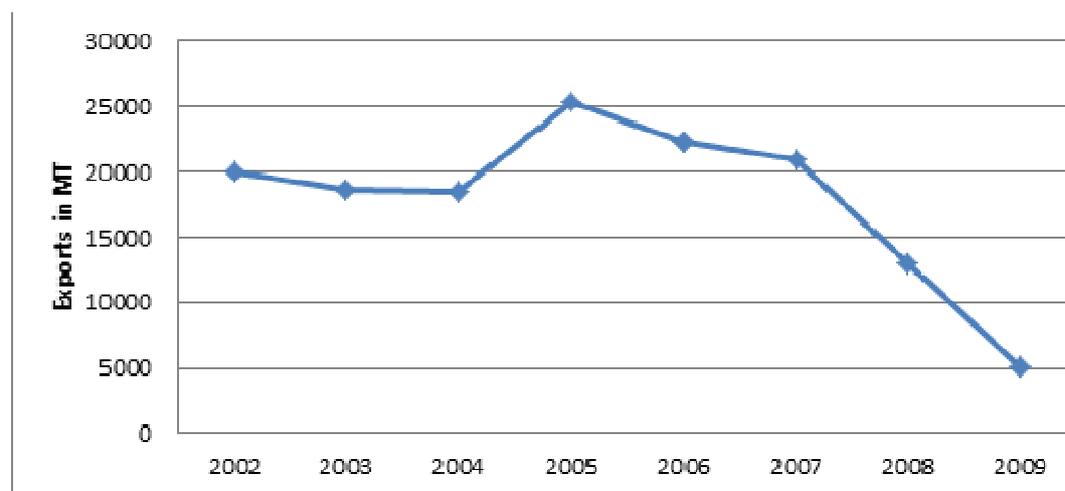
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Introduction

The Ugandan leather value chain has a very good resource base; the national livestock population² was estimated to comprise of 11.4 million cattle, 12.5 million goats, 3.4 million sheep, 3.2 million pigs and 37.4 million poultry. With off-take rates in the range of 12-15% for cattle, and 20-30% for sheep and goats, the potential raw material available in Uganda is about 1.4 million cattle hides and about 3.1 million goat and 0.68 million sheep skins per annum. Fish, especially Nile perch, also provides a good source of skin for the fish skins tanning industry. Ostrich and crocodile farming also provide valuable skins which are used as high-end source of leather.

Uganda has an installed tanning capacity of 1.08 and 2.0 million hides and skins respectively, and it is estimated that tanneries are operating at 60 to 70 percent range because of financial constraints and machine breakdowns. Approximately 90 percent of processed hides and skins are exported as partly processed leather (wet blue). Prior to 2007, 90 percent of these hides and skins were being exported in raw state. In order to curtail the export of raw hides and skins, the Ugandan authorities introduced an export tax of 20% on the value of exported hides and skins in 2002. This was further tightened to 40% in 2007, however the response was weak, this forced the government to further tighten it by introducing a specific export tax of UD\$0.40 per kg, and this has dramatically reduced the exports of hides as shown in the figure below.

Figure 1: Trends in the Export of Raw hides and Skins



Despite the favourable raw materials base, Uganda manufacturers of footwear and leather products are facing an acute shortage of finished leather; this is because approximately 80 to 90 percent of the tanned hides and skins are being exported in wet blue form. The only tannery that is producing finished leather is facing several production constraints that has impacted negatively on quality, quantity and variety of finished leather on the market. This has impacted negatively on the footwear and leather goods subsectors. All footwear and leather products produced are now depending on direct or indirect imports of leather from the region or abroad. This has raised the price of finished leather for footwear manufacturing in Uganda from Ux3000 (US\$1.6) to Ux4000 (US\$1.6) per square foot. This is an area which requires urgent government support, thereby pushing up the cost of production. The small enterprises, which have no stamina to import, are currently facing

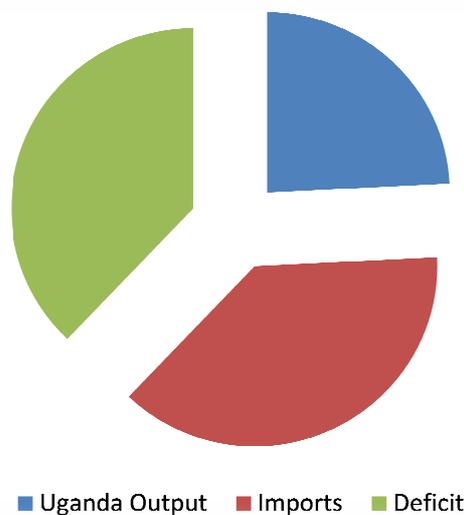
² Livestock Census (UBOS 2008)

acute shortage of leather and have already lost business during the peak demand season for school shoes.

