SNAPSHOT MALI

ENTERPRISE BENCHMARKING STUDY OF THE COST AND QUALITY OPERATING CONDITIONS FACED BY FOREIGN INVESTORS IN MALI AND THROUGHOUT SUB-SAHARAN AFRICA

JULY 2005

This publication was produced for review by the United States Agency for International Development. It was prepared in cooperation with the Multilateral Investment Guarantee Agency (MIGA) of the World Bank, and The Services Group, Inc. (TSG) of Arlington, Virginia, USA.

This report was produced by The Services Group, Inc. (TSG) under Purchase Order No. 688-O-00-04-00051-00 from USAID-Mali, with additional support and funding from the Multilateral Investment Guarantee Agency (MIGA) of the World Bank for additional field visits and research in Senegal, Ghana, Kenya, Uganda, Tanzania, Mozambique, Lesotho, South Africa, Madagascar, and Mauritius, as part of MIGA's Enterprise Benchmarking Project (EBP) for Sub-Saharan Africa.

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DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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CHAPTER I
INTRODUCTION AND OBJECTIVES

INTRODUCTION

Sub-Saharan African countries are increasingly paying more attention to the conditions in their countries that make private sector investment attractive. Mali is no exception. A government open to attracting foreign investment has solicited the support and advice of the MIGA, USAID and other donors to chart a path forward.

This study on Mali's competitiveness was commissioned by USAID and MIGA. It provides a 'snapshot' of the cost and quality operating conditions foreign investors would currently face in Mali and ten other Sub-Saharan African countries. MIGA's Enterprise Benchmarking Model provided a systematic way to evaluate the conditions foreign investors would face in Mali and compare them against those in other countries.

CONTEXT AND OBJECTIVES OF THE MALI ENTERPRISE BENCHMARKING STUDY

The Mali Enterprise Benchmarking Study was prepared as part of a larger study on the business and operating conditions faced by foreign investors in Sub-Saharan Africa. This study is funded and supported by USAID and is the latest in a series of competitiveness benchmarking studies undertaken by the Multilateral Investment Guarantee Agency (MIGA) of the World Bank.

The Enterprise Benchmarking Program (EBP) measures competitiveness – an established set of criteria to gauge a company's ability to competitively produce in Mali and various locations throughout Sub-Saharan Africa. When a company decides to open a factory, representative office, or call center, it is faced with the need to evaluate a variety of sites and choose the one that best fits its needs to access raw materials and end markets while remaining profitable. This often implies a major investment in company resources and the daunting task of obtaining and analyzing a vast body of information, particularly for foreign investors. Benchmarking is a tool that companies often use to organize their research and assign value to each bit of information according to their own priorities.

Investment promotion agencies (IPAs) are increasingly using a benchmarking approach, which mimics that of an investor, to determine how attractive their country or region is from the investor's viewpoint and how its strengths and weaknesses compare to those of other sites. This EBP study is an effort to view Mali through the eyes of a foreign investor as compared with ten other Sub-Saharan African countries. The objectives of this study are fourfold:

1) Observe the costs and quality conditions under which companies operate in Mali and other Sub-Saharan African countries;
2) Investigate the reasons for investment decisions made in Mali and other countries;

3) Examine Mali's strengths and weaknesses vis-à-vis other Sub-Saharan African countries in a manner consistent with the approach taken by foreign investors; and
4) Recommend ways in which Mali can capitalize on its strengths and take advantage of potential opportunities.

In coordination with IPAs throughout Africa, MIGA chose six industries believed to be of great current and future importance for Mali and Africa. These are apparel, textiles, shared services, tourism (hotels), horticulture and food and beverage processing.

SUMMARY OF FINDINGS

Recurring Strengths and Weaknesses in Mali

The current study has identified Mali's track record of political stability and democratic administration, pro-business policies introduced in recent years, relatively secure operating and living environment, availability of unskilled labor, low operating costs and relatively flexible labor regulations as the country's most important strengths.

Based on the EBP Model output, Mali rated as a country with lower operating costs relative to the Sub-Saharan Africa mean in every industry except for shared services. This is primarily due to the affordability of land and low cost of skilled and unskilled labor, particularly in sectors that utilize a high proportion of unskilled workers. Foreign investors in Mali also benefit from the ability to own land in many parts of the country. This is a very significant benefit not available in many surveyed countries such as Tanzania or Uganda and is particularly important for the horticulture sector. Other investors mentioned multiple government incentives, low labor turnover rates and low interest rates as additional positive factors that facilitate business.

Investors in all sectors generally praised Mali for offering a higher degree of safety than surrounding countries and African industry leaders such as South Africa and Kenya. Mali also enjoys a more stable and consistent supply of water and power than most other countries in Sub-Saharan Africa do.

On the "quality of business environment" Mali faces many challenges. The absence of current industry clusters and transportation infrastructure are consistently problematic, with limited road access to neighboring countries and ports and extremely limited air cargo capacity. Many of the government-zoned industrial parks are also not connected to basic off-site infrastructure and the cost of power is among the highest in Sub-Saharan Africa.

Investors found Mali's general business environment difficult to navigate and noted that some bureaucratic regulations and practices stymie business operations. Government officials are thought to lack an understanding of the needs of the private sector and become overly involved in regulating the affairs of private companies, including private contracts. The public system has many penalty payments, which has enticed corruption among bureaucrats. This is particularly evident in customs, where bribes are usually necessary to clear goods quickly.

All industry sectors experienced difficulty in recruiting properly trained workers, from managers to skilled multilingual workers. This is a result of both poor primary and secondary education as well as of a lack of technical training opportunities in specific sectors such as food and beverage processing and information and communication technology. Where specific sector research or

training opportunities do exist, many firms or individuals do not have access to the information due to a lack of professional association among firms.

Cost Savings over Comparator Countries

In addition to the eleven Sub-Saharan African countries analyzed for this study, MIGA consultants also assessed typical operating costs in four comparator countries – Nigeria, Tunisia, Ireland and France. When comparing the operating costs of firms located in Africa with those situated in Europe, large cost advantages become very apparent in all analyzed sectors. This is principally due to much lower wage levels and also partially due to lower real estate prices. However, due largely to less-developed infrastructure, African utility and transportation costs are almost uniformly more expensive than in Europe.

To put the levels of savings in perspective, total operating costs in Mali and the profiled Sub-Saharan African countries – with the exception of South Africa – were generally between 72 and 85 percent less expensive than those in Europe. Horticulture and processed food and beverages showed smaller levels of savings – about 45 percent – due to high African airfreight rates. However, since most companies in these sectors either export products that are seasonally unavailable in Europe or serve local markets, these transportation costs may not be relevant to the type of investor looking to locate in Africa. Due to the very large cost differential between Europe and Africa, the margins separating individual Sub-Saharan countries from each other – and from North Africa – may seem inconsequential to investors from Europe or other overseas markets. In this case, other distinguishing characteristics such as quality or promotional activities may play a larger role than anticipated in attracting foreign direct investment.

CHAPTER II
METHODOLOGY

ENTERPRISE BENCHMARKING MODEL

MIGA designed the Sub-Saharan Enterprise Benchmarking Project to compare the cost and quality conditions of doing business in eleven Sub-Saharan African countries for six industry sectors. The goal was to replicate the same site selection factors used by international investors when deciding to expand or locate a factory or business overseas. Typically, investors are motivated by a wide range of factors, including labor costs, political stability, quality of infrastructure, or other concerns. MIGA developed a benchmarking methodology and model to systematically collect and process data in order to compare each industry and country through the lens of investors' priority site selection motivations.

The model measures the potential for company competitiveness at a specific point in time in Mali and other countries. It is based on the concept of capturing a "snapshot" of investors' perspectives in six industry sectors. Investment conditions can invariably change very quickly, so this "snapshot" report provides a baseline for Mali to monitor progress in creating a competitive operating environment for foreign and local investors. The benchmarking methodology is most effective when repeated on an annual or semiannual basis, so that it can identify investment trends and reveal areas of declining or increasing costs and quality operating conditions.

ASSUMPTIONS

The benchmarking model is predicated on a set of assumptions about investment decisions, which are tested through empirical data gathered from interviews and publicly available cost and quality condition rankings. The model assumes several things about investor behavior, garnered through hundreds of interviews with companies with international investments. These assumptions can be broken down into two major categories:

Assumption 1. Lower costs make a potential investment location more attractive. The assumption is that when researching a site, an investor will prefer lower costs to higher costs, when all else is equal. For instance, assuming that the education level and productivity of the work force are similar in two countries, an investor will prefer the location where labor costs are lower. That said, quality is often reflected in the costs that investors face, so that highly skilled labor is more expensive than unskilled labor.

Assumption 2. Higher quality makes an investment site more attractive. Here, cost factors being equal, the benchmarking model is structured under the assumption that good quality operating conditions such as infrastructure, services and political stability are more attractive to an investor than poor quality conditions. For example, if the electric power costs in two countries are similar, the investor will prefer the country that experiences fewer power outages.

MODEL MEASUREMENTS

The benchmarking model processes measurements of cost and quality conditions experienced by investors based on desktop research and a detailed survey of investors already operating in Mali and ten other African countries.[1] The survey obtained profiles and data from these investors regarding their costs and the quality of infrastructure and services they face. These factors are listed below in Figure 1 and are defined further in Appendix B.

Figure 1: Site Selection Factors Processed by the Enterprise Benchmarking Model

Site Selection Consideration[2]	*Cost Factors*	*Quality Factors*
Labor	Labor costs	Potential to recruit local staff Flexibility of labor environment
Infrastructure	Cost of electricity Cost of water Cost of telecommunications and broadband internet Cost of natural gas Cost of transportation (air, road, ocean)	Quality of telecommunications and internet Quality of power supply Quality of water supply Availability and reliability of shipping transportation
Real Estate	Cost of land Cost of construction Cost of office space	Availability of land and office space
Living Conditions	None	Quality of living, including schools, safety and healthcare
Access to Markets	None	Size of local market Proximity to raw materials and components Access to international tourists
General Business Environment	None	Political, financial, and economic stability Level of bureaucratic regulations Taxation

Investors do not place equal value on all cost and quality factors. A textile mill, for example, might place premium value on locating near a source of raw cotton, while a call center might value access to inexpensive and reliable telecommunications above all else. Based on the experience of hundreds of foreign investors, weightings were thus assigned to each factor that investors consider when making location decisions. The benchmarking model processes the data in proportion to the importance each site selection factor plays in a typical investment decision for each industry. The weightings utilized by the model are displayed in Figure 2.

[1] Surveyed countries include Mali, Senegal, Ghana, Kenya, Uganda, Tanzania, Mozambique, South Africa, Lesotho, Madagascar and Mauritius.
[2] The cost and quality factors measured in this study are defined in detail in Appendix B.

Figure 2: Site Selection Factor Weighting Matrix

	Sector											
	Apparel (Garment Factory)		**Textiles** (Fabric Mill)		**Shared Services** (Call Center)		**Tourism** (Hotel)		**Horticulture** (Vegetable or Flower Farm)		**Food and Beverage Processing Factory**	
Location Quality Variables	**Weight (%)**		**Weight (%)**		**Weight (%)**		**Weight (%)**		**Weight (%)**		**Weight (%)**	
General business environment	14		21		16		26		16		16	
Potential to recruit local staff	20		19		29		9		14		24	
Access to input/output markets	27		26		0		3		26		21	
Infrastructure	14		9		14		4		9		9	
Flexibility of labor regulations	14		14		23		25		24		19	
Quality of real estate	9		9		9		29		9		9	
Living conditions	2		2		9		4		2		2	
Total	***100***		***100***		***100***		***100***		***100***		***100***	
Location Quality Factors	**Weight (%)**	**Overall Weight (%)**	**Weight (%)**	**Overall Weight (%)**	**Weight (%)**	**Overall Weight (%)**	**Weight (%)**	**Overall Weight (%)**	**Weight (%)**	**Overall Weight (%)**	**Weight (%)**	**Overall Weight (%)**
General Business Environment												
Economic, financial, & political stability	65	9.1	65	13.7	50	8.0	60	9.6	70	11.2	60	9.6
Doing business & bureaucracy	25	3.5	25	5.3	27	4.3	25	4.0	25	4.0	25	4.0
Intellectual property protection	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Corporate taxation	10	1.4	10	2.1	23	3.7	15	2.4	5	0.8	15	2.4
Total	***100***	***14.0***	***100***	***21.0***	***100***	***16.0***	***100***	***16.0***	***100***	***16.0***	***100***	***16.0***
Potential to Recruit Local Staff												
Availability of labor	100	20.0	100	19.0	50	14.5	80	11.2	100	14.0	100	24.0
Mastery of languages	0	0.0	0	0.0	50	14.5	20	2.8	0	0.0	0	0.0
Total	***100***	***20.0***	***100***	***19.0***	***100***	***29.0***	***100***	***14.0***	***100***	***14.0***	***100***	***24.0***
Access to Input/Output Markets												
Export competitiveness	77	20.8	63	16.4	0	0.0	0	0.0	48	12.5	59	12.4
Proximity to raw materials	0	0.0	20	5.2	0	0.0	0	0.0	50	13.0	35	7.4
Suppliers/cluster network	20	5.4	15	3.9	0	0.0	100	26.0	0	0.0	0	0.0
Size of domestic market	3	0.8	2	0.5	0	0.0	0	0.0	2	0.5	6	1.3
Total	***100***	***27.0***	***100***	***26.0***	***0***	***0.0***	***100***	***26.0***	***100***	***26.0***	***100***	***21.0***
Flexibility of Labor Regulations												
Flexibility of labor	30	4.2	30	2.7	30	4.2	35	3.2	30	2.7	30	2.7
Working time regulations	25	3.5	25	2.3	20	2.8	25	2.3	25	2.3	25	2.3
Social climate	25	3.5	25	2.3	0	0.0	10	0.9	25	2.3	25	2.3
Labor turnover	15	2.1	15	1.4	50	7.0	30	2.7	15	1.4	15	1.4
Presence of labor unions	5	0.7	5	0.5	0	0.0	0	0.0	5	0.5	5	0.5
Total	***100***	***14.0***	***100***	***9.0***	***100***	***14.0***	***100***	***9.0***	***100***	***9.0***	***100***	***9.0***
Infrastructure												
International people access	10	1.4	5	0.7	63	14.5	77	18.5	5	1.2	5	1.0
Air shipment	10	1.4	15	2.1	0	0.0	0	0.0	30	7.2	10	1.9
Rail shipment	5	0.7	7.5	1.1	0	0.0	0	0.0	7.5	1.8	7.5	1.4
Sea shipment	15	2.1	15	2.1	0	0.0	0	0.0	10	2.4	15	2.9
Road shipment	5	0.7	7.5	1.1	0	0.0	0	0.0	7.5	1.8	7.5	1.4
Quality of telecommunications	5	0.7	5	0.7	28	6.4	0	0.0	5	1.2	5	1.0
IT infrastructure	10	1.4	5	0.7	6	1.4	0	0.0	5	1.2	10	1.9
Power supply	10	1.4	20	2.8	3	0.7	14	3.4	10	2.4	10	1.9
Water supply	30	4.2	20	2.8	0	0.0	9	2.2	20	4.8	30	5.7
Waste treatment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Gas supply	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	***100***	***14.0***	***100***	***14.0***	***100***	***23.0***	***100***	***24.0***	***100***	***24.0***	***100***	***19.0***
Quality of Real Estate												
Availability of land	50	4.5	50	4.5	0	0.0	50	14.5	50	4.5	50	4.5
Availability of industrial buildings	50	4.5	50	4.5	0	0.0	50	14.5	50	4.5	50	4.5
Availability of office space	0	0.0	0	0.0	100	9.0	0	0.0	0	0.0	0	0.0
Total	***100***	***9.0***	***100***	***9.0***	***100***	***9.0***	***100***	***29.0***	***100***	***9.0***	***100***	***9.0***
Living Environment												
Cost of living	55	1.1	55	1.1	55	5.0	20	0.8	55	1.1	55	1.1
Safety	15	0.3	15	0.3	15	1.4	80	3.2	15	0.3	15	0.3
Schools	15	0.3	15	0.3	15	1.4	0	0.0	15	0.3	15	0.3
Healthcare	15	0.3	15	0.3	15	1.4	0	0.0	15	0.3	15	0.3
Total	***100***	***2.0***	***100***	***2.0***	***100***	***9.0***	***100***	***4.0***	***100***	***2.0***	***100***	***2.0***
		100		***100***		***100***		***100***		***100***		***100***

DESCRIPTION OF DATA

The data used for the Benchmarking Model is gathered from three types of sources.

International sources. Desktop research was used to gather important data from international sources such as *Euromoney's* Country Risk Poll, *Transparency International's* Corruption Perception Index and macroeconomic statistics found in *The World Bank's* World Development Indicators.

Local sources. Local sources such as tax specialists, real estate agents, construction companies, government ministries and utility providers supplied information required by the methodology such as local tax rates, typical rental and land purchase rates and electric power and water costs.

Company interviews. The bulk of quality conditions data were gathered through company interviews. The survey requested both quantitative and qualitative information and identified the motivating factors behind the investor's decision to locate at that site. Approximately five companies in each industry were interviewed in Mali and other countries. Most interviews were conducted with foreign investors or firms in a joint venture with a Malian and foreign partner. In some cases, local companies were interviewed, particularly those engaged in exporting.

MIGA consultants conducted twenty-five interviews between November 26, 2004 and March 30, 2005 in and around the Bamako area. The composition of selected firms is displayed in the table below. These interviews were conducted simultaneously with company interviews in ten other African countries.