Footwear Market

In 2010 US\$36 million worth of shoes were imported into Uganda and this translates³ to approximately 1.8 to 7.2 million pairs of shoes. With an estimated annual demand of 19 million pairs, it implies that there is a gap of in between 16.8 to 9.8 million pairs that must be manufactured within the country. There are no official statistics of footwear production in Uganda; however it has been projected to stand at 4.6 million, with 60% of it being sandals. The figure below shows the footwear output, imports and deficit deficit in Uganda.

Figure 2: Size of the Footwear Market



There are 10 medium sized enterprises specializing in the manufacture of safety and security boots, children shoes and sandals, 40 small scale enterprises making children shoes, sandals and tailor-made articles. over 300 people. There are 10 small leather goods enterprises employing mostly women. Most of these are cottages.⁴

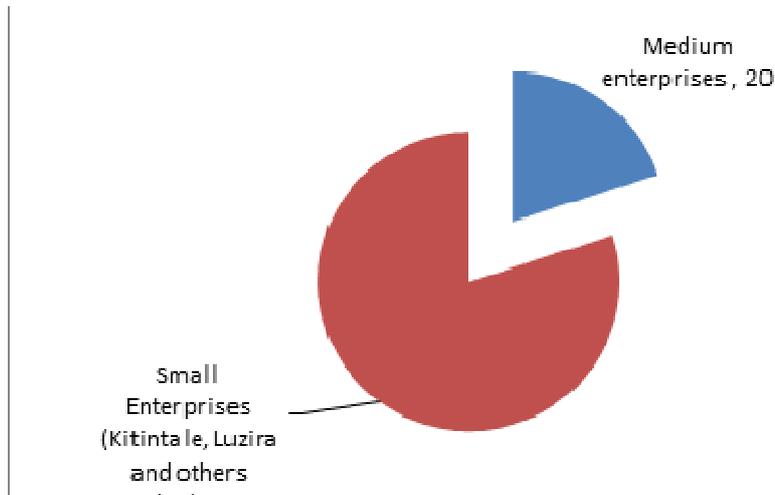
The Structure of the Industry

The objective of the cluster initiative is to support the production of footwear by Micro, Small and Medium Enterprises in Uganda. This report is based on field work which was undertaken in Kampala and its outskirts in May 2012. The report gives a broad outline of the challenges, which the enterprise are facing and also provides practical recommendations, which could be implemented in order to improve the performance of these enterprises. Figure 3 shows that the footwear and leather products industry in Uganda is dominated by small enterprises, which depends on the labour input of its owner and one to five assistances.

³ Assuming that the import prices range between US\$5 to US\$20

⁴ Uganda Demand and Supply Survey

Figure 3: Summary by Size of Enterprises



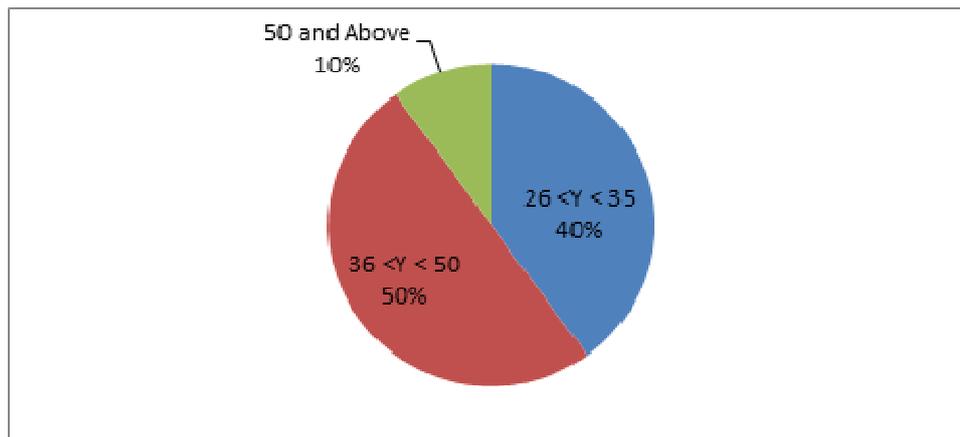
Of the twenty enterprises visited, only four are owned by women, however it is fundamental to note that in the 60 percent of the enterprises that were visited the presence of women in production is very visible. This matter is even confirmed by the fact that the current chairperson of the SMEs Association of leather and leather products is female. Table 1, summarises gender distribution.