Figure 3: Interviewed Malian Firms

Sectors Covered	Number of Firms	Ownership Structure of Interviewed Firms		
		100% Malian	Joint Venture	100% Foreign
Apparel	**2***	1	1	0
Textiles	**3****	1	2	0
Horticulture	**5**	4	1	0
Food and Beverage	**5**	0	3	2
Shared Services	**5**	0	5	0
Tourism (Hotel)	**6**	1	3	2
TOTAL	***26****	***7***	***15***	***4***

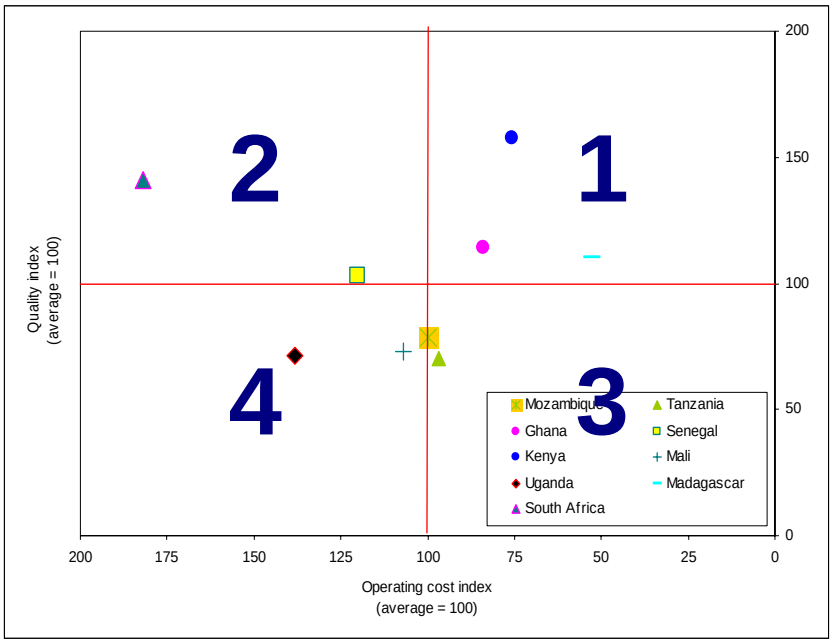
* One firm also produces textiles.
** One firm also produces apparel.
*** Twenty-five individual interviews

A notable feature of the sample firms in Mali is the presence of non-foreign firms. As described earlier, this study is based on the site-selection methodology, which normally focuses on foreign firms. However, the reality of Mali today is that there are not enough foreign companies to be sampled – in fact, in some sectors, they are the universe. Therefore, realistically, if an investor is still interested in Mali after learning that it is a frontier market, and wants to have a sense of operating conditions, then the investor would naturally be forced to interview non-foreign firms as a proxy. While the feasibility study for the potential investor may still come out positively, generally speaking, the lack of the cluster of foreign firms itself does not do a favor to promote Mali since foreign investors rely, to some extent, on the assessment of the country's business environment given by existing foreign investors.

INTERPRETATION OF MODEL OUTCOMES

MIGA's Enterprise Benchmarking Program seeks to provide a 'snapshot' view of what an industry looks like to a foreign investor at one static point in time. Part of the snapshot is rooted in indisputable costs; a fraction is based on perceptions or conjecture. But that is the experience of a foreign investor. Government plans may exist for a complete overhaul of a nation's power grid, but if an investor took his or her site selection 'snapshot' in November 2004, that may not have been captured in the picture. Similarly, government officials may believe that they have reformed customs, but if potential investors hear of frequent shipment delays or are faced with bribery themselves, then that is the captured 'snapshot'.

Figure 4: Cost-Quality Quadrant Zones



There are no scientific ways to determine whether a particular industry is worth promoting. The question can, however, be analyzed in a systematic way, which is the aim of MIGA's Enterprise Benchmarking Model. Each sector was analyzed along a cost and quality axis. The *x*-axis plots the operating costs a company would face in each country as a percent of the mean costs of all countries. The *y*-axis plots a weighted quality operating conditions scores that are within 0.5 standard deviations above and below the mean. These are displayed on Model outputs like the one in Figure 4, which is divided into four quadrants. This provides a methodical way to take a first look at an industry, just as an investor might.

A country would ideally like to find its industries in Quadrant 1 in Figure 4, where quality is high and costs low relative to other surveyed countries. In general, industries in Quadrant 1 are worth promoting because the government and private sector can often do so by capitalizing on marketing strengths instead of remedying weaknesses.

Countries that lie in Quadrant 2 might be attractive locations for companies that desire the highest quality operating environment, both in terms of how the EBP Model defines 'quality' and in ways that lie outside the Model's calculus. Quality operating conditions, particularly highly skilled labor, come with higher costs.

Quadrant 3 countries are not as attractive as those in Quadrant 1, but are more desirable than those in Quadrant 4. Industries that value low-cost conditions relatively more than those with high quality might consider a Quadrant 3 location, particularly those closest to the quality mean.

Quadrant 4 is the least desirable position since costs are high without the benefit of higher quality. Additional justification is probably needed to promote firms lying in this quadrant of the

scatter gram. Cases in which countries lie close to the quality mean may benefit from investment promotion activities with accompanying policy changes and support.

In some cases, improvements in infrastructure or alterations in policies and practices can have the positive effect of improving quality conditions and lowering operating costs for investors – effectively moving a country into a more desirable Quadrant. Improvements in the power supply, for instance, not only improve quality, but also lower the costs of generator-dependent firms. Some factors such as the landlocked geographical location of a country cannot be altered and certain costs will always remain higher vis-à-vis other countries in the region. Subsidies that lower operating costs in these cases usually are not the first best strategy. Some industries are not worth promoting.

CHAPTER III
RESULTS — APPAREL

SUMMARY OF FINDINGS

Mali's export-oriented apparel industry is very small, with most existing firms producing customized garments for clients or for general sale on local and regional markets. Despite this, the apparel industry enjoys generous incentives from the government, who is committed to promoting apparel exports.

However, the challenges facing the industry are formidable. Although Mali possesses large supplies of high-quality cotton, it does not presently benefit from this "natural" advantage because only a tiny proportion of Malian cotton is processed into fabric locally. With the expiration of the Multi-Fiber Agreement, many producers in countries that are located closer to major export markets can now access those markets free of export tariffs, depriving Mali and other Sub-Saharan Africa countries of this powerful advantage. The country has not been able to establish itself as a quality leader, or a low cost location. High transportation costs and above average skilled and unskilled labor costs, and high electricity costs are recurrent themes in every sector studied.

Thus, any advantage to locating in Mali is likely to come from apparel manufacturing operations that are downstream vertical integrations from textile mills. Presence of high-quality raw materials is one area where Mali has a huge advantage over its regional competitors. Such vertical integration can allow Mali to become a viable regional player in apparel which can then expand to other markets. It is thus recommended that any push for investment in apparel production occur right after or simultaneously with promotion of domestic cotton processing.

Strengths	**Weaknesses**
• Access to input (cotton) supply • Abundant skilled and unskilled labor • Reliable power and water supply • Fast custom clearance • Track record of pro-business reforms	• Above-average cost and below-average quality of skilled labor • High transportation costs • Limited access to sea ports • Lack of industry knowledge and expertise
Opportunities	**Threats**
• Vertical integration of cotton production with apparel manufacturing • Production for local and regional markets	• Global, especially Asian, competition • Extension of duty-free access to export markets to global competitors • Stringent environmental requirements demanded in export markets • Civil unrest in neighboring countries

CONTEXT

Presently, the apparel industry in Mali is underdeveloped and is comprised of small ateliers and tailor shops with a few workers each. There are very few actual factory operations that export their production or take advantage of scale economies. Despite this, the Malian government considers the apparel industry important and supports its development.

Apparel manufacturing is a labor-intensive operation that does not require sophisticated factory infrastructure other than electrical lighting, water and sewerage hook-ups. This explains the intense level of competition that exists in the industry. Mali's most formidable competition comes from Asia, where India, Pakistan, and especially China offer the best mix of cheap and skilled labor and favorable access to export markets. In particular, China began exporting textiles to the US market without quotas on January 1, 2005 and is now given favorable trade access as a member of the World Trade Organization (WTO/OMC).

Apparel sector investors look for availability of affordable and skilled labor combined with access to raw materials such as yarn and fabric. In addition, manufacturers select locations from which they can transport goods cheaply and enter main export markets free of tariffs. Affordable and reliable power and water supplies are needed because apparel factories rely on them for uninterrupted production.

Even more worrying for Mali were the expiration of the Multi-Fiber Agreement on 31 December, 2004 and the ensuing abandoning of the apparel quota system. This effectively removed an incentive to locate apparel operations in Mali or other AGOA countries based on quota-free access to the US market. Overcoming this development in the international market will be one of the biggest obstacles to the development of apparel manufacturing in Mali.

Apparel companies interviewed for the study were Malian-owned and joint ventures between the government of Mali and Chinese investors. They produce men's and women's cotton and polyester shirts, T-shirts, jeans and other trousers, as well as military and work uniforms. The government provides several incentives for apparel producers, including exemption from import duties on capital equipment and three-year tax holiday and exemption from value-added tax.

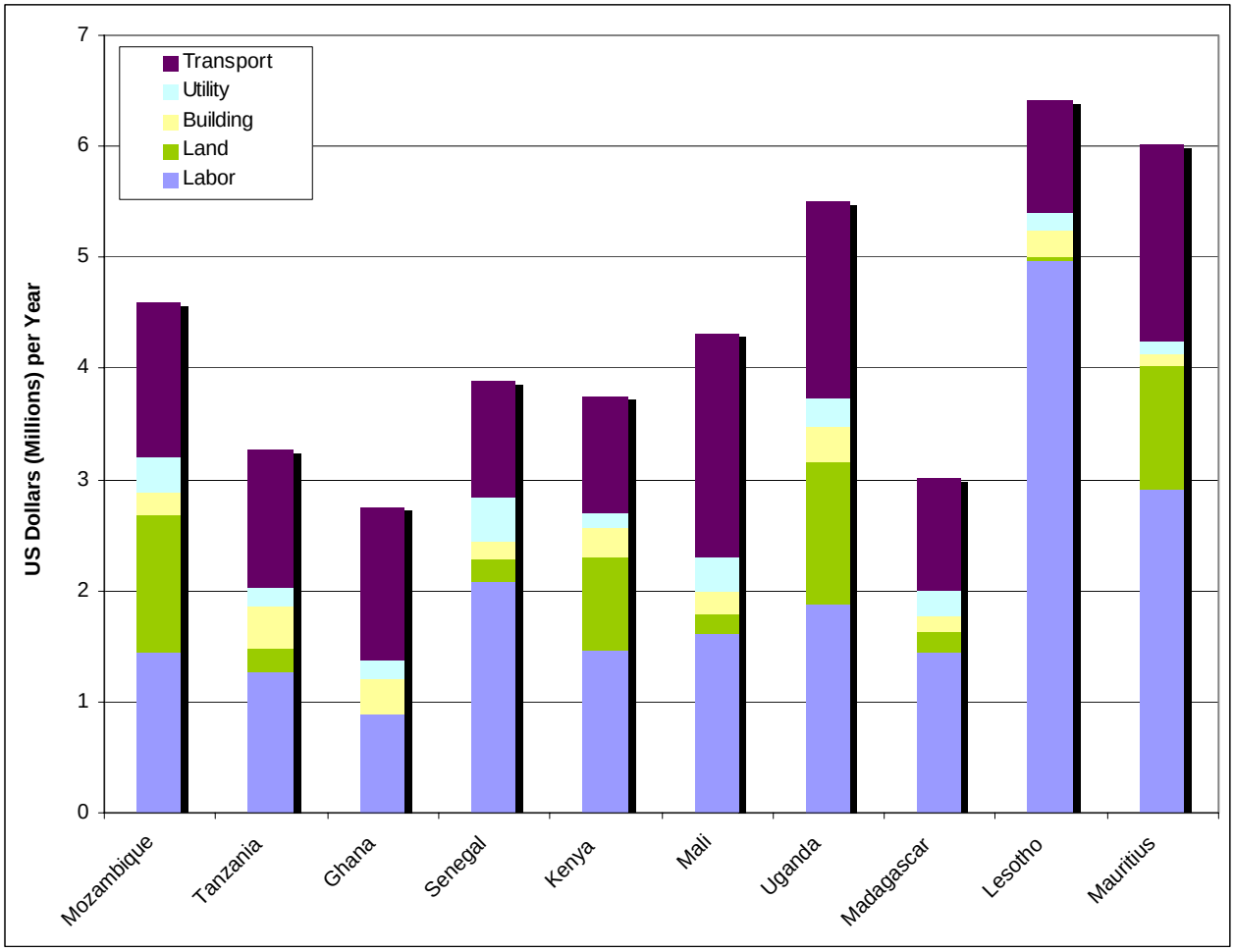
COST

Main Operating Parameters

- Employment: 651 (27 managers, 8 professionals, 28 technicians, 369 skilled labor, 219 unskilled labor)
- Power consumption: 1 million kilowatt hours / year at 575 KVA
- Water consumption: 34,000 m^3 / year
- Property: 2 Ha, leased
- Factory: 12,800 m^2; depreciated over 20 years
- Market: Local and regional

The EBP Model calculated primary annual operating costs of a hypothetical firm with predefined operating parameters. Results of the calculation are illustrated in Figure 5. According to the assumption, Mali presents an average-cost environment compared to other countries studied. Further assessment of the cost structure reveals that Mali's labor and utility costs are also average. Its most significant cost advantage comes from low real estate leasing costs, while high transportation costs are the country's main drawback. As a matter of fact, excluding transportation costs Mali would be a below-average cost location.

Figure 5: Comparison of Operating Costs in the Apparel Sector



Labor Costs

Labor costs in Mali are lower than those in Lesotho, Mauritius, Senegal and Uganda but higher than those in all other surveyed countries. In particular, an apparel manufacturing operation could make significant savings in the categories of professional and technical labor, both of which are the lowest of all studied countries. At the same time, management wage levels are about average while skilled and unskilled labor costs are slightly above average (See Figure 6). The last point is important because the bulk of all costs for apparel manufacturers come from wages, and in turn skilled and unskilled labor costs are by far the largest components of total labor costs.

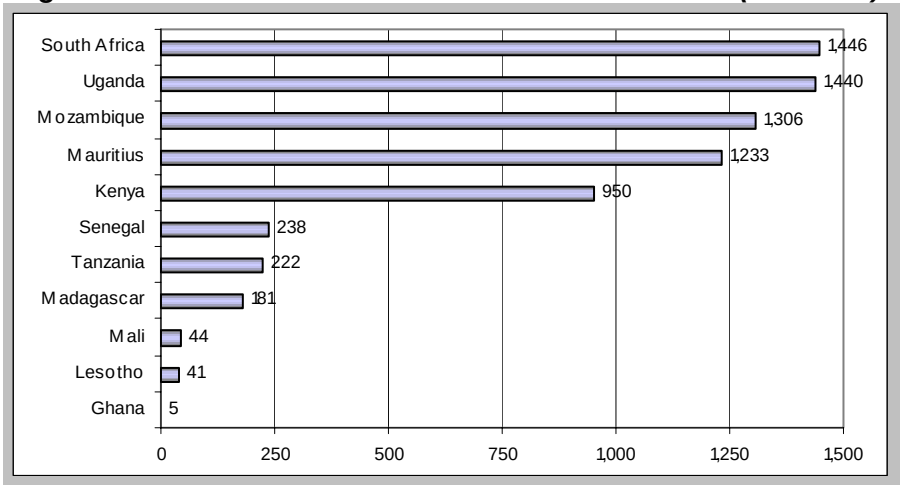
Figure 6: Annual Labor Cost Based on EBP Operating Parameters*

	Total	Management	Professional	Technical	Skilled	Unskilled
Lesotho	**4,974,119**	609,039	221,629	646,417	2,451,987	1,045,047
Mauritius	**2,911,932**	619,521	126,575	451,836	1,059,401	654,600
Senegal	**2,076,396**	266,698	96,595	251,469	1,079,217	382,417
Uganda	**1,869,424**	476,200	94,571	233,685	831,243	233,727
Mali	**1,613,836**	384,798	40,380	91,449	843,616	253,593
Kenya	**1,453,348**	425,806	89,019	184,875	524,149	229,499
Madagascar	**1,451,982**	642,623	45,357	144,219	486,189	133,593
Mozambique	**1,446,597**	212,065	120,566	103,931	791,552	218,484
Tanzania	**1,272,612**	251,662	86,675	238,933	508,039	187,303
Ghana	**897,965**	122,007	52,436	225,491	373,107	124,926

*See Table 37 for fully burdened wage levels by labor category

Real Estate Costs

Figure 7: Annual Lease Cost of 2 Ha Industrial Land *(000s USD)*

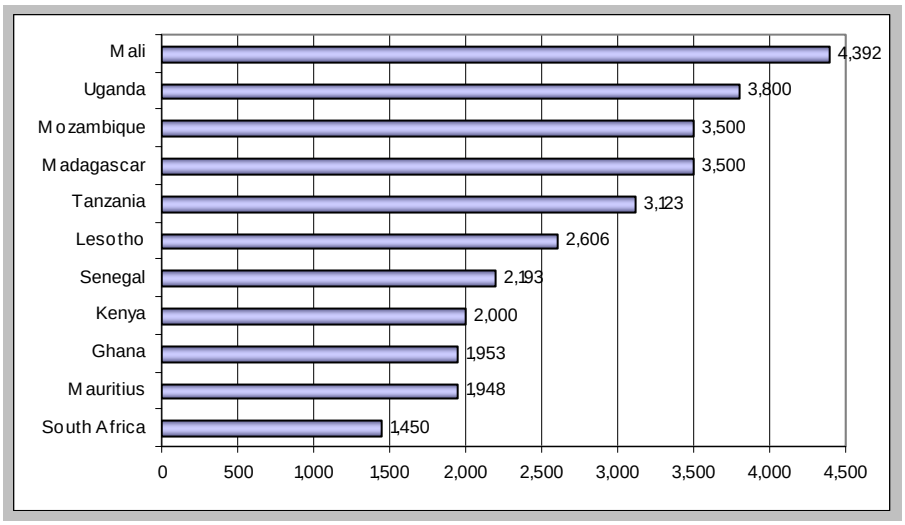


Mali is a rare case in Africa where foreign investors are allowed to purchase land. In fact, leasing is not readily available; though there is no statutory limitation, there is currently no system of commercial leasing of land. In many other countries foreign investors are forced to lease land and leasing tends to be more expensive than purchasing. When the purchase price of land in Mali is converted to the equivalent of lease[3], it is among the lowest in Africa. Otherwise Mali's price for industrial land is the fourth highest after Kenya, South Africa and Senegal among the eleven countries studied. In general, however, real estate prices in Mali and other countries widely vary and often do not reflect market demand.