Table 1: Gender Balance

Gender	Percentage
Male	80
Female	20
Total	100

The majority of enterprise owners are under the age of 50 years, with the 50% and 40% in the 36 to 50 years and 26 to 35 years age group respectively. This scenario is quite encouraging as these people still have a future to look forward to. They have young families, which requires their support and this would motivate them to work very hard. Most of the workers employed by these SMEs are in the 20 to 35 years age group and also looking forward to establish their own enterprises, once they save enough to purchase their own tools and machinery. Figure three displays the age distributions of the respondents.

Figure 4: Summary by Age Group of Entrepreneurs



The educational level of the footwear and leather goods artisans in Uganda is very high, all the respondents that were interviewed have attained secondary school and 40 percent of them have attained a university degree. This scenario places this sector on a sound educational background, which makes it easier for these enterprises to learn and adapt to new hardware and soft skills. This situation was confirmed also by the fact that University graduates are enrolling to train in footwear technology at the training centre in Uganda. The table below summarises the educational level of the enterprises.

Table 2: Summary of Educational Levels

Education Level	Percentage
Secondary	60
Degree	40

The majority of the owners of the footwear and leather products MSMEs have received vocational technical training in footwear and leather products manufacturing from the Leather training School in Kampala. Out of the twenty respondents 90 percent hold a certificate in footwear and leather products. These enterprises owners were also trained in Training of Trainers course in footwear and leather products manufacturing. This dimension has boosted the skills level in Uganda as all new recruits are being trained on the job. During our mission we observed youths being trained by enterprises owners in both Luzira and Kitintale markets. Figure below displays the distribution on the sources of skills

Table 3: Skills Training Background

Source of Skills	Percentage
Self-taught	0
Learning from friends & relatives	0
From previous job	10
Vocational	90
Other	0
Total	100

Source of Capital

The majority of MSMEs in the footwear and leather products subsector have not received a bank loan to finance their starting up of their business. The model of financing start up small footwear and leather goods enterprises in Uganda was influenced by the training and mentoring model which was championed by the training school. After completing the training course it was observed that most trainees had no capital to start their own business, as a stop gap measure trainees were allowed to use the college facilities to make their own goods at a small fee. Most of these trainees raised money to buy their tools and basic machines by selling these small products, which ranged from wallets, belts and sandals. This led them start their own business operations. This has built a solid base for the new enterprises and also enabled the training centre to continue offer training programmes even in times when enrolments were below economic viability levels and the donor support had dried up. Details see table below.

Table 4: Source of Capital Profile

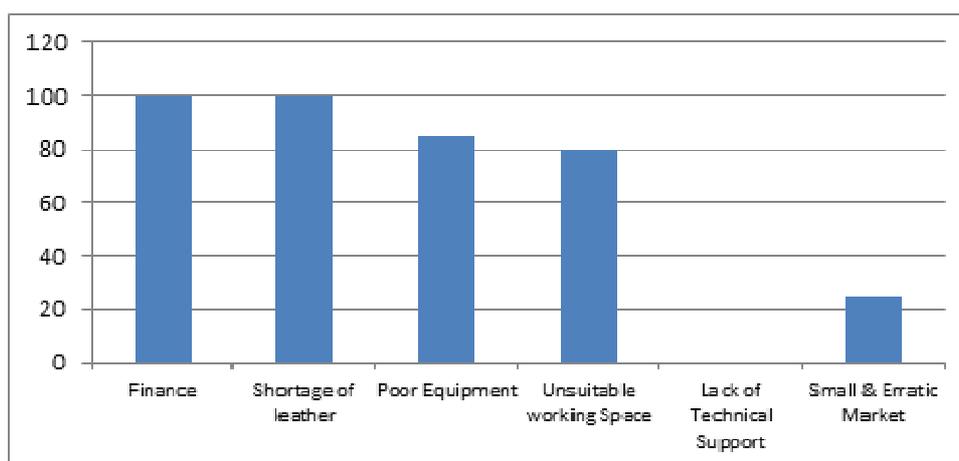
Table 5: source of Capital Profile

Source	Percentage
Friends and Relatives	0
Own Savings	75
Bank Loan	25
Retirement Package	0
Other	0
Total	

Identified Constraints

All the respondents considered shortage of finance and use of old and rudimentary equipment as a major constraint that has hampered the production of quality products and productivity. Eighty-five percent regarded the poor state and lack of necessary machinery as a major factor that was undermining the manufacturing of quality products. The absence of a common working facility impacted negatively on MSMEs visibility as some of them were operating in their back yards and in vegetable markets. Most of the enterprises are of the view that a centralised working space would help to solve a lot of their challenges through collaboration and sharing of the equipment, knowledge and skills. Furthermore this would improve on the visibility of these enterprises that would in turn boost their turnover, capacity utilisation and competitiveness. The overall impact to the economy would be employment creation and enhancement of the livelihoods of the owners and workers. For details see table 8 below.

Figure 5: Summary of Constraints



Main inputs and Products

The inputs used in the production of footwear are leather, soles, glue and other accessories as listed in table 6 below. The direct material cost of the shoes produced by MSMEs range from a minimum of US\$3.64 for sandals to a maximum of US\$14.8 for boots per pair. The main cost input is the leather, which contributes 40.7 per cent, followed by soles at 31.8 per cent. The price of school shoes soles is relatively lower than the rest of the other soles types this is attributed to an innovation that was accomplished by the Crane Training and Common Facility Centre. They designed a school shoes sole, which is very durable and light despite the fact that it is being produced using mainly recycled materials. The Ugandan footwear SMEs are very competitive in the production of school shoes, as the average price in most shops in Kampala for similar products are selling at a price of US\$20. At an ex-factory price of US\$6.04 per pair, MSMEs have the capacity to penetrate the market if they are supported from both the supply and demand side. See details for the cost breakdown below.