[3] 10% of purchase price

Transportation Costs

Figure 8: Cost 40' Sea Freight Container to Rotterdam *(USD)*



Perhaps the defining weakness in Mali's cost environment is the cost of transportation borne by export oriented apparel manufacturers and their clients[4]. Transportation makes up a larger portion of operating costs in Mali than in all other surveyed countries due to the country's land locked location. Shipping 40-foot containers from Mali is about twice as expensive to any destination as from Senegal or Ghana (See Figure 8). This adds to the costs of exporting goods to regional and international markets. I

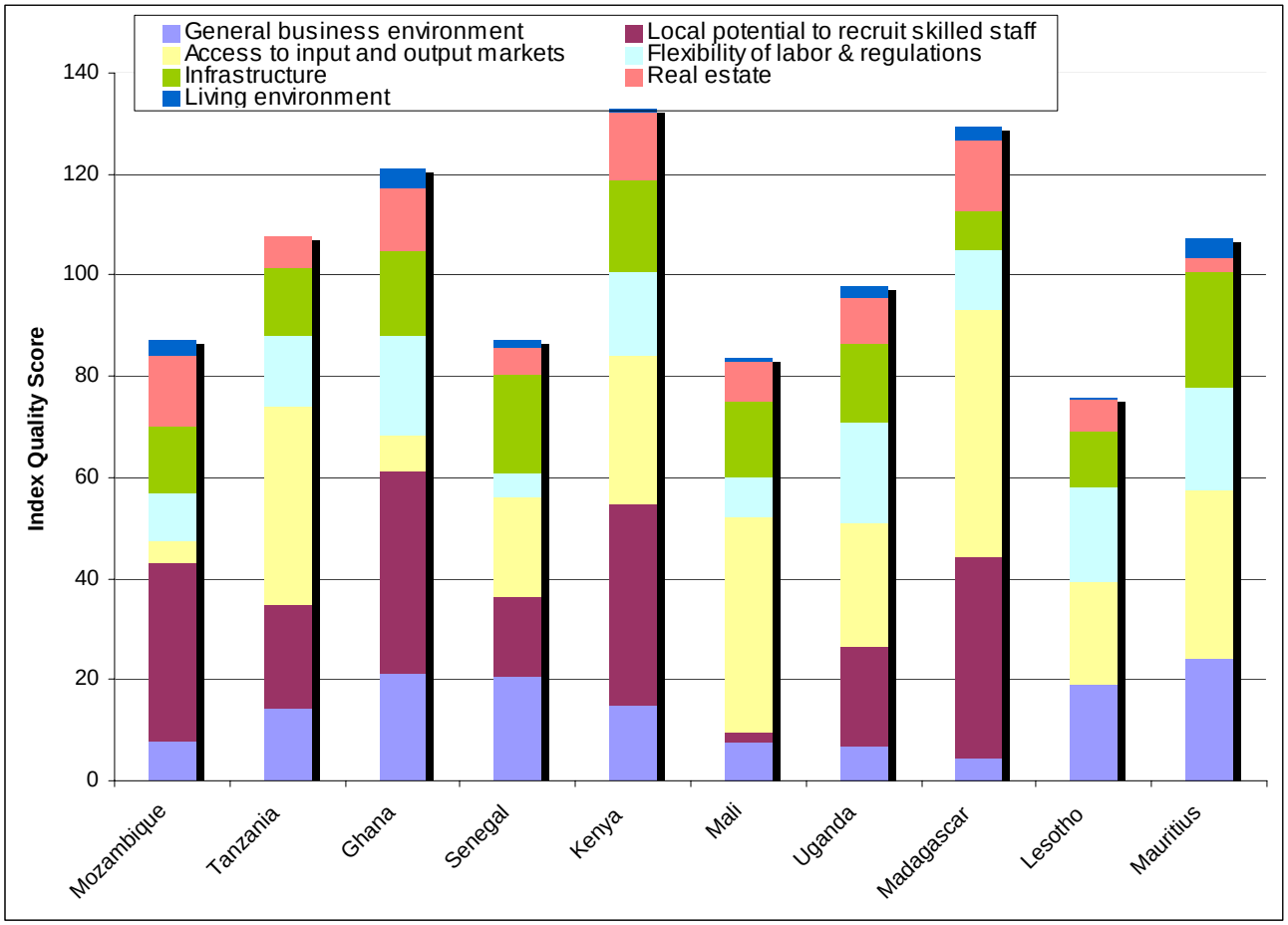
QUALITY OF OPERATING CONDITIONS

Mali presents a mixed picture in terms of the quality of operating conditions in the apparel industry (See Figure 9). The country scores well on access to both inputs and output markets, mostly due to abundant local cotton supply and duty-free access to US and European markets. It also offers above average power and water supply and ability for foreign investors to own land. At the same time, the country falls short on offering adequately skilled labor, which is indispensable in apparel operations, and suffers from a perception of poor general business environment as reflected by its high country risk and low credit rankings.

> The two most important quality site selection factors for apparel investors are access to inputs and output markets and potential to recruit appropriately skilled local labor.

[4] Apparel is often shipped FOB, whereby the cost of shipment is factored in the price of the garment and ultimately borne by the customer.

Figure 9: Comparison of Weighted Quality Operating Conditions in the Apparel Sector



Access to Input and Output Markets

While abundant cotton supply is the reason Mali was give a favorable rating for this category, outside the cotton-based apparel, Mali is very dependent on imported materials for the apparel manufacturing operations to function. Though starting from a very small base, the statistics shows a substantial export growth of Malian apparel in recent years as indicated by *International Trade Centre*.

Figure 10: Mali's 'Access' Performance for the Apparel Sector

Access Factor	Mali Rating	Africa Average[5]	Best Rated Countries
Export Competitiveness (77% Access weight)			
Current apparel export performance ranking	108	133.4	Mauritius (31) *Comparator:* Tunisia (8)
Change in apparel export performance ranking	29	119.4	Kenya (14) *Comparator:* Tunisia (34)
Presence of Supplier/Cluster Network (20% Access weight)			
Percentage of imported raw materials	90%	73%	Ghana (52.5%)

[5] Surveyed countries only.

Access Factor	Mali Rating	Africa Average[5]	Best Rated Countries
Percentage of imported components	85%	84.2	Senegal (70%)
Average tariff for imported textiles	17.4%	20%	Uganda (12.8%) *Comparators:* France and Ireland (2.5%)
Size of Domestic Market (2% Access weight)			
Gross domestic product (US$ millions)	$4,326	$26,342	South Africa ($159,886)

Labor Availability

Mali compares relatively well with other studied countries on the ability of local investors to hire managers and professionals for their apparel operations. This, however, is partially explained by the fact that many of these highly qualified workers are expatriates from France and other West African countries. On the other hand, Mali obtained lower scores than every other country except for Lesotho and Mauritius for availability of skilled labor. Investors also gave Mali the lowest rating on the command of the French language found in the general labor pool.

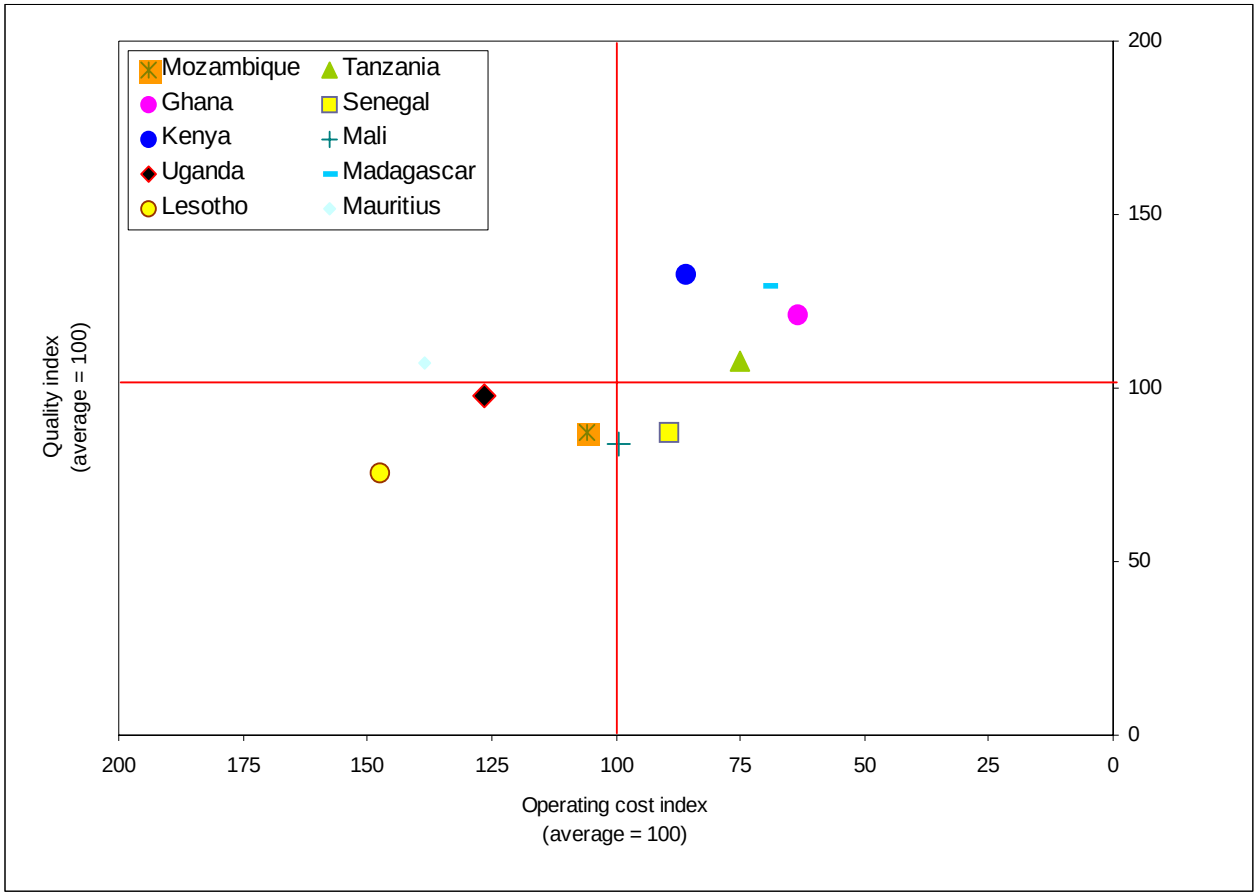
Labor availability measures the ability of interviewed companies to hire managers, professionals, technicians, skilled and unskilled workers to fill required positions. The measurement also takes into account the mastery of local and foreign languages needed in the workplace. Responses are measured on the scale of 1 ('No qualified workers') to 5 ('Many qualified workers').

COST AND QUALITY COMPARISON

The EBP Model plotted quality and cost conditions together in Figure 11. The matrix depicts the tradeoffs between costs and quality of business operation. It should be noted that the matrix does not depict the absolute competitiveness of each participating country, since each investor's mix of needs for quality and cost is slightly different, which could result in different location selection. However, in the case of Mali, the need for improvement in operating conditions is undeniable, as investors can actually operate in a better business environment AND at lower cost if they went to Kenya, Tanzania, Ghana or Madagascar.

Mali's most significant attraction for apparel manufacturers is the abundance of high-quality input materials. The quality and the amount of cotton grown in Mali set the country apart from most other Sub-Saharan competitors. However, outside the cotton-based apparel manufacturing, this unique advantage becomes futile. In addition, unavailability of properly trained skilled and unskilled labor combined with low industry knowledge and technical expertise prevent Mali from becoming a quality leader in the apparel sector. This is exacerbated by above average skilled and unskilled labor costs and the highest transportation costs among all surveyed countries. Therefore, Mali does not have a cost advantage and has not yet been able to become a quality leader, placing it in a not so attractive low quality average cost category of production locations.

Figure 11: Quality Conditions vs. Cost in the Apparel Sector



RECOMMENDATIONS

The challenge for Mali is to obtain a cost advantage while making substantial improvements in the quality of its labor force. Since the country's landlocked position will inevitably produce a cost disadvantage, Mali needs to overcome this obstacle by becoming a cost leader in all other categories if it hopes to become attractive to apparel manufacturers. Although the future of Mali's apparel industry depends to a large extent on the actions of industry leaders such as China and on the emergence of other attractive manufacturing locations such as the Caribbean and Latin America, the following are some issues that Mali can address in order to improve competitiveness vis-à-vis its regional competitors.

- Promotion of vertically integrated apparel and textile operations so as to allow apparel manufacturers to take advantage of affordable and abundant supplies of local cotton.
- Development of an industrial manufacturing zone that provides, among other things, electricity and telecommunications at more competitive prices.
- Improvement of the trucking industry: as much as 60 percent of transportation cost is said to be within the country.[6] This presents an opportunity to improve cost competitiveness of logistics in Mali by improving efficiency of the trucking industry.

[6] Impact of Transport and Logistics on Mali's Trade Competitiveness

- Enhancement of technology and knowledge transfer, research and development through better education and training targeted specifically at the apparel sector.

CHAPTER IV
RESULTS — TEXTILES

SUMMARY OF FINDINGS

Mali is one of the largest producers of raw cotton in Africa that offers high quality cotton as well as a low-cost operating environment in the textile sector. However, Mali's attractiveness as a destination for textile investment is not as strong; state monopoly of cotton seeds and the lack of positive investment climate, quality workforce and adequate infrastructure are some factors stifling opportunities. The future of the textile industry in Mali, to a large extent, will be determined by the outcome of the privatization of *Compagnie Malienne pour Dévelopment des Textiles (CMDT)*. The challenge for Mali will be to maintain its relative cost competitiveness while improving on operating conditions. Whilst the successful privatization of CMDT is a precondition for making Mali an attractive destination for textile investors, development of a well-functioning industrial zone that can provide quality infrastructure, especially electricity and water, at a competitive price is also urgently needed. In addition, ensuring maintenance of roads and improving efficiency of the trucking sector are other critical areas to be addressed.

Strengths	**Weaknesses**
• Large cotton supply • Inexpensive labor • Safe living environment • Low labor turnover • Track record on political reform	• Public water system • Waste water management • Land line telephone system • Limited access to ports • High transportation cost • High electricity cost • Lack of technical expertise • Lack of non-cotton inputs
Opportunities	**Threats**
• Untapped cotton potential • AGOA rules of origin • Privatization of CMDT	• Global competition • Regional unrest • Low cotton price • Mismanagement of CMDT privatization process • Environmental impacts

CONTEXT

Mali is one of the largest producers of raw cotton in Africa, and its cotton is of a quality high enough to rival textile industries in Asia. However, this advantage is hardly exploited – of the large cotton production, less than one percent is processed into cloth in Mali. Broadening the textile industry in Mali requires significant efficiency gain in the operation of CMDT, which handles virtually all of seed cotton in the country. As such, the reform and privatization of CMDT is a center piece of the government's reform program, but a contentious one. The privatization, which was originally planned for 2006, has been delayed until 2008.

The international textile industry is very competitive with continuous innovation for competing substituting products. The industry is also highly cost sensitive. Mali's textile industry is faced with tough competition from countries around the world, particularly India, China, and Pakistan. In Sub-Saharan Africa, Mauritius and South Africa take the lead. Under several initiatives, textiles produced in Mali have duty and quota-free advantages over those produced in major textile-producing countries outside Africa when sold on the U.S. or E.U. markets.

The cotton sector has a critical role in Mali: about 3.3 million people, in a country of 13 million, live directly from cotton cultivation. Given its importance, CMDT's privatization may have significant impact on the lives of Malians, particularly the rural population, since cotton producers are guaranteed minimum price to recover their production cost. In 2004/05, when the world cotton price was low, this resulted in CMDT's loss of US$132.2 million in sales.

Mali's textile sector investors are both local entrepreneurs and investors from countries like China, France, and Mauritius. They focus on the production of cotton textiles, including spinning of cotton thread and yarn, weaving of canvas and other coarse fabrics, and printing cotton fabrics.

In the following sections, the cost and quality condition in Mali's textile sector is compared against that of nine African countries, including two countries that are considered to be high-performers (the "benchmarks") – South Africa and Mauritius. The charts presented are the resulting outputs of the model developed under MIGA's Enterprise Benchmarking Program.

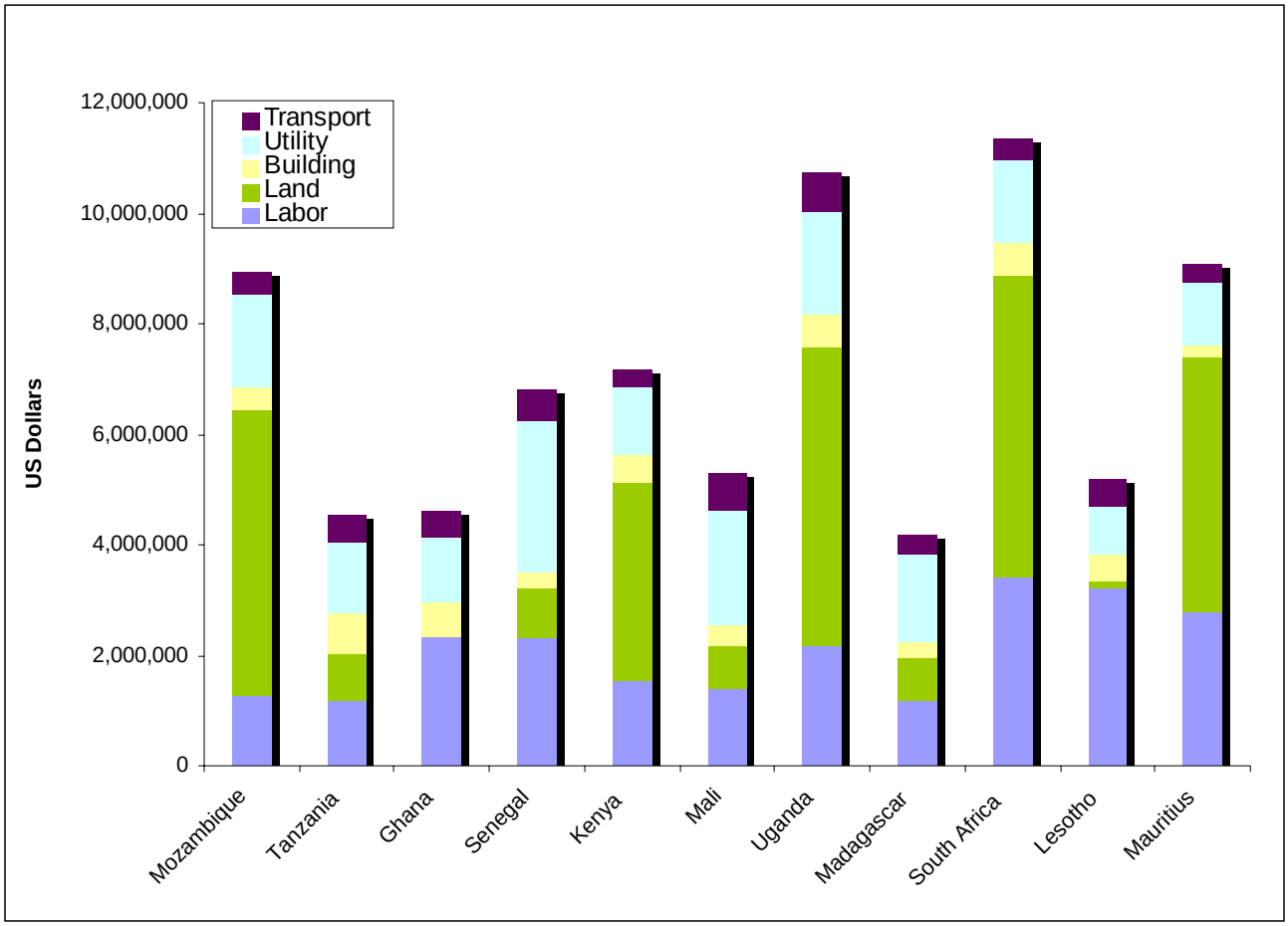
COST

Main Operating Parameters

- Employment: 527 (24 managers, 12 professionals, 42 technicians, 255 skilled labor, 194 unskilled labor)
- Power consumption: 14.6 million kilowatt hours / year at 2,100 KVA
- Water consumption: 211,000 m^3 / year
- Property: 8 Ha, leased
- Factory: Construction of 25,800 m^2; depreciated over 20 years
- Market: Europe

The EBP Model calculated primary annual operating costs of a hypothetical firm with predefined operating parameters. Results of the calculation are illustrated in Figure 12. According to the assumption, Mali presents a relatively low-cost environment compared to other countries studied, however, is not the most cost competitive one. Further assessment of the cost structure reveals that costs below the African average can be attributed to wage levels for certain labor categories, land and building costs. The biggest cost savings would occur for an investor in the areas of leasing land and building; however, these are seen as less important than other cost components such as labor and utility, and normally do not feature until the country is selected for a short-list. In the following section, the three most important cost motivations as identified by textile industry investors are considered in more detail.