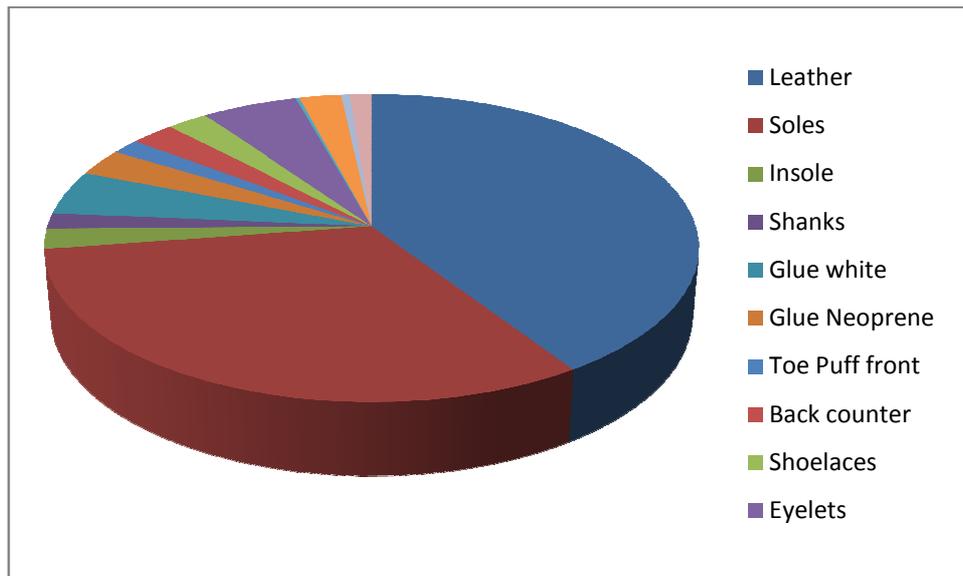
Table 6: Costing of Footwear

Materials	In United States Dollars			
	Back to School	Boots	Sandal	Average
Leather	2.24	4.7	3.04	3.33
Soles	1.6	6.2	0	2.60
Insole	0.19	0.33	0	0.17
Shanks	0.2	0.2	0	0.13
Glue white	0.4	0.48	0.25	0.38
Glue Neoprene	0.3	0.4	0	0.23
Toe Puff front	0.19	0.2	0	0.13
Back counter	0.29	0.32	0	0.20
Shoelaces	0.25	0.32	0	0.19
Eyelets	0.05	1.28	0	0.44
Machine Thread	0.02	0.03	0	0.02
Sock Lining	0.28	0.3	0	0.19
Polish	0.03	0.04	0.05	0.04
Colour	0	0	0.3	0.10

Total	6.04	14.8	3.64	8.16
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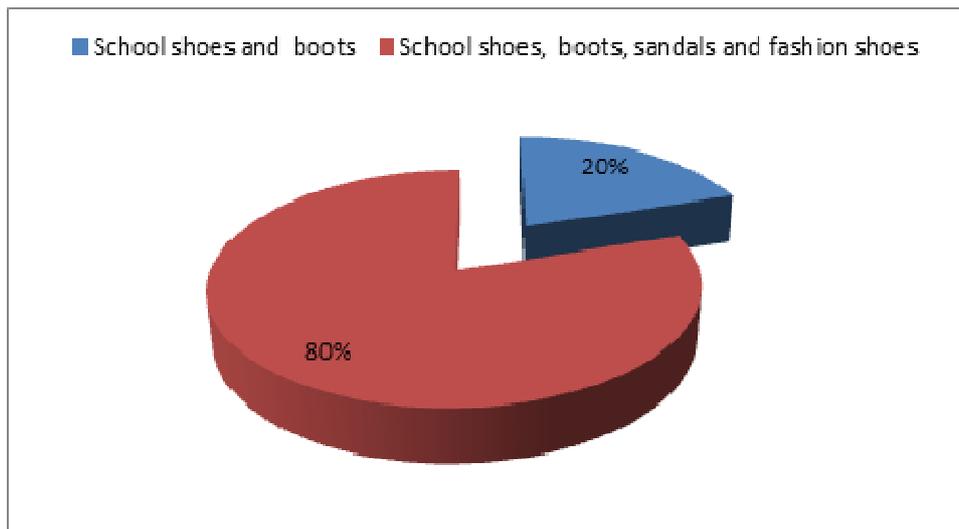
The detailed cost breakdown for direct material inputs are illustrated in the figure below. The two main cost centre are leather and soles as alluded to before. In order to enhance competitiveness in the footwear industry there is a need to increase the production of finished leather in Uganda. The shortage of finished leather has pushed the prices from Ux3000 (US\$1.6) to Ux4000 (US\$1.6) per square foot leather. Uganda has a very good raw material base to address this challenge.

Figure 6: Distribution of Direct Material Costs



The main products being produced by the MSMEs are sandals, school shoes and security boots; however most of the enterprises are in a position to manufacture other types of footwear such as, fashion shoes and gloves. Eighty percent of the enterprises are currently producing a combination of school shoes, boots, sandals and man fashion shoes. These products are mainly seasonal; the turnover of school shoes is high in December and January and also around school opening periods during the year. Sandals have become a year rounder product given the fairly warm weather of Uganda and also because this product is being exported across Africa (Sudan, Zambia, Kenya, Rwanda and Tanzania). Sandals and other leather products such as ladies bags and wallets have found niche markets in Europe, USA and Lebanon.

Figure 7: Models Combinations by Enterprises

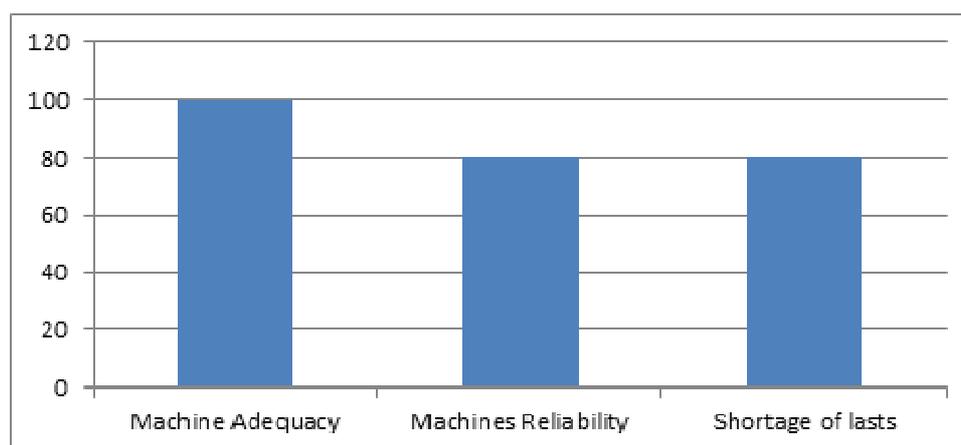


Type and Estimated Cost of the Machines/Tools in Use and Required

The enterprises operating in the footwear clusters are facing major challenges with respect to machinery and tools, all the enterprises reported that they were operating with inadequate machines. 80 % considered their machines and equipment to be unreliable machinery. Whereas the enterprises want to purchase new machines they are constrained by lack of funds. The unreliability of the stitching machines in particular impact negatively on the durability of the products and also results in distorted stitching patterns. Furthermore it undermines on the productivity of the enterprises because of the slow speed and high frequency of breakdowns of the machines.

The quality of the shoes with regard to shape, variety and comfortability is greatly compromised in Uganda because enterprises are facing an acute shortage of shoe lasts (moulds) as such they are using one mould to produce different kinds of shoes. According to Leng and Du (2005), a shoe last represents the approximate shape of the human foot, and is very important in the whole shoe making process. A good last for shoe production has the same importance as a good foundation for a stability of a house. It is responsible for the product fitness as well as the footwear style. A last is involved in both the beginning and end process of constructing shoes. Shoe lasts are not produced in Uganda, however there are plants producing them in Ethiopia and Egypt. See the details of the responses in the figure below:

Figure 8: Machinery Adequacy, Reliability and Shortage of Lasts



The situation with regard to machine combination is fairly good, with close to 70 percent of the respondents operating, with industrial sewing, roughing machines and tools. The major challenge however is that most of the sewing machines are very old and are prone to frequent breakdown as they were bought as second or third hand and thus have outlived their economic life. Hundred percent of the enterprises have roughing machines, which are being fabricated in Uganda, through reverse engineering. This innovation is quite evident in Uganda than in other COMESA Member States. This is an important learning point for other countries.

Table 7: Summary of Machine Combination per Enterprise

Machine Combinations per enterprise	Percentage
Domestic sewing machine, roughing machines & tools	10
Industrial manual/electrical machine, Roughing machine & tools	70
Full Set of Machines	20
Total	

Given the machinery gap summarised in the table above, enterprises were asked to list the machinery they immediately require to boost their productivity, quality and durability of their products. Eighty percent of the enterprises pointed out that it was imperative that they acquire industrial stitching, skiving, sole press machines and lasts. The number required for skiving and sole press machines may be reduced once these enterprises are operating within the same industrial complex as these machines can be shared. It would not make economic sense for this enterprise to own their own skiving and sole press machines, given their current scale of operation. The table below summarises the machines requirements of the twenty enterprises and the total cost of the machines.

Table 8: Summary of Machine Requirements

Machines	Responses			Total Market Value (US\$)	
	Possible	Actual	Percentage	Unit Price	Total
Industrial Stitching machine	20	16	80	3,500.00	56,000.00
Skiving Machine	20	16	80	2,000.00	32,000.00
Sole Press Machine	20	16	80	10,000.00	160,000.00
Tools	20	16	80	2,000.00	32,000.00
Lasts	20	16	80	1,000.00	1600.00
Total					249,600.00

Gross Margin and Break Even Analysis

The gross margin is central in gauging the viability of a business; this is because every business must generate enough cash to buy raw materials, pay employees and all expenses. This margin also demonstrates a firm's ability to translate sales dollars into profit. A healthy business must generate more cash than it consumes. If it does not, it will die. So the stream of cash that flows into a business is the gross profit. The higher the gross profit margin, the larger the stream. The lower the gross profit margin, the smaller the stream of cash available to fund business operations and investment in future growth. The table below shows that the enterprises in Uganda are generating a minimum and a maximum gross profit margin of 20.2 and 40.7 percent per pair. Sandals are the most profitable generating a gross margin of 40.7% and boots has the lowest at 20.2 percent.