Figure 12: Comparison of Operating Costs in the Textile Sector



Labor Costs

Mali offers relatively low labor cost for a textile operation. In particular, the operation could make significant savings in the category of professionals while wage levels for technical, skilled and unskilled labor are also relatively cost competitive (See Figure 13).

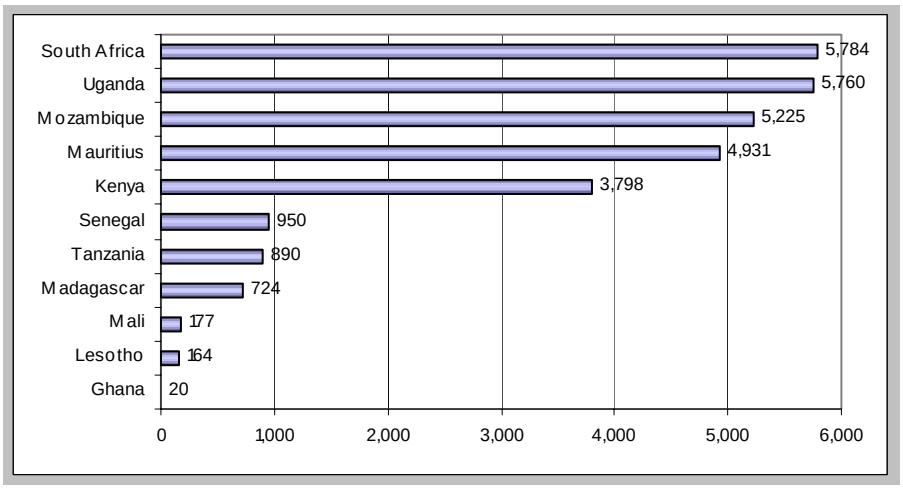
Figure 13: Annual Labor Cost Based on EBP Operating Parameters*

	Total	Management	Professional	Technical	Skilled	Unskilled
South Africa	**4,469,025**	1,084,340	472,732	525,423	1,355,379	1,031,151
Lesotho	**3,194,692**	345,915	332,443	590,134	1,326,831	599,370
Mauritius	**2,778,031**	490,068	211,644	673,151	755,394	647,774
Ghana	**2,332,233**	556,568	246,966	360,159	893,686	274,854
Senegal	**2,302,996**	301,663	123,515	415,677	1,058,294	403,847
Uganda	**2,153,655**	445,956	165,866	471,271	757,272	313,291
Kenya	**1,559,302**	316,396	144,612	280,126	611,544	206,624
Mali	**1,419,173**	444,276	54,632	130,024	590,558	199,683
Mozambique	**1,265,798**	188,502	180,849	155,897	547,007	193,543
Madagascar	**1,203,961**	612,273	62,942	119,510	289,320	119,917
Tanzania	**1,184,896**	181,932	139,240	423,752	303,424	136,548

*See Table 41 for fully burdened wage costs by labor category

Real Estate Costs

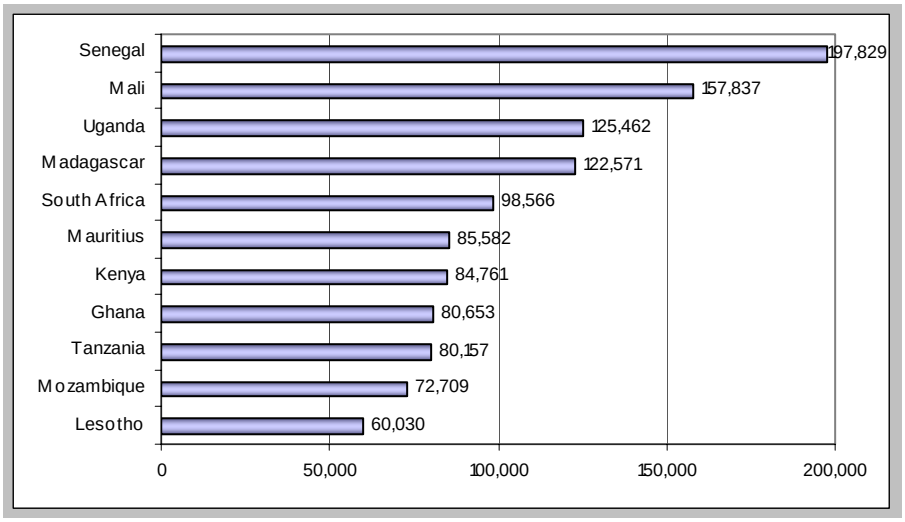
Figure 14: Annual Lease Cost of 8 Ha Industrial Land *(000s USD)*



Mali is a rare case in Africa where foreign investors are allowed to purchase land. In fact, leasing is not readily available – though there is no statutory limitation, there is currently no system of commercial leasing of land. In many other countries foreign investors are forced to lease land, and leasing tends to be more expensive than purchasing. When the purchase price of land in Mali is converted to the equivalent of lease[7], it is among the lowest in Africa. Otherwise Mali's price for industrial land is the fourth highest after Kenya, South Africa and Senegal among the eleven countries studied.

Utility Costs

Figure 15: Electricity Cost *(USD per month)*



Utility cost is an area where Mali lags behind other countries. In particular, electricity cost in Mali is the second highest among the countries studied. Monthly consumption of 1.2 million KwH at 2,100 KVA would cost an investor $157,837, which is substantially higher than the average among the countries studied of $106,014. It should also be noted that seven countries out of eleven offer less than $100,000 a month on electricity cost on the same parameters.

[7] 10% of purchase price

Transportation Costs

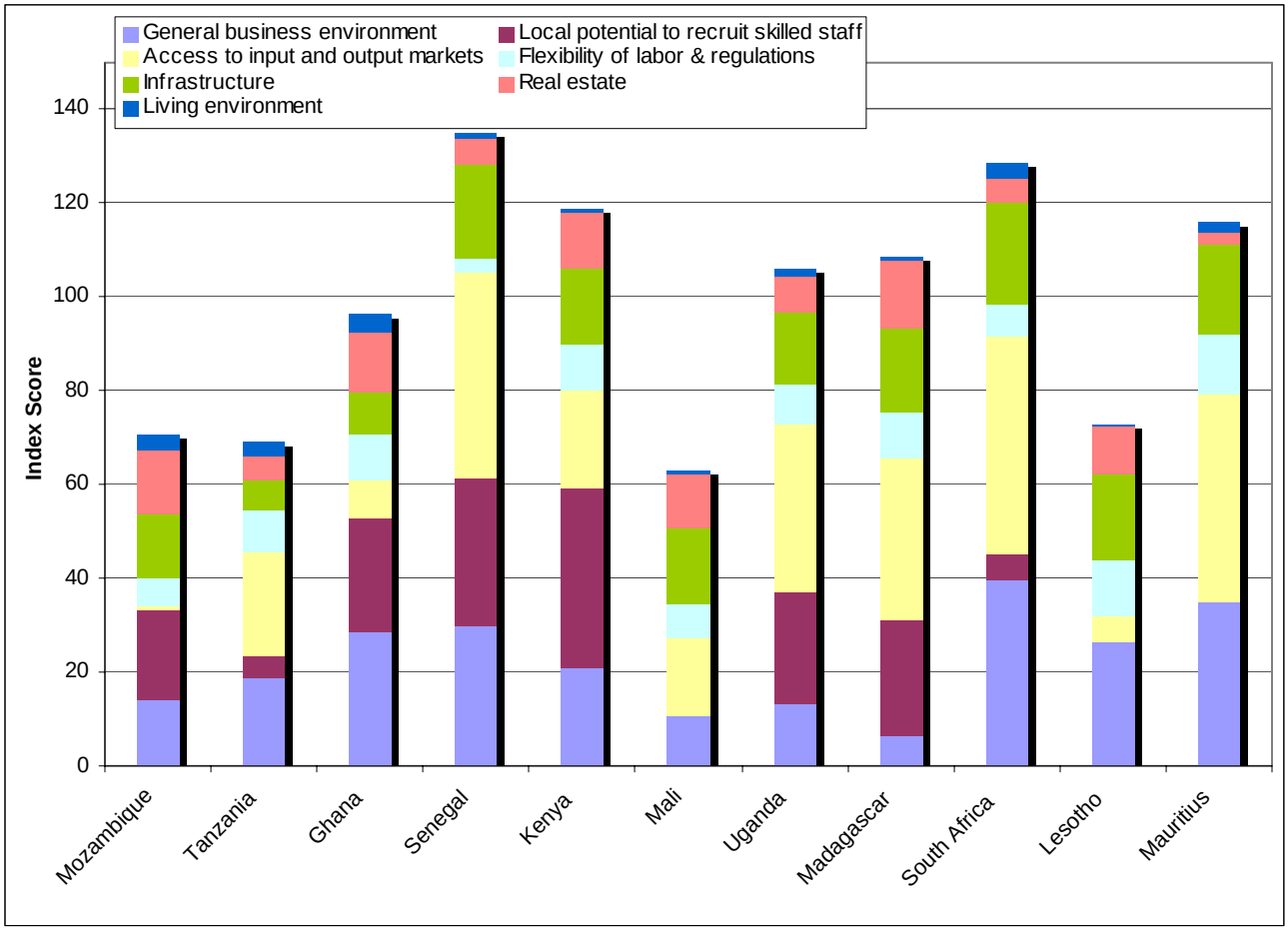
Mali's landlocked geography makes it difficult to compete on transportation cost. In fact, Mali has the highest cost of sea shipment among the countries studied, even ahead of another landlocked country, Uganda. Shipping a container to Rotterdam by sea from Mali will cost double that of shipping from Senegal or Ghana (See Figure 8).

QUALITY OF OPERATING CONDITIONS

The three most important site selection factors for textile firms are access to input and output markets, general business environment, and potential to recruit appropriately skilled local labor.

Mali is faced with tough competition: the country falls particularly short on offering an attractive business climate and adequately skilled labor, both of which are two of the three most important site selection factors for textile firms (See Figure 16).

Figure 16: Comparison of Weighted Quality Operating Conditions in the Textile Sector



General Business Environment

Mali was rated second lowest among the surveyed countries on general business environment. Its score appeared particularly low on economic, financial, and political stability as shown by the ratings from T*he Institutional Investors* and *Euromoney* (See Figure 17). The fact that Mali is one of the poorest countries in the world with its economy dependent on a few commodity exports continues to affect such ratings in the foreseeable future. On the other hand, Mali is sending positive signals on the institutional aspects of business environment. Mali scores better than the African average on factors such as customs clearance time, the 'Number of days to start a business'[8] and 'Corruption perception'[9].

Figure 17: Mali's 'General Business' Performance for the Textiles Sector

General Business Factor	Mali Rating	Africa Average	Best Rated Countries
Economic, Financial, and Political Stability (65% GBE weight)			
Country credit rating	23.7	32.2	South Africa (59.3) *Comparator: France (92.7)*
Country risk	31.2	40.4	South Africa (59.8) *Comparator: Ireland (94.0)*
Doing Business and Bureaucracy (25% GBE weight)			
No. procedures to start business	13	12.1	Senegal, South Africa, Lesotho (9) *Comparator: Ireland (4)*
No. days to start business	42	62.9	Tanzania (35) *Comparator: France (8)*
Corruption perception	3.2	3.3	South Africa (4.6) *Comparator: Ireland (7.5)*
Days to clear customs	3[10]	8.4	Mali (3.0)
Corporate Taxation (10% GBE weight)			
Corporate income tax	35%	31.8%	Uganda, Tanzania, Ghana, Kenya, (30%) *Comparator: Ireland (25%)*
Sales/VAT tax	18%	16.5%	Ghana (12%) *Comparator: Nigeria (5%)*

Availability of Labor

Mali has a very low labor turnover of just 0.1 percent per year in the textiles sector (See Table 17 in Appendix C) whereas the average for the surveyed countries was 7.1 percent. This makes managing and training the labor force needed for textile operations much easier in Mali than in the rest of Africa.

Textile investors in Mali gave lower ratings than investors in other countries to labor availability in all categories. Top management positions are often filled by expatriates, including French, Senegalese, Chinese,

Labor availability measures the ability of interviewed companies to hire managers, professionals, technicians, skilled and unskilled workers to fill required positions. The measurement also takes into account the mastery of local and foreign languages needed in the workplace. Responses are measures on the scale of 1 ('No qualified workers') to 5 ('Many qualified workers').

[8] Doing Business (World Bank 2005)

9 Transparency International 2005

[10] The number of days to clear shipments through Customs varied between industries, according to responses from interviewed firms in Mali and other countries. In Mali, the responses were as follows: Apparel (0.8 days); Textiles (3 days); Shared services (5 days); Hotels (14.6 days); Horticulture (5.6 days); Food & beverage processing (3.6 days).

and Indian nationals. The ability to recruit skilled textile workers received a rating of just 1.7 vs. the average rating of 2.9. Companies stressed the need to improve vocational technical schools for the textile industry. The difficulty to find French and English-speaking workers was also stressed, receiving a score of just 2.0 vs. the average of 4.0. As per the law, factories have employee delegates, but none of the firms interviewed has unions.

Mali's score on *Doing Business* 'Rigidity of Employment Index'[11] is above the African average. However, field interviews revealed that improvement is needed in terms of labor enforcement regulations: several companies reported government's excess interference in labor relations.

Access to Input and Output Markets

Given the importance of access to inputs, textile investors find it advantageous to locate mills in Mali because of its abundant cotton. However, this advantage is somewhat offset by Mali's reliance on importing non-cotton inputs: dyes from India and China, chemicals and detergents from India, China, and Australia, lubricants from Germany and China. Gum arabic used in fabric printing is sourced locally in Mali. Textile equipment is generally imported from China.

Mali remains constrained in terms of accessing markets: its own small market is surrounded by other small economies. Today's Mali markets are Cote d'Ivoire, South Africa, Burkina Faso and Angola for printed and batik cloths, Guinea and Burkina Faso for cotton thread, South Africa for heavy "bogolan" artisan cloth, France and Italy for tie-died cloth. So far, exports to the US are minimal, hampered by stringent requirements by the American buyers and high shipping cost. Textile exports are so negligible that International Trade Center's Trade Competitiveness Index, which was used as proxy for the level of access to market, did not provide a score for Mali.

Figure 18: Mali's 'Access' Performance for the Textiles Sector

Access Factor	Mali Rating	Africa Average	Best Rated Countries
Export Competitiveness (63% Access weight)			
Current apparel export performance ranking	185	118.9	South Africa (39) *Comparator:* France (4)
Change in apparel export performance ranking	185	98.8	Mauritius (1) *Comparator:* Ireland (4)
Access to Raw Materials (20% Access weight)			
Percentage of imported raw materials	16.7%	62.4%	Mali (16.7%)
Presence of Supplier/Cluster Network (15% Access weight)			
Percentage of imported components	70%	73.5%	Ghana (1.5%)
Average tariff for imported textiles	17.4%	19%	Uganda (12.8%) *Comparator:* France, Ireland (2.5%)
Size of Domestic Market (2% Access weight)			
Gross domestic product (US$ millions)	$4,326	$26,342	South Africa ($159,886)

Infrastructure

The electricity situation in Mali, as seen by the occurrence of blackouts and brownouts, compares favorably to other countries including the benchmarks. The textile sector is very

[11] It measures the hiring and firing regulations and the rigidity of working hours.

sensitive to power outages, brownouts, and surges. For example, one firm noted that it takes two hours after each outage to reset the looms and other equipment.

Although water shortage does not appear to be a problem in Mali, the survey revealed that the availability of the public water system is very limited. The lack of wastewater management will pose a serious challenge for Mali, if not addressed immediately. Wastewater containing dyes and other harmful chemicals are often freely discharged into the environment without treatment. It not only has an implication for local fish stocks and environment degradation of nearby communities, but also the competitiveness of the industry, as these issues are increasingly important for foreign buyers especially in Europe and the US.

Investors gave an average rating of 2.3 to landline telephone quality, the second lowest rating in Africa whereas the average is 3.4 (See Table 29 in Appendix C). Textile investors noted an average of 49 days to install new telephone service, longer than the Africa average of 28 days.