Table 9: Gross Profit Margin per Unit

Shoe Type	Production Cost per Unit (US\$)	Ex factory Price per Unit (US\$)	Gross Profit per Unit (US\$)	Gross Margin (%)
Back to Scholl	8.8	10.6	1.8	20.5
Boots	20.3	24.4	4.1	20.2
Sandals	7.15	10.7	3.55	40.7
Man office	20	28	8	40
Average	14.1	18.4	4.3	32.6

In order to gauge whether these enterprises are viable it is critical to compute their break-even point and then compare with their current output levels. Four scenarios are given, based on the production of back to school shoes, boots, man office shoes and sandals. Sandals are the most profitable product at US\$4705 per month, and office shoes are the least at US\$957 per month at the current levels of capacity utilisation. Details of profitability per type of footwear at current and installed capacity utilisation levels are illustrated below.

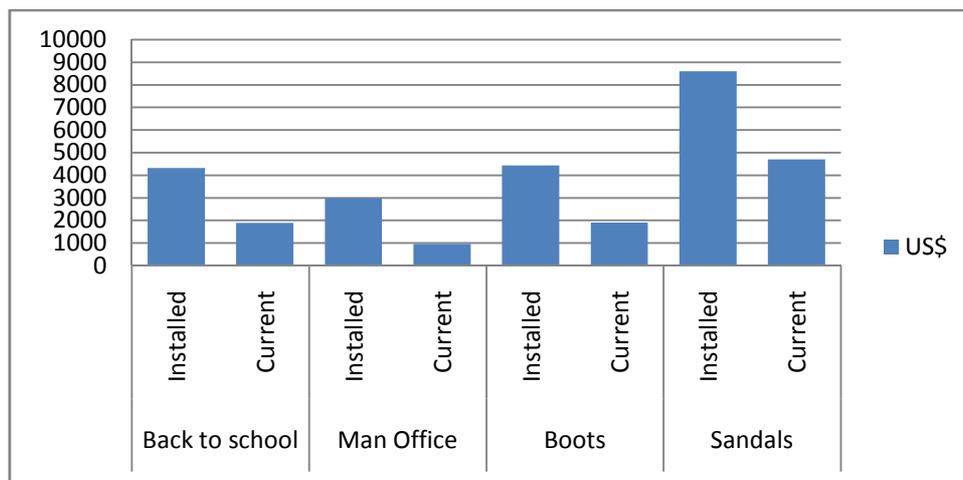
Table 10: Break Even Analysis

Average	Back to School		Man office Shoes		Military Boots		Sandals	
	Installed	Current	Installed	Current	Installed	Current	Installed	Current
Fixed Costs	750	750	750	750	750	750	750	750
Variable Cost per Unit	6.04	6.04	18	18	14.8	14.8	3.64	3.64
Selling Price per Unit	10.6	10.6	28	28	24.4	24.4	10.7	10.7

Break Even Qty per Month	164	164	75	75	78	78	106	106
Net Profit per Month	4320	1894	2996	957	4438	4438	8600	4705

The net profit margin shows how much of each sales dollar shows up as net income after all expenses are paid. For example, if the net profit margin is 5% that means that 5 cents of every dollar is profit. The net profit ratio for the four shoes models is positive at the current capacity utilisation levels. Minimum loaning rates in Uganda are above 20 percent per annum, which implies that these SMEs are in a position to repay bank loans. The figure below shows the net profit comparison when firms are operating at either 100% or the current capacity utilisation level of 60 percent.

Figure 9: SMEs profitability by Shoe Model



The figure above illustrates that footwear artisans can easily increase their profitability by expanding their volumes towards the installed capacity utilisation levels.

Banking, Loan Requirements and Repayment Capacity

SMEs Relationships with Banks

The enterprises, which were interviewed in all the sites, have a strong relationship with banks, as 100 hold bank accounts. This is contract in other COMESA countries. This is a good indicator that banks may be willing to extend loans to these SMEs, as they are already have a relationship. For details see table 12 below.