Mali's landlocked geography is a handicap in any export-oriented industry. Limited access to ports delays shipment time as well as transportation cost (see Cost section). Shipments to Dakar typically take nineteen days. The reliance on infrastructure in other countries means Mali's transportation logistics will always be dependent on economic and political situations of neighboring countries, as seen in the case of the civil unrest in Cote d'Ivoire. Various alternative routes, such as Tema and Lome, are developed; however, Dakar remains the most cost efficient and fastest route, followed by Abidjan, for the textile industry.[12] Although a railroad is available between Dakar and Bamako, truck is the preferred transportation means. Within the country, the road situation has improved considerably in the last ten years, however, the lack of proper maintenance may lead to quick deterioration. The restructuring of CMDT, which used to handle the maintenance of cotton roads, is causing uncertainty over the responsibility.

The industrial zone development in Mali has not yielded much success: textile investors felt that industrial zones are not adequately equipped and some lack even in basic infrastructure.

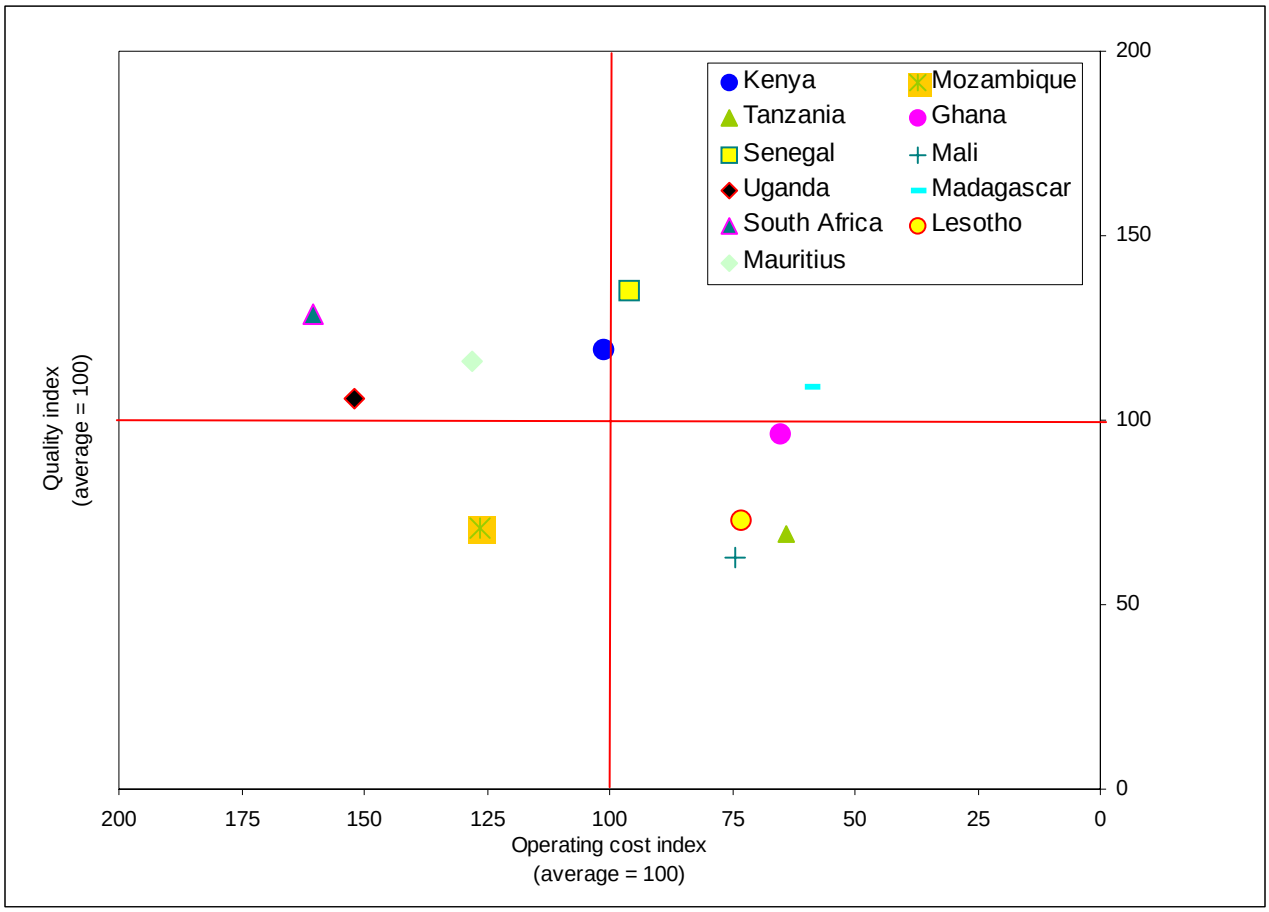
COST AND QUALITY COMPARISON

The EBP Model plotted quality and cost conditions together in Figure 19. The matrix depicts the tradeoffs on cost and quality of business operation. It should be noted that the matrix does not depict the absolute competitiveness of each participating country, since each investor's mix of needs for quality and cost is slightly different, which could result in different location selection. However, in the case of Mali, the needs for improvement in operating conditions is undeniable as an investor can actually operate in a better business environment AND at lower cost if he/she went to Tanzania, Ghana, Lesotho or Madagascar.

Mali's advantage as a relatively low-cost operating environment coupled with substantial raw cotton production has not turned the country into an attractive investment destination due to its low score on overall quality of operating condition. Mali's low wage level, for example, is offset by a lack of technical expertise suitable for an export-oriented textile industry, reported by interviewed firms. Land may be acquired at low cost, however, with the lack of decent transportation infrastructure, it becomes costly and less attractive. Furthermore, utility cost is high compared to other countries studied.

[12] Impact of Transport and Logistics on Mali's Trade Competitiveness.

Figure 19: Quality Conditions vs. Cost in the Textile Sector



RECOMMENDATIONS

The challenge for Mali is to keep certain cost advantage while making substantial improvements in the quality of operating conditions. Although the future of Mali's textile industry depends partly on the world cotton and textile market, the following are some issues that the country can address in order to improve competitiveness.

- Improve efficiency of downstream cotton processing.
- Establishment of an effective investment promotion agency that promotes investment opportunities, particularly in light of cotton sector liberalization and CMDT privatization.
- Development of an industrial zone that provides, among others, a better water management system and electricity at more competitive price.
- Improvement of the trucking industry: as much as 60 percent of transport cost is said to be within the country.[13] This presents an opportunity to improve cost competitiveness of logistics in Mali by improving efficiency of the transportation industry, especially trucking.
- Enhancement of technology and knowledge transfer, research and development and training for the cotton and textile sectors.

[13] Impact of Transport and Logistics on Mali's Trade Competitiveness

CHAPTER V
RESULTS — SHARED SERVICES

SUMMARY OF FINDINGS

Even though outsourcing of business services is a relatively new concept in Mali and throughout Sub-Saharan Africa, call center and back office support service ventures have been established in the Bamako area. To date such ventures include third-party call center as well as offshore data processing and accounting activities. Most shared services firms are joint ventures between Malian business people and foreign investors.

Shared services firms in Mali could potentially serve French-speaking markets both inside and outside Africa because they offer lower costs as compared to French-speaking European countries, a safe operating environment vis-à-vis other French-speaking West African nations, and a democratic, pro-business government. In addition, shared services is one of the few industries where Mali's landlocked location does not put it at a disadvantage.

However, today's Mali falls short of offering attractive propositions for investors in the shared services sector. It must overcome investor perceptions that there are more attractive locations such as Senegal, Morocco, Tunisia and Mauritius where French language capability of the workforce is superior. Investors in Mali must also contend with high telecommunication costs and low telephone and internet quality, an area which is absolutely critical to a successful shared services operation. One of the single most important ways to court international shared services investors is to substantially upgrade Mali's telecommunications network, including full liberalization of voice over internet protocol (VoIP) networks, which currently VoIP users are not allowed to resell.

Strengths	**Weaknesses**
• French-speaking labor force • Safe operating environment • Same time zone with Europe • Democratic, pro-business government	• High telecommunications costs • Low telecommunications quality • Poor language abilities and low quality of the workforce • Lack of IT knowledge and expertise • Above-average labor costs
Opportunities	**Threats**
• Export of services to European and regional Francophone markets • Potential to serve local market • A safer alternative location for regional investors from 'unstable' countries	• Other Francophone competitors • Improving telecommunications quality in competing markets

CONTEXT

The international shared services industry is skilled-labor intensive and requires high-quality telecommunications infrastructure. Since high levels of customer service is what sets best shared service operators from the rest, firms generally consider labor force and infrastructure quality to be the most important investment prerequisites. Countries that provide these quality conditions AND offer low labor and infrastructure costs tend to be most attractive locations for shared services investors.

Shared services investors seek highly skilled workers who possess language, information technology, accounting, engineering and customer service skills. In most cases, workers must also be familiar with clients' operations and business protocols. Although many shared services firms provide training to their employees, such training is done in addition to, not instead of, basic technical or university education. In addition, investors require a well-functioning, high-quality, telecommunication infrastructure because service quality is very important to them. Finally, labor, infrastructure and real estate cost considerations also figure prominently in the investment decision.

Shared services operations in Mali tend to be small relative to international outsourcing standards, averaging US$ 300,000 per investment and occupying around 1,500 m^2 of office space. Firms that took part in the study were joint ventures between Malians and partners from Canada, France, Senegal, Morocco and other West African countries.

Interviewed firms included a third-party call center, banks and internet services provider with their own internal customer service centers, as well as firms providing offshore accounting, tax preparation and payment systems for local and international clients. Most firms invested in Mali in order to serve local and regional markets. Both internal and third-party call centers typically handled inbound calls and were not involved in outbound solicitations.

In the following sections, the cost and quality conditions in Mali's shared services sector are compared against those of nine other African countries. The charts presented are the resulting outputs of the model developed under MIGA's Enterprise Benchmarking Program.

COST

Main Operating Parameters

- Employment: 133 (9 managers, 6 professionals, 27 technicians, 77 skilled labor, 14 unskilled labor)
- Power consumption: 300 thousand kilowatt hours / year at 400 KVA
- Telecom: national calls – 30, int'l calls – 120 min/day/employee
- Office: Lease of 1,000 m^2; depreciated over 20 years

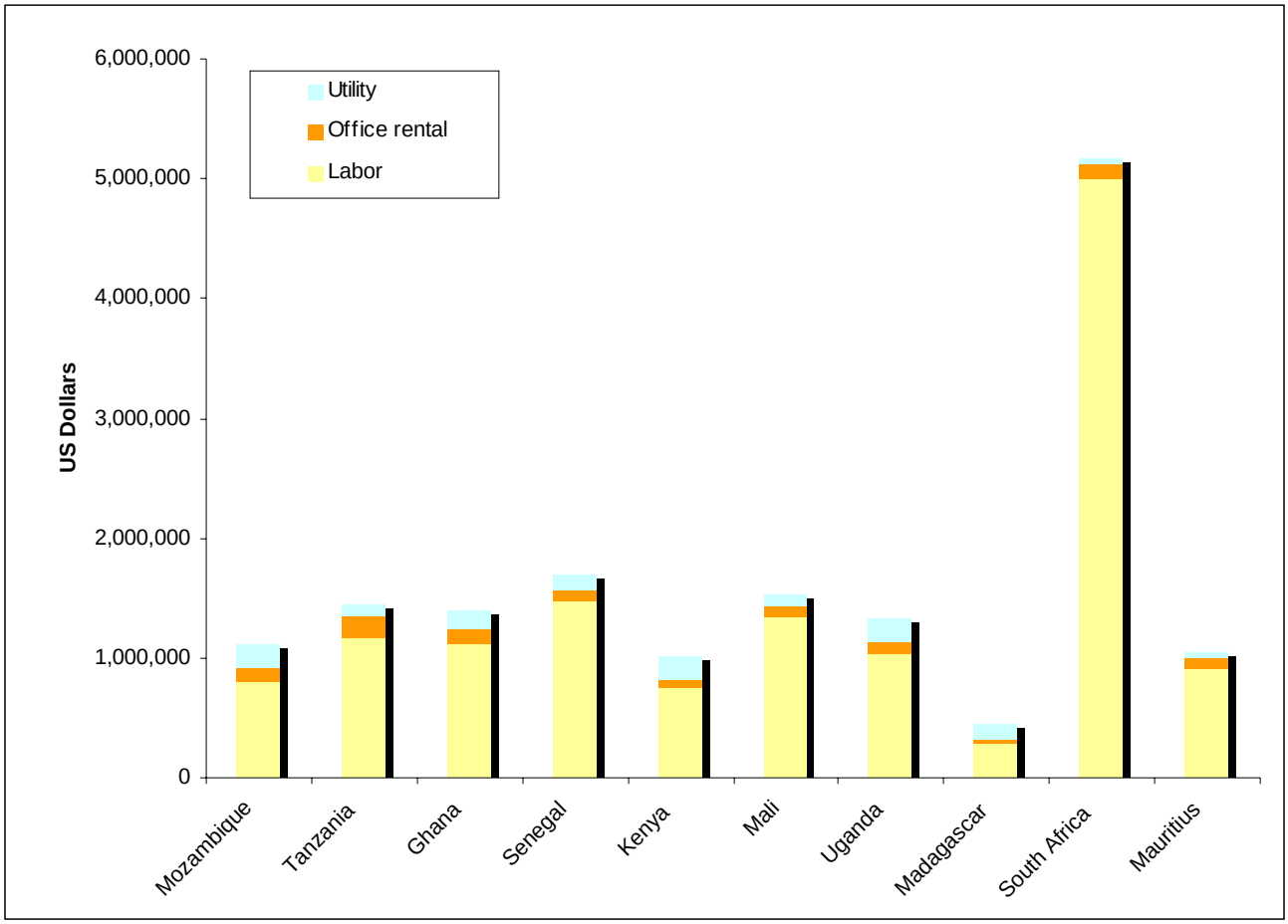
The EBP Model calculated annual operating costs of a hypothetical shared services firm with predefined operating parameters. Results of the calculation are illustrated in Figure 20. As a Francophone country, Mali would most likely compete with Senegal, Madagascar and Mauritius (of the surveyed countries) to attract French-speaking offshore call center and back office support service investors. This analysis will primarily focus on comparing and contrasting Mali with those three countries.

Based on these assumptions, Mali presents an above average cost environment in this sector compared to other countries studied. A closer look at the cost structure reveals that higher than average costs are a direct result of high labor costs due to the lack of skilled local labor force and the need to hire more expensive foreign professionals. Mali also has high electricity and

telecommunication rates which, combined with relatively expensive centrally located office space, are important cost considerations for shared services investors.

In the following section, the three most important cost motivations as identified by shared services industry investors are considered in more detail.

Figure 20: Comparison of Operating Costs in the Shared Services Sector



Labor Costs

Annual call center labor costs are higher in Mali than in most other surveyed countries. Thus, Mali presents a high skilled-labor cost operating environment compared to Mauritius and Madagascar and does not offer a low cost advantage for any labor category (See Figure 21).

Figure 21: Annual Labor Cost Based on EBP Operating Parameters*

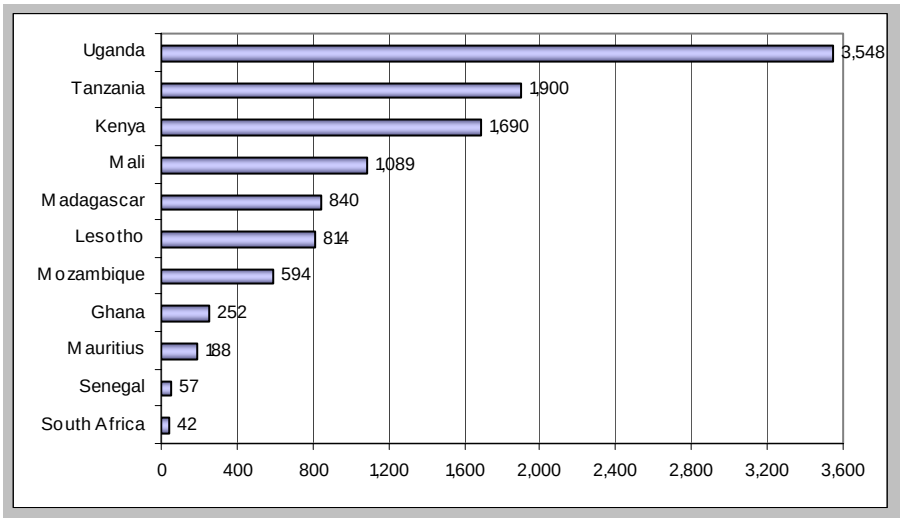
	Total	Management	Professional	Technical	Skilled	Unskilled
South Africa	**5,000,130**	589,251	610,749	1,377,264	2,242,280	180,586
Senegal	**1,475,652**	270,718	120,599	365,429	650,272	68,634
Mali	**1,345,213**	258,065	120,410	320,298	611,502	34,938
Tanzania	**1,168,565**	187,327	147,963	484,621	311,483	37,171
Ghana	**1,118,953**	209,384	153,012	289,917	413,400	53,241
Uganda	**1,037,861**	297,403	85,480	255,948	361,953	37,078
Mauritius	**912,740**	154,110	86,986	308,219	329,623	33,801
Mozambique	**790,200**	231,414	77,223	211,630	246,337	23,596
Kenya	**750,151**	133,610	67,026	227,378	301,919	20,219
Madagascar	**277,991**	92,560	19,353	71,326	84,981	9,771

*See Table 40 for fully burdened wage costs by labor category

Telecommunication Costs

Shared services firms heavily rely on telecommunications via landline and internet-based VoIP service. In general, the costs of telecommunications in Sub-Saharan Africa are very expensive compared to those in North America and the EU. For instance, a one-minute call to the US from Ireland costs about US$ 0.19 vs. US$ 0.89 from Mali and an African average of US$ 0.75.

Figure 22: Cost of High-Speed Internet (*USD per month)*

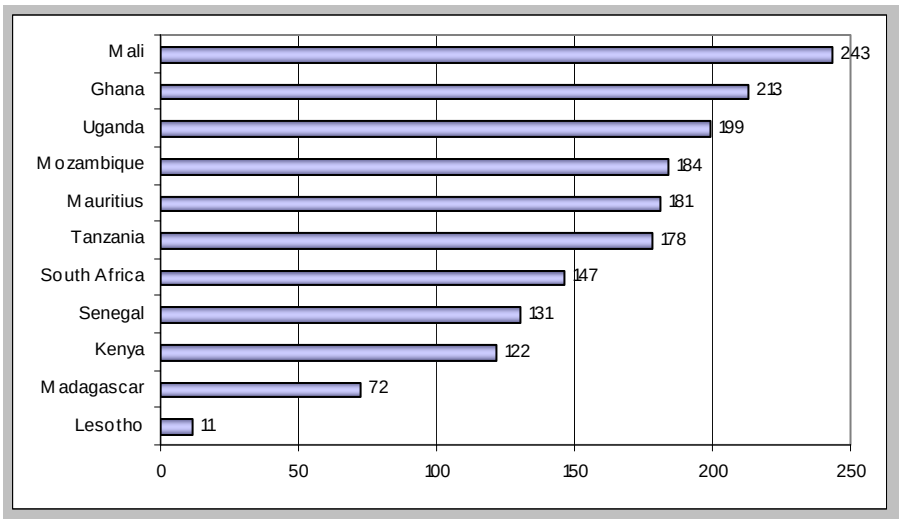


Shared services firms can skirt high telecommunications costs by placing calls over the internet using VoIP technology. Mali is one of the few surveyed countries that have begun to allow the use of VoIP technology. However, companies are not allowed to resell this service to others. Mali stands at a disadvantage to other surveyed Francophone countries in that the cost of high-speed internet required by VoIP is extremely high (See Figure 22).

Real Estate Costs

Shared services firms tend to locate in centrally situated office buildings or suburban locations. For the most part, this is due to the need to have the highest quality levels of telecommunication and power infrastructure possible. The EBP Model found that the cost of premier office space in the Bamako area is higher than in all other surveyed countries (See Figure 23).

Figure 23: Cost of 'Class A' Office Space *(USD / year / m^2)*



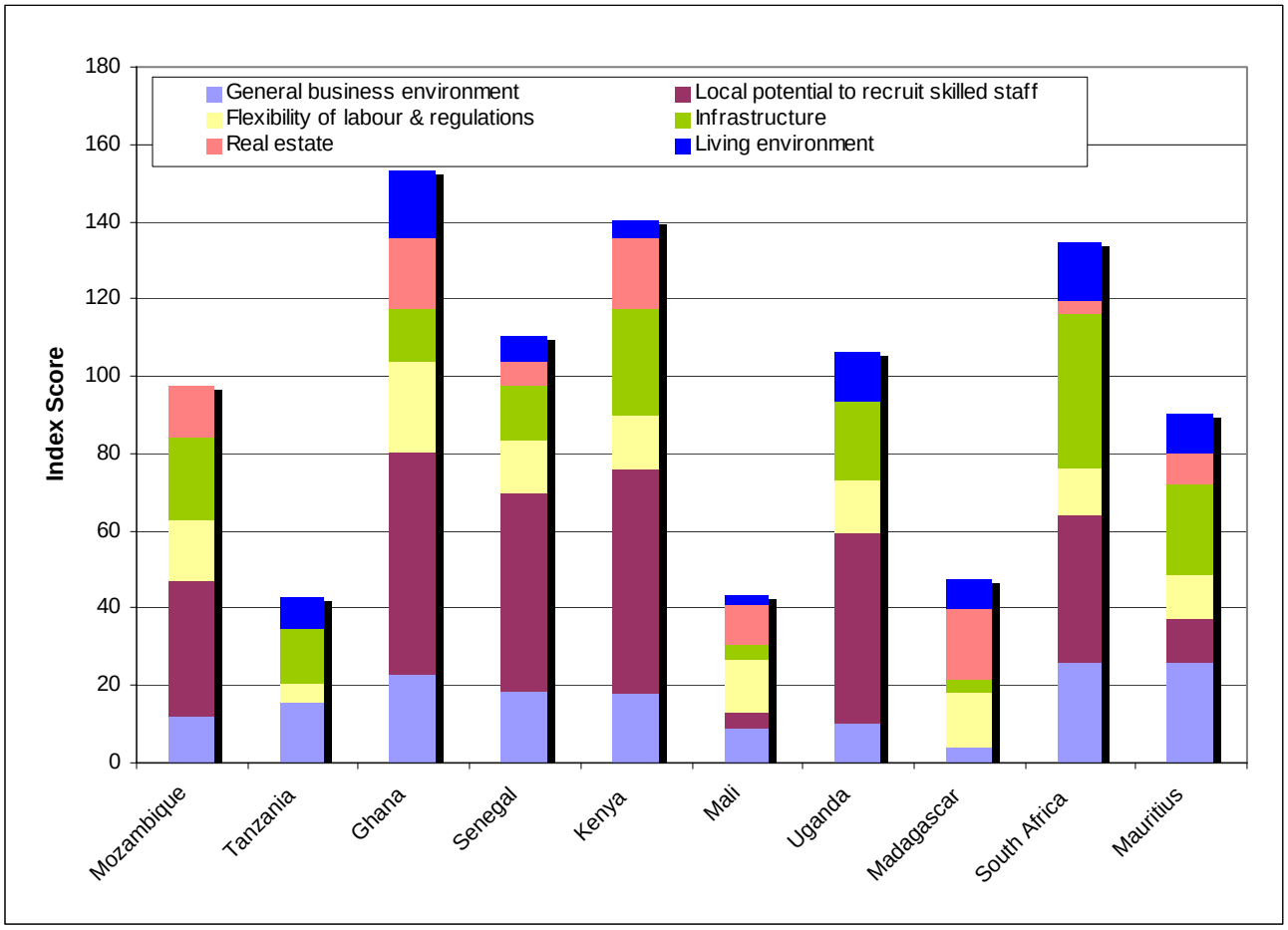
QUALITY OF OPERATING CONDITIONS

Shared services investors in Mali face poor quality conditions that are on par with those in Madagascar but much lower than those in Senegal and Mauritius (See Figure 24). Poor infrastructure quality – particularly telecommunications – and relative difficulty in finding qualified staff for shared services positions were the two factors that set Mali apart from stronger African players in the sector, namely Senegal, South Africa and Mauritius.

Perhaps more than any other sector, the shared services industry is heavily dependent on reliable telecommunications, because a shared services firm cannot offer full-scale cross-border service delivery in an environment with poor quality infrastructure and unskilled workforce, even at low operating costs. Landline telecommunications and internet connectivity in Mali received ratings of 2.8 and 2.4 – the lowest ratings among surveyed countries – indicating problems with dropped calls, unclear lines and slow and unreliable service.

> The three most important site selection factors for shared services firms are potential to recruit appropriately skilled local labor, high quality of infrastructure and general business environment.

Figure 24: Comparison of Weighted Quality Operating Conditions in the Shared Services Sector



Potential to Recruit Local Staff

Ease of recruiting local staff accounts for the highest proportion of shared services companies' non-cost site selection motivation. Call centers, data processing and other shared services operations are highly labor-intensive operations that employ a gamut of skills. At the most basic level, call centers employ personnel fluent and literate in a language such as French or English to make outbound sales calls. Inbound customer service calls require familiarization with the call center clients' operations and business protocols and workers are usually trained on these aspects. Some shared services operations, however, require workers to possess technical competence in an area such as software programming, engineering and accounting. Many of these workers possess university or technical degrees in these areas of competency and are hired to work on telephone or internet-based technical support lines or in back office outsourcing operations.

Mali rated lower than every other country except Tanzania and Madagascar on the ease of recruiting skilled local labor. The variable was measured by investors' responses to questions regarding the ease of hiring workers in five different job categories as well as finding workers with a mastery of required language skills (See Figure 25). Mali rated lower than the African

average on every 'Recruit' factor and lower than the Francophone average on every factor except 'Mastery of language'.

Figure 25: Mali's Recruit Performance for the Shared Services Sector

Recruit Factor	Mali Rating	Africa Average	Best Rated Countries
Availability of Qualified Personnel (50% Recruit weight)			
Availability of Managers	2.4	2.9	Ghana (4.6) *Francophone:* Senegal (3.6)
Availability of Professionals	3.0	3.5	Ghana (4.6) *Francophone:* Senegal (4.0)
Availability of Technicians	2.8	3.5	Ghana (4.8) *Francophone:* Senegal (4.0)
Availability of Skilled Labor	3.3	3.8	Senegal (4.5) *Francophone:* Senegal (4.5)
Availability of Unskilled Labor	4.0	4.4	Ghana (5.0) *Francophone:* Senegal and Madagascar (4.4)
Mastery of Required Language Skills (50% Recruit weight)			
Ease of finding workers with command of required language	3.6	3.9	Kenya (5.0) *Francophone:* Senegal (4.0)

Infrastructure

The overall 'Infrastructure' rating is lower in Mali than in all other countries except Madagascar. Among surveyed francophone countries, Mauritius emerges as offering the best infrastructure for shared services firms, followed by Senegal. These two countries are stronger on the 'Infrastructure' variable because of higher quality of telecommunications and internet services. For instance, investors in Mali indicated that it takes an average of 49.4 days to install a telephone line, vs. 3.4 days in Senegal. Similarly, broadband internet capable of transmitting large volumes of data and voice communication is largely unavailable in Mali, but very accessible in Mauritius.

Figure 26: Mali's Infrastructure Performance for the Shared Services Sector

Infrastructure Factor	Mali Rating	Africa Average	Best Rated Countries
International Access to People (63% Infrastructure weight)			
Number of direct flights to U.S., E.U., and Asia	11	34.8	South Africa (125) *Francophone:* Mauritius (48)
Yearly passenger arrivals	96,000	1,049,700	South Africa (6,640,000) *Francophone:* Mauritius (702,000)
Quality of Telecommunications (28% Infrastructure weight)			
Quality of landline telecommunications	2.8	3.7	Uganda (4.6) *Francophone:* Senegal (4.4)
No. days to install new line	49.4	21.8	Senegal (3.4) *Francophone:* Senegal (3.4)
Quality of IT Infrastructure (6% Infrastructure weight)			
Quality of internet service	2.4	3.5	South Africa (4.4) *Francophone:* Mauritius (4.0)
No. days to install internet	5.4	7.4	Mozambique (1.0) *Francophone:* Mauritius (3.5)
Quality of Power Supply (3% Infrastructure weight)			
No. hours blackout per month	16.2	22.5	South Africa and Mauritius (0.4) *Francophone:* Mauritius (0.4)
No. hours brownout per month	1.5	23.7	South Africa (0) *Francophone:* Mauritius (1.4)

General Business Environment

Compared to other surveyed countries, the quality of Mali's 'General business environment' was judged to be quite low. This can be partially explained by the fact that the study relies heavily on past country credit risk ratings as provided by *Institutional Investors* and *Euromoney*. On the other hand, Mali ranks favorably on factors such as number of days and procedures to start a business, number of days to clear customs and corruption perception (See Figure 27).

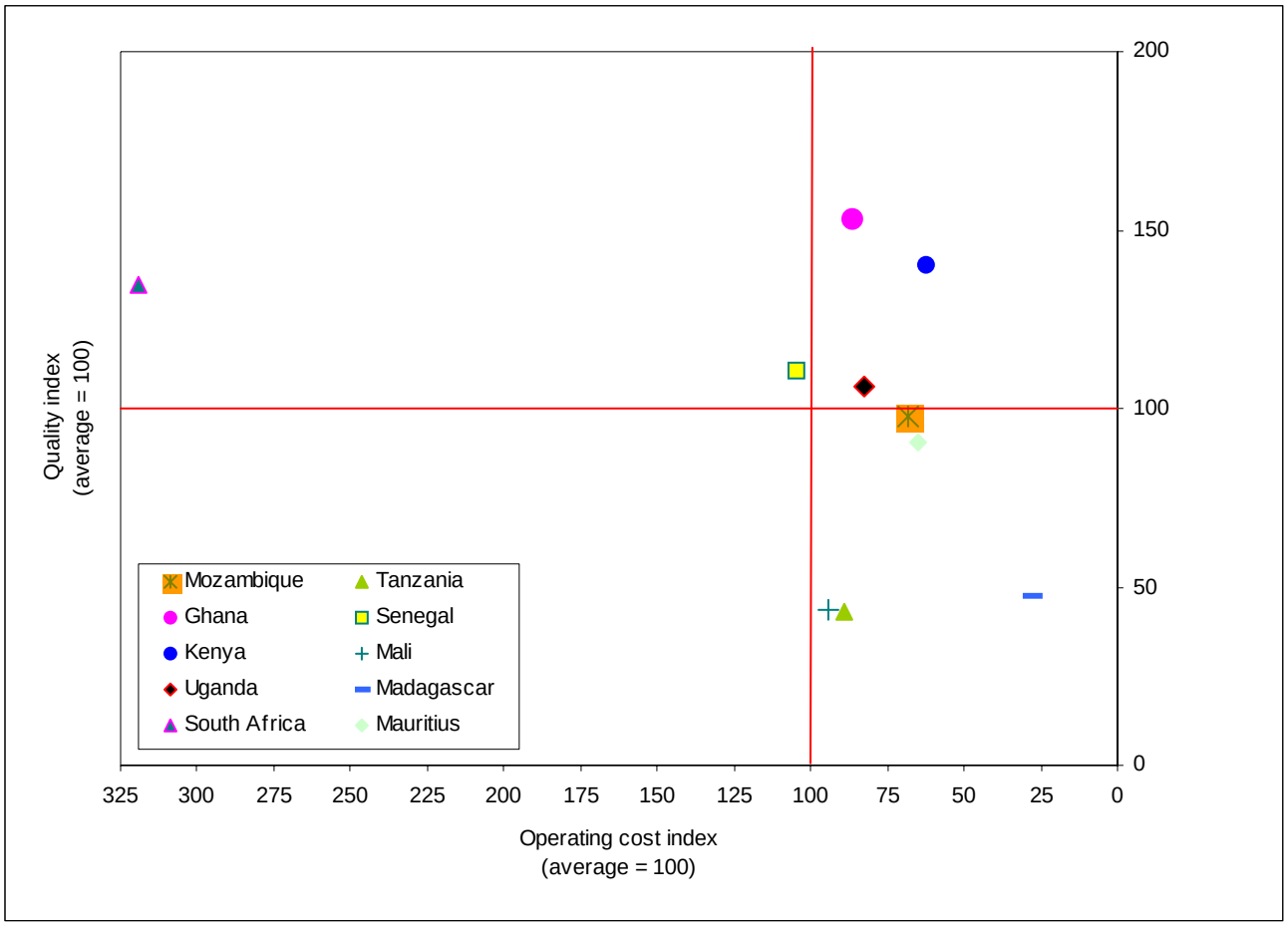
Figure 27: Mali's 'General Business' Performance for the Shared Services Sector

General Business Factor	Mali Rating	Africa Average	Best Rated Countries
Economic, Financial, and Political Stability (60% GBE weight)			
Country credit rating	23.7	32.2	South Africa (59.3) *Comparator: France (92.7)*
Country risk	31.2	40.4	South Africa (59.8) *Comparator: Ireland (94.0)*
Doing Business and Bureaucracy (25% GBE weight)			
No. procedures to start business	13	12.1	Senegal, South Africa, Lesotho (9) *Comparator: Ireland (4)*
No. days to start business	42	62.9	Tanzania (35) *Comparator: France (8)*
Corruption perception	3.2	3.3	South Africa (4.6) *Comparator: Ireland (7.5)*
Days to clear customs	14.6	19.3	Senegal (6.7)
Corporate Taxation (15% GBE weight)			
Corporate income tax	35%	31.8%	Uganda, Tanzania, Ghana, Kenya, (30%) *Comparator: Ireland (25%)*
Sales/VAT tax	18%	16.5%	Ghana (12%) *Comparator: Nigeria (5%)*

COST AND QUALITY COMPARISON

The EBP Model plots cost and quality conditions together in Figure 28 to show trade-offs between these operating variables. In general, high-quality telecommunications, a multilingual workforce and a stable business operating environment trump low costs in the shared services sector. The guarantee of lower cost telemarketing, customer services and back office data processing is not a sufficient condition to warrant moving shared services operations overseas. This effectively renders Mali, with its poor labor availability and telecommunications infrastructure, as a relatively weak location to establish export-oriented shared services companies (See Figure 28). The EBP Model shows that Mali offers an unattractive mix of cost and quality relative to other Sub-Saharan Africa countries. It should also be noted that shared services is the industry where Mali received its least competitive score relative to competition.

Figure 28: Quality Conditions vs. Cost in the Shared Services Sector



RECOMMENDATIONS

While there are reasons for Mali to wish to promote this sector, for the time being the reality of the country does not seem to present a very favorable picture. The challenge for the shared services industry in Mali is to improve the quality of the country's labor force, telecommunications infrastructure and general business environment. While there are no measures that can provide a quick and easy fix in this area, the following steps can be taken in order to start moving the process in the right direction.

- Liberalization of voice over internet protocol (VoIP) networks so as to allow investors to overcome poor land-line quality and to provide a transparent operating environment.
- Providing better training and education in areas that are valued by shared services investors.

CHAPTER VI
RESULTS — TOURISM (HOTELS)

SUMMARY OF FINDINGS

ANDREA FERRMANN, THE SERVICES GROUP, INC.

Presently, hotels in Mali primarily serve business clients while the leisure tourism sector remains small relative to that of Kenya, South Africa and Tanzania. However, current lack of demand does not mean that the leisure tourism sector has no future in Mali. On the contrary, Mali offers many natural and cultural attractions, including travel to 'mysterious' Timbuktu and Djeré, and tour packages that explore local cultural traditions. In addition, the country is deemed to be safer than most other destinations in Sub-Saharan Africa, an advantage that has positive implications for the development of this sector. Combined with consistent power and water supplies, these conditions present significant opportunities for growth in the near future.

Notwithstanding less critical weaknesses such as difficulty in recruiting skilled workers and negative impact of corruption on the levels of economic activity, the most important challenge facing Mali is the need to overcome a lack of awareness of its tourism potential in the major regional and international markets. The first step in this direction could be initiating a sustained marketing campaign targeting regional and European French-speaking markets that seeks to capitalize on the current trend toward "exotic" tourist destinations by emphasizing Mali's uniqueness and authenticity. At the same time, the government must expediently design a comprehensive tourism strategy that will include phased master plans and zoning of targeted sites such as Timbuktu that specify guidelines to protect the architecture and heritage that make the sites attractive in the first place. In the longer term, this strategy should also address infrastructure deficiencies that currently hamper the movement of tourists. For instance, the government can create as favorable a regulatory regime as possible for both commercial and charter airline operators who will attempt to satisfy demand for air travel in and out of the country once more tourists start considering Mali as a viable vacation destination. Only by combining a clear and consistent marketing campaign with a comprehensive and well thought-out sector development strategy will Mali succeed in capitalizing on its many natural and cultural attractions.