Table 11: Relationships with Banks

Are in Possession of a Bank Account	Responses		
	Possible	Actual	Percentage
YES	20	20	100
NO	20	0	0

Loan Requirements and Repayments Capacity

The loan requirements of the SMEs are informed by the information contained in table 8 above, which lists the types of machines, which they require in order to improve their operations. The total loan requirement for the group of 16 enterprises is estimated at USD249, 600. This implies an average minimum loan per enterprise of USD15,600. However this loan requirement maybe reduced by ensuring that equipment such as skiving and sole press machines are centralised and shared by enterprises. The centralised machines may be owned by different enterprises within the clusterthat will then extend a service for a fee to other enterprises. This will reduce the minimum loan requirement for capital to USD6, 500, which will cater for the industrial sewing machine, lasts and tools. Thisloan requirement is subjected to loan repayment capacity (sensitivity analysis) based on their profitability margin estimated in the table below An array of interest rates is used ranging from 5 to 25 percent. See the details in table 13.

Table 12: Loan Repayments Capacity under Different Scenarios

Description	Back to school	Fashion Shoes	Boots	Sandals
Net profit per annum	22,728	11,484	53,256	56,460
Loan repayment @ 5% per annum	6 825	6 825	6 825	6 825
Net after loan repayment	15 903	4 659	46 431	49 635
Loan repayment @ 10% per annum	7 150	7 150	7 150	7 150
Net after loan repayment	15 578	4 334	46 106	49 310
Loan repayment @ 10% per annum	7 475	7 475	7 475	7 475
Net after loan repayment	15 253	4 009	45 781	48 985
Loan repayment @ 15% per annum	7 800	7 800	7 800	7 800
Net after loan repayment	14 928	3 684	45 456	48 660
Loan repayment @ 20% per annum	8 125	8 125	8 125	8 125
Net after loan repayment	14 603	3 359	45 131	48 335
Loan repayment @ 25% per annum	22728	11484	53256	56460
Net after loan repayment	6 825	6 825	6 825	6 825

Out of the four models of shoes sandals and boots are the most profitable product lines. Back to school shoes demand and prices can easily be increased to around USD15, as most of the established shops are selling similar products, which are less durable at USD20 per pair in Kampala. If SMEs raises their prices of back to school shoes to US\$15, their net profitability ratio, would rise to 53 percent and make a net profit of US\$2085 per month, which translates to US\$25 025 per annum. This situation would allow them to even repay commercial loans of 20 to 25 percent per annum. It is fundamental to point out that these SMEs can only be able to pay these loans if they are operating at full or near full capacity and there are also supported by government procurement.

Scenario Analysis: Policy and Planning

Industrialisation is important for Uganda or any other Africa country, hence it is fundamental that deliberate policies should be enacted and implemented to stimulate the industrialisation process especially with regard to renewable resources such as hides and skins. The normal chorus from tanners across the Africa is that finished leather is difficult to sale because the leather industry is fashion industry where texture and colour demanded of leather changes rapidly, hence wet blue is the only tradable commodity. This sounds logical simply because the tanners' focus is to export to Europe and China. They further assert that the market in Africa is small to absorb all finished leather. The market is there in Africa; however deliberate action has to be taken by national governments to procure domestically for example military boots.

Summary of Findings

The Ugandan footwear cluster faces the following major constraints:

- Most of them operate without the basic machinery and tools and depend on shared manual domestic sewing machines;
- There is no natural clusters as the MSMEs are scattered all over the city;
- Shortage of quality leather and soles, the shortage of leather is likely to worsen because one of the leading tanneries has just stopped production;
- The Crane Common Training Facility requires capitalisation, as a number of machines and equipment are not working.

Despite these enormous challenges, the shoe cluster holds immense potential because of the following:

- The sector is dominated by young and innovative entrepreneur who are eager to learn and prosper;
- Highly trainable because most of them have secondary school education;

- The Crane Common Training Facility is the anchor of the footwear industry and has demonstrated greater resilience over the years, despite lack of external funding.

Recommendations

The following interventions are recommended:

- Business training, which will cover basic business concepts, such as costing, recording keeping, pricing and separation of business and personal income.
- Skills up grade training;
- Mobilise for the allocation of the common production facility.
- The Government should provide a common working facility for these SMEs, as this will help to partially address some of the operational constraints these SMEs are facing.