Strengths	**Weaknesses**
• Rich cultural heritage • Natural beauty • Above-average level of safety • Consistent power and water supplies • Political stability and democratic, pro-business government	• Low numbers of passenger arrivals • Lack of direct international flights • Lack of awareness of Mali's tourism potential in major markets • Lack of skilled labor • Negative impact of corruption on levels of business activity
Opportunities	**Threats**
• Growing interest in new destinations • Increasing appeal of cultural tourism • Political strife in neighboring countries • Mutually reinforcing link between hotel development and tourism demand	• Regional competition • Inconsistent or unclear marketing • Failure to develop a comprehensive industry development strategy

CONTEXT

Because the consumption of tourism services have to meet at the same place where the services are produced, the existence of the market at the location where services are produced becomes much more important than in the case of manufacturing sectors. Therefore tourist attractions that can contribute to the increasing size of the "market" i.e. tourists, and the existence of any means to increase the future market, i.e. access to the location, bear much heavier weight when looking at the competitiveness of hotel operation.

Hotel investors tend to focus on developing a property around a local attraction, such as a historical site, natural setting, or a commercial business center. Availability of affordable real estate next to natural and cultural sites is the most important investor consideration, followed by availability and cost of qualified personnel and the quality of local infrastructure. Most developers also consider construction costs, number of direct flights and number of companies that could attract business travelers to the area and whether their brand name can be expanded regionally.

A viable hotel development project usually requires a hotel developer who is capable and willing to finance the upfront capital investment to physically build the hotel and a hotel operator who can be trusted to successfully manage the operation once the hotel is built. The two players are motivated by different factors, but a successful project requires both parties to sign on. Hotel developers will be susceptible to the availability and cost of land and construction. Since they will be making significant upfront investment which they hope to recuperate in the course of time, they may be concerned about the stability of the general business environment in a long run. For hotel operators, operating costs become critical, especially labor cost, which is the bulk of operating expenses. In addition, since the tourism is about providing "experiences" which people are willing to pay extra for, the quality of human resources to create positive encounters become vital. The size of the market, as determined by the tourists arrival and access to the location is the other side of the equation for the operators to assess the viability of the hotel project. General economic and political stability and subsequently security may also be a substantial concern for the operators, since they can directly affect the flow of tourists.

At present, hotels in Mali are mostly foreign owned or are operated as joint ventures between Malian and foreign investors with a typical investment averaging about US$ 18 million per hotel. Some hotels operate with management contracts from foreign hotel chains. Businesspeople comprise between 85 and 90 percent of all clients at Malian hotels. The hotels that participated in this study ranged in size from about 40 to 120 rooms and usually provided restaurants, golf and fitness services. Guests at interviewed hotels were primarily West Africans, but also included French, German, American and Canadian nationals.

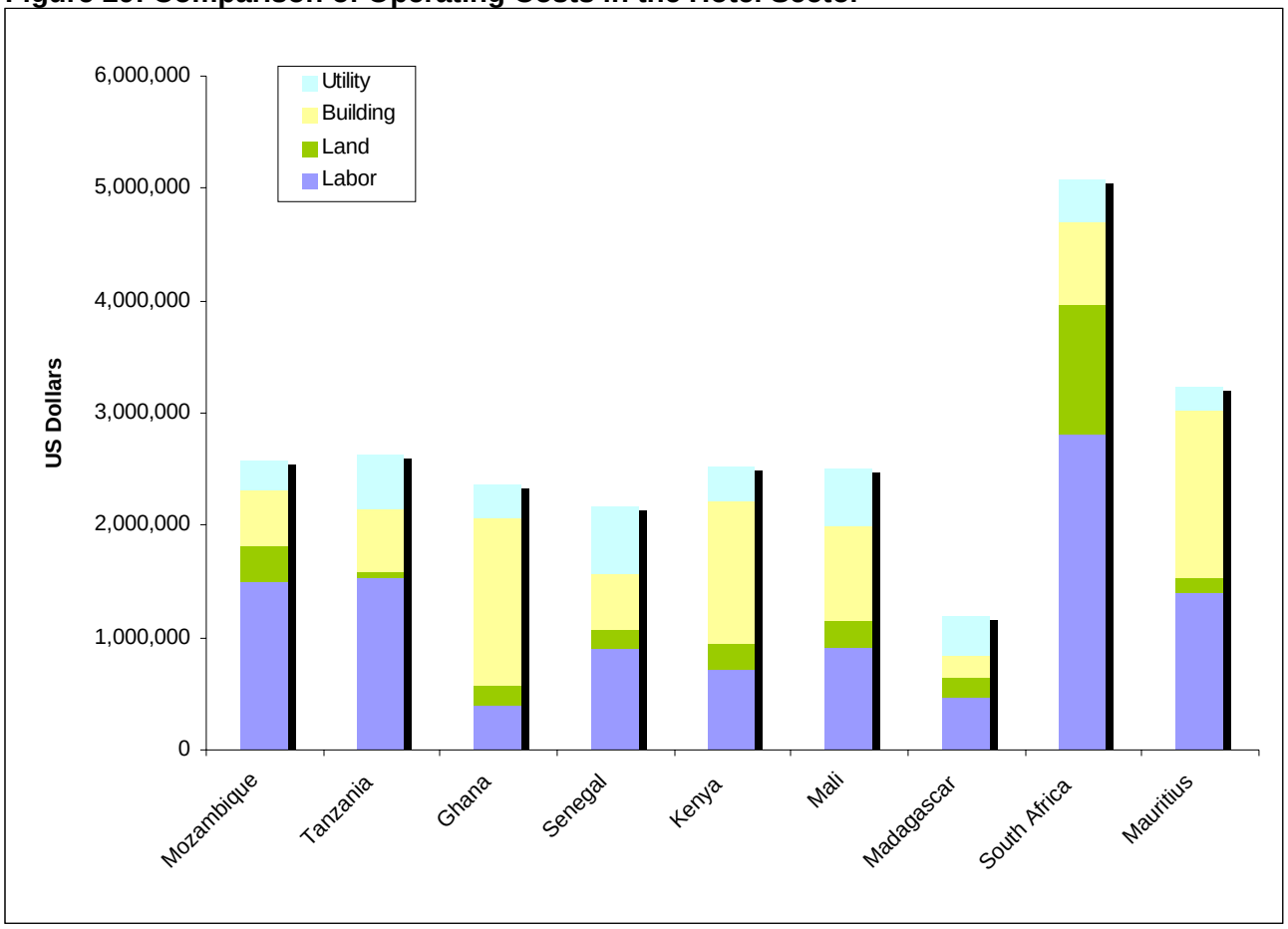
COST

Main Operating Parameters

- Employment: 225 (10 managers, 6 professionals, 23 technicians, 81 skilled, 105 unskilled laborers)
- Power consumption: 2.8 million kilowatt hours / year at 710 KVA
- Water consumption: 62,000 m^3 / year
- Property: 8 Ha, built
- Building: 18,600 m^2; depreciated over 20 years

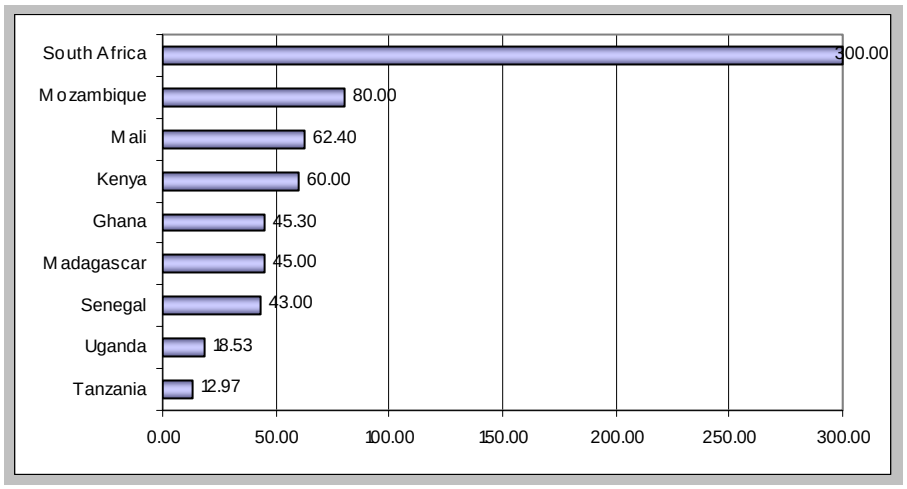
The EBP Model calculated annual operating costs of a hypothetical hotel with predefined operating parameters. Results of these calculations are illustrated in Figure 29. The top three cost concerns for investors are the price of real estate, wage levels and cost of construction. Based on these considerations, Mali presents a moderately low cost environment compared to other countries studied. In the following section, the three most important cost motivations as identified by hotel industry investors are considered in more detail.

Figure 29: Comparison of Operating Costs in the Hotel Sector



Real Estate Costs

Figure 30: Cost of Hotel Land *(US$ per m²)*



Although real estate cost is the most important expense component considered by hotel investors, decisions regarding whether or not to locate a hotel in Mali versus another country are rarely based solely on property prices since tourist products in each location can be vastly different. Thus, once a decision has been made to build a tourist hotel near a site, developers then investigate the cost of available parcels of land in that area.

The EBP collected data on the average cost of 'tourist' land in each country, generally meaning a beach or game reserve location in the African context. The study found that at US$ 62.40 per square meter, the cost of tourist land in Mali is the third highest among surveyed countries.

Labor Costs

Wages constitute the largest single share of annual operating costs for hotels in most surveyed countries. The study revealed that Mali offers a moderately low labor cost environment for a hotel operation. Significant savings in comparison to South Africa, Tanzania and Senegal can be realized in all labor categories with the exception of management, which is a consequence of having to hire expensive expatriates due to the lack of qualified local managers. At the same time, Mali is not as labor costs competitive as Kenya, Madagascar and Ghana (See Figure 31).

Figure 31: Annual Labor Costs Based on EBP Operating Parameters*

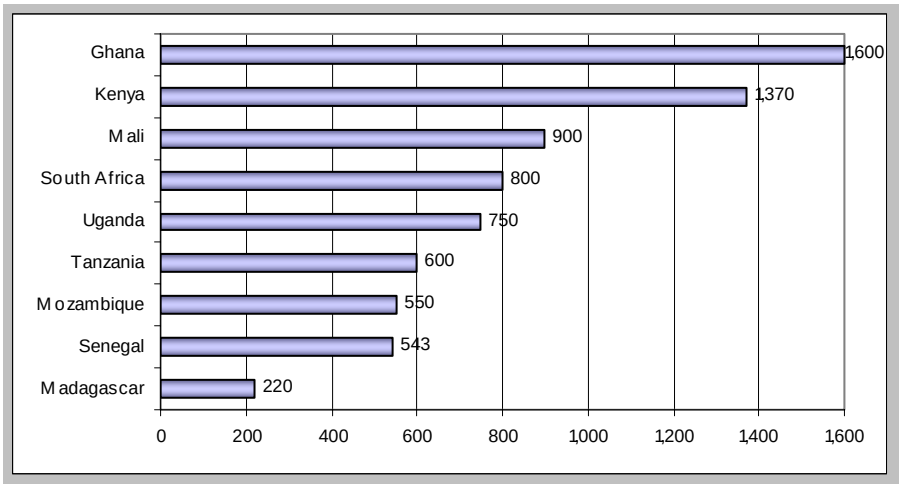
	Total	Management	Professional	Technical	Skilled	Unskilled
South Africa	**2,799,772**	381,107	263,844	503,453	1,013,160	638,208
Tanzania	**1,535,292**	303,932	163,411	412,825	376,342	278,783
Mozambique	**1,495,061**	473,641	126,565	230,301	337,752	326,802
Senegal	**1,223,146**	276,454	98,377	281,506	326,636	240,174
Mali	**911,565**	304,378	65,598	145,479	233,920	162,190
Kenya	**710,206**	191,565	65,699	119,518	199,665	133,760
Madagascar	**459,633**	212,718	46,969	44,060	81,769	74,117
Ghana	**395,720**	42,951	36,508	46,478	135,898	133,885

*See Table 38 for fully burdened wage costs by labor category

Construction Costs

Cost of construction is another factor that can vary greatly even within a single country. To remain uniform in approach across all countries, the Model utilizes construction costs for a five star hotel that would be constructed in a country's capital city.

Figure 32: Cost of Hotel Construction *(US$ per m^2)*



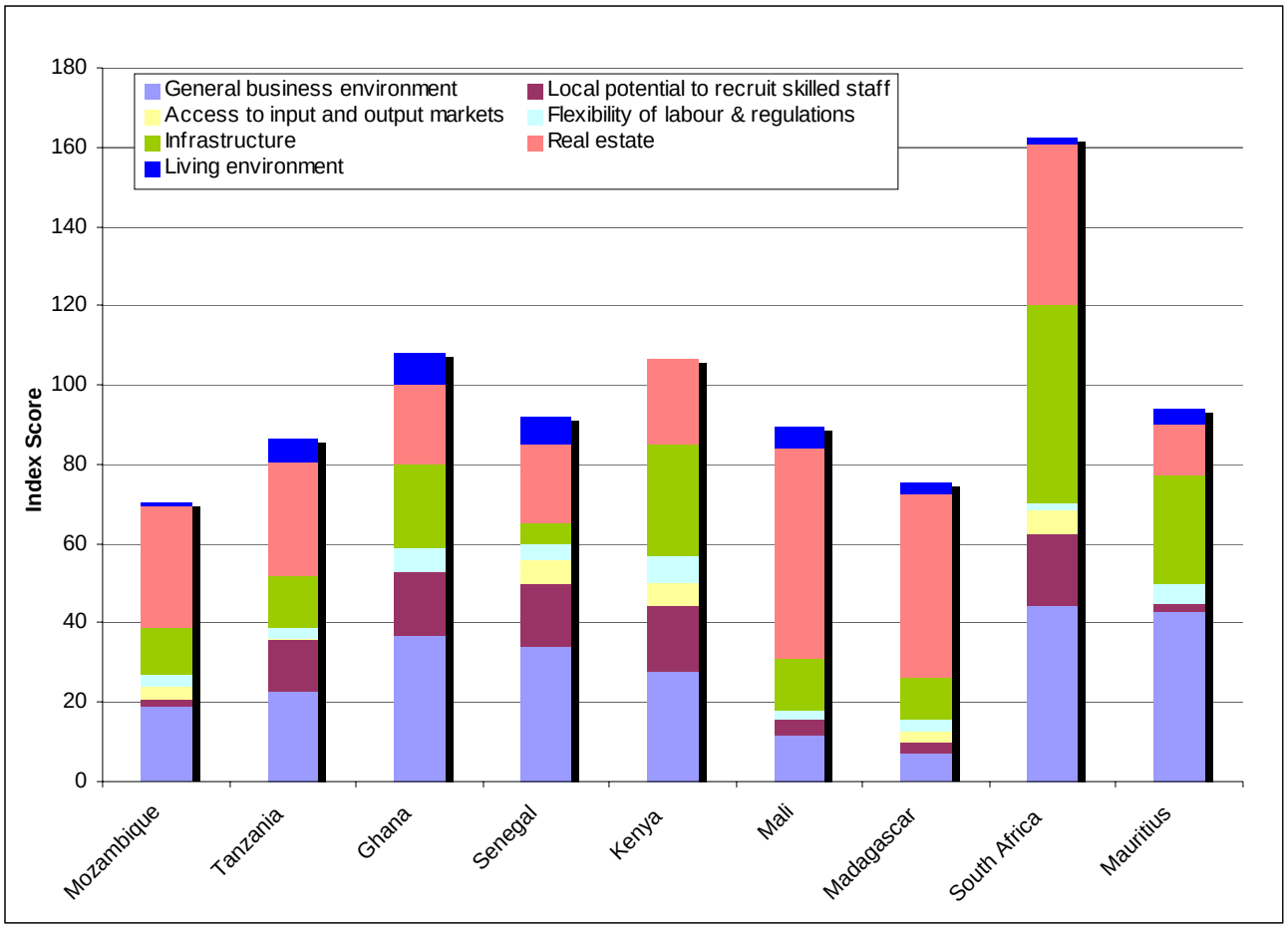
Due to the lack of locally sourced input materials, the country's landlocked position and below average infrastructure, the cost of constructing a five star hotel in Mali is around US$ 900 per square meter, which is third highest among the surveyed countries and even ahead of South Africa (See Figure 32).

QUALITY OF OPERATING CONDITIONS

Mali faces tough competition on quality conditions in the tourism industry from both its neighbors, such as Ghana and Senegal, as well as the African leaders, such as Kenya and South Africa (See Figure 33). Despite this, Mali is fairly competitive on this variable, primarily due to the fact that it received the highest score of all surveyed countries on the most important non-cost variable for hotel investors – availability of real estate. Combined with above average safety for a Sub-Saharan country, a good water supply and the most reliable power supply among the studied countries, Mali has the necessary ingredients for attracting tourists, particulalry leisure tourists who apreciate exotic natural and cultural beauty of its countryside.

> Based on the results of the EBP study, the three most important site selection criteria for hotel and tourism investors are availability of real estate, general business environment, and infrastructure.

Figure 33: Comparison of Weighted Quality Operating Conditions in the Hotel Sector



Availability of Real Estate

It is difficult to categorize and measure the type of land that suits the needs of all investors because hotel owners usually

> The EBP Model used an average of two variables to measure the 'Availability of real estate'. Hotel investors were asked to indicate the number of properties they looked at before making their investment decision. That score was combined with the 'Availability of arable land' in each country to arrive at the 'Real estate availability' score.

do not have generic real estate preferences. Mali's leading position on this variable, combined with the ability of foreign investors to own Malian land, is the country's most important advantage in the hotel industry.

General Business Environment

The quality of a country's general business environment is influenced by political and economic stability, the ease with which companies can start businesses, intellectual property protection, and corporate taxation, among other factors. Compared to other surveyed countries, the quality of Mali's 'General business environment' was judged to be lower than that of all other countries except Madagascar. The fact that Mali is one of the poorest countries in the world will penalize Mali's score on this category for some time to come.

Figure 34: Mali's 'General Business' Performance for the Hotel Sector

General Business Factor	Mali Rating	Africa Average	Best Rated Countries
Economic, Financial, and Political Stability (60% GBE weight)			
Country credit rating	23.7	32.2	South Africa (59.3) *Comparator: France (92.7)*
Country risk	31.2	40.4	South Africa (59.8) *Comparator: Ireland (94.0)*
Doing Business and Bureaucracy (25% GBE weight)			
No. procedures to start business	13	12.1	Senegal, South Africa, Lesotho (9) *Comparator: Ireland (4)*
No. days to start business	42	62.9	Tanzania (35) *Comparator: France (8)*
Corruption perception	3.2	3.3	South Africa (4.6) *Comparator: Ireland (7.5)*
Days to clear customs	14.6	19.3	Senegal (6.7)
Corporate Taxation (15% GBE weight)			
Corporate income tax	35%	31.8%	Uganda, Tanzania, Ghana, Kenya, (30%) *Comparator: Ireland (25%)*
Sales/VAT tax	18%	16.5%	Ghana (12%) *Comparator: Nigeria (5%)*

Infrastructure

Although Mali scores well on power and water supply quality, these variables are less important to hotel investors because hotels can and often do solve problems in these areas by installing power generators and water storage facilities. On the other hand, the biggest concern for hotel investors is the number of direct flights to tourist markets. Mali scores poorly on this variable, as evidenced by the low number of flights and passenger arrivals from the EU (currently Mali's most important market), US and Asia. By contrast, Kenya has 50 weekly flights to Europe and 18 to Asia, while South Africa has 10 direct flights to the US, 92 to Europe and 23 to Asia (See Figure 35).

Figure 35: Mali's Infrastructure Performance for the Hotel Sector

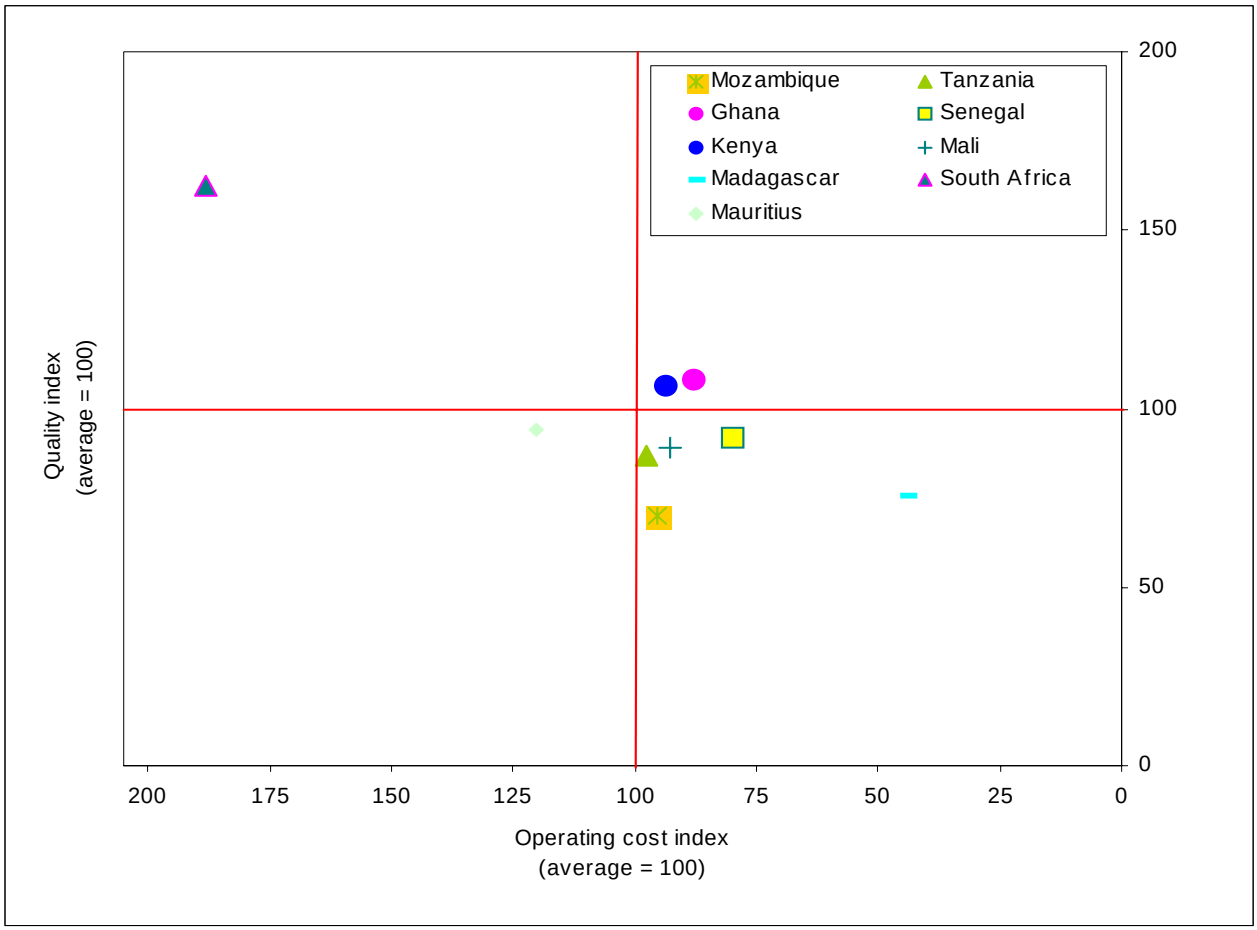
Infrastructure Factor	Mali Rating	Africa Average	Best Rated Countries
International Access to People (77% Infrastructure weight)			
Number direct flights to US, EU, Asia	11	34.8	South Africa (125)
Yearly passenger arrivals	96,000	1,049,700	South Africa (6,640,000)
Quality of Power Supply (14% Infrastructure weight)			
No. hours blackout per month	9.0	62.9	South Africa and Mauritius (0.4)
No. hours brownout per month	1.0	71.8	South Africa (0)
Quality of Water Supply (9% Infrastructure weight)			
No. days water shortage per year	7.2	46.4	South Africa (0.2)

COST AND QUALITY COMPARISON

The EBP Model plots cost and quality conditions together in Figure 36 to show trade-offs between these operating variables. The matrix does not depict absolute competitiveness of each participating country, since each investor's mix of needs for quality vs. cost is different, which results in different location selections. The EBP Model represents Mali as a lower-quality, lower-cost investment location for hotel developers, better than Mozambique and Tanzania, but worse than Ghana and Kenya. In general, it should be noted that tourism and hotels is the industry where Mali received its most competitive score relative to other Sub-Saharan countries.

Mali's numerous advantages as a potentially important player in the tourist industry, such as availability of real estate, its natural beauty and rich cultural heritage, good power and water supply, above average safety, and political stability have not yet led to the development of a vibrant tourist sector. The factors that are constraining Mali's performance are low numbers of flight and passenger arrivals and poor general business environment perception (based on low credit and risk ratings as provided by *Institutional Investors* and *Euromoney*), making it possible to move the country to the high quality low cost quadrant with a clear and targeted strategy. In addition to improving quality, Mali has room to further increase its low cost advantage, particularly in real estate and labor cost categories. The most serious long-term challenges that can prevent Mali's success as a tourist destination is lack of skilled workers.

Figure 36: Quality Conditions vs. Cost in the Hotel Sector



RECOMMENDATIONS

Mali offers a wide range of very rich tourism assets. From an economic development strategy perspective, tourism sector development seems to offer interesting opportunities to catalyze the development of other sectors, such as textile, apparel, horticulture and food processing: hotels and ancillary sectors create "export" market without physically exporting products overseas, if suppliers can be properly organized.

The immediate challenge for the hotel and tourism sector in Mali is to overcome a lack of awareness of the country's tourism potential in major international markets and low flight and passenger arrivals while preserving the country's below average costs. This can be achieved by

- Designing a comprehensive tourism strategy that will include phased master plans and zoning of targeted sites throughout the country by developing guidelines to protect the architecture and heritage that make Mali attractive in the first place.
- Increasing the number of direct flights from Mali to Europe and Asia by promoting tourism at the same time as horticulture and creating a favorable regulatory regime for commercial and charter airline operators who will attempt to satisfy demand for air travel

in and out of the country once more tourists start considering Mali as a viable vacation destination.

- Continuing active destination marketing to increase tourists arrival, hence demand for hotels.

In the longer term, the government must tackle poor skilled-labor quality by improving currently existing hospitality training and producing more graduates for such positions as hotel clerks, receptionists, chefs and waiters. In addition, the tourism development strategy should address other deficiencies that currently hamper the country's attractiveness, such as poor quality of recreational activities for families and poor quality of road infrastructure.

CHAPTER VII
RESULTS — HORTICULTURE

SUMMARY OF FINDINGS

ANDREA ERDMANN, THE SERVICES GROUP, INC

Although Mali's export-oriented horticulture business is currently small compared to other Sub-Saharan African countries, the country possesses a number of factors that make this sector potentially attractive to foreign investors. In particular, Mali benefits from a large amount of irrigable land, an abundant and relatively stable water supply and a large rural labor force that commands low wages.

The immediate challenge for the horticulture sector in Mali is to overcome such drawbacks as low air cargo and cold chain logistics capacity while preserving the country's low cost advantage. One way to do so is by encouraging production of non-perishable low bulk / high value goods such as gum arabic. Another strategy lies in increasing economies of scale through greater commercialization of production by stimulating the creation of commercial growing areas that can benefit from more reliable power and telecommunication services. In addition, promoting producer associations that can disseminate knowledge about growing techniques and export markets is essential in order to address the problem of local skilled workforce shortage.

Strengths	**Weaknesses**
• Inexpensive and abundant labor • Law permits foreign ownership of land • Large amount of irrigable land • Abundant and reliable water supply • Political stability and democratic, pro-business government	• Low air cargo capacity • Lack of cold chain logistics • Spoilage due to poor road networks • High transportation costs due to land-locked position • Lack of sector organization • Low workforce quality
Opportunities	**Threats**
• Growers' association • Greater commercialization and economies of scale • High prices for / deficit of gum arabic • Increased air cargo capacity and better access to seaports • Direct relationships with retailers	• Regional competition • Export certification requirements

CONTEXT

The horticulture industry is labor intensive, cost sensitive and competitive. Mali faces strong competition from established producers in Asia and Latin America as well as from Sub-Saharan Africa leaders such as Kenya (green beans), Burkina Faso (mangos) and Sudan (gum arabic). Fruits and vegetables produced in Mali have an advantage over those grown in Asia and Latin America because they face no import tariffs in US and EU markets. However, most other Sub-Saharan competitors also enjoy zero tariffs on their horticultural exports.

Horticulture industry investors have a medium to long term investment view, place a high value on the possibility to own land and prefer politically stable and pro-business environments. Other important investor considerations are low labor and real estate costs combined with good infrastructure – especially reliable water supply, cold storage logistics and air as well as sea cargo capacity – and reliable access to both land and export markets. Commercialization of production and economies of scale are also important because of higher efficiency and productivity that they bring.

Malian investors who took part in this study are primarily local and joint venture firms that focus on the production of green beans, okra, melons, mangos and gum arabic for export to the EU. They are relatively small enterprises that sell to wholesalers and have no direct relationships with retail customers. The lack of large scale commercial producers that have direct access to overseas market and the absence of foreign players are, for prospective investors, in themselves very telling stories about today's Mali as a potential destination for horticulture investment.

The following sections compare cost and quality conditions in Mali's horticulture sector to those of eight other Sub-Saharan Africa countries including two countries that are considered to be high-performers (the "benchmarks") – South Africa and Kenya. The charts presented are the resulting outputs of the model developed under MIGA's Enterprise Benchmarking Program.

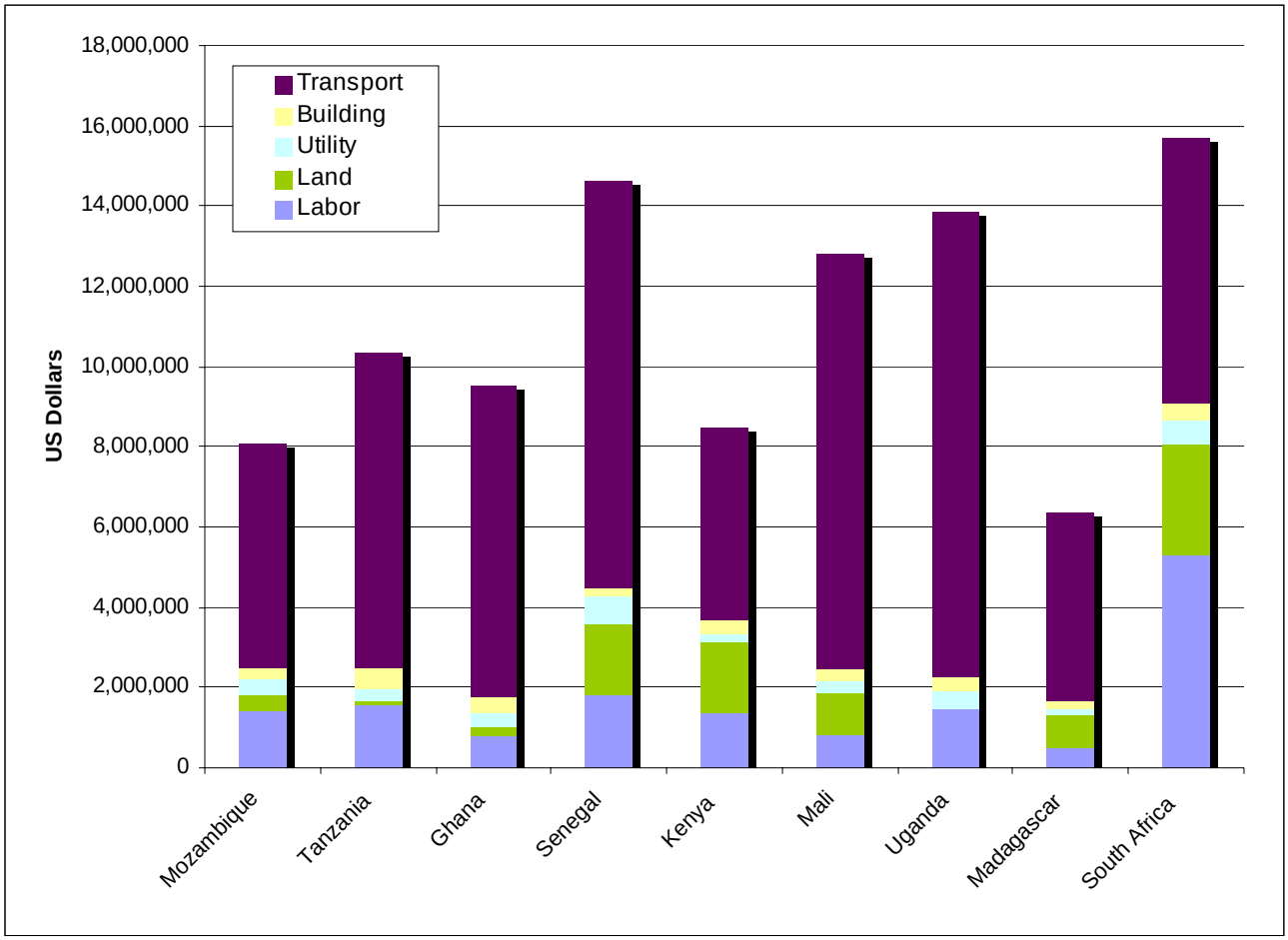
COST

Main Operating Parameters

- Employment: 640 (12 managers, 13 professionals, 16 technicians, 160 skilled, 439 unskilled laborers)
- Power consumption: 250 thousand kilowatt hours / year at 200 KVA
- Water consumption: 355,000 m^3 / year
- Property: 100 Ha
- Factory: Construction of 15,000 m^2; depreciated over 20 years
- Market: Europe

The EBP Model calculated annual operating costs of a hypothetical horticulture firm with predefined operating parameters. Results of the calculation are illustrated in Figure 37. Based on these assumptions, Mali presents an above average cost environment compared to other countries studied. A closer look at the cost structure reveals that Mali's high costs are a direct result of very high transportation costs due to the country's land-locked position. Excluding transportation costs, Mali offers a competitive cost environment, mostly due to its very low labor costs, which is the most important cost component considered by horticulture investors. In the following section, the three most important cost motivations as identified by horticulture industry investors are considered in more detail.

Figure 37: Comparison of Operating Costs in the Horticulture Sector



Labor Costs

Mali offers a low labor cost environment for an horticulture operation. In particular, significant savings can be realized in management and professionals categories, while wage levels for technical, skilled and unskilled labor are also quite competitive (See Figure 38).

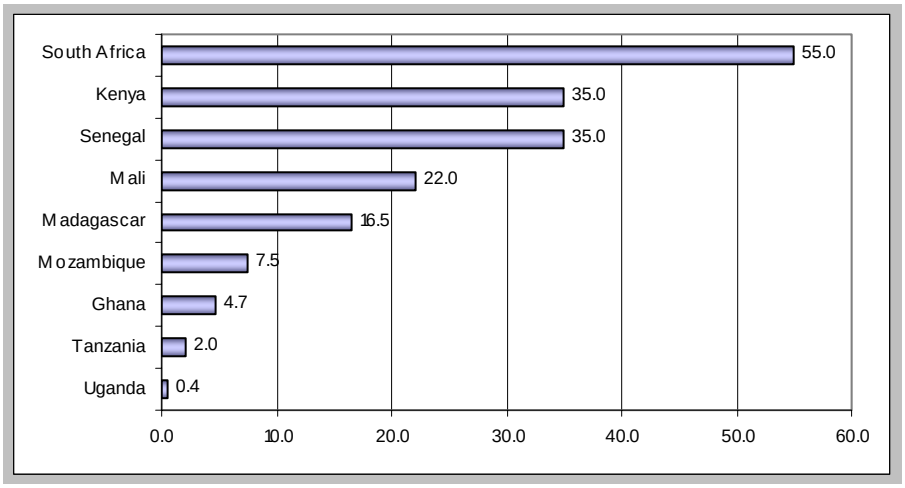
Figure 38: Annual Labor Costs Based on EBP Operating Parameters*

	Total	Management	Professional	Technical	Skilled	Unskilled
South Africa	**5,304,509**	609,772	475,114	318,784	2,267,101	1,633,738
Senegal	**1,805,887**	436,960	252,177	159,145	420,586	537,019
Tanzania	**1,555,685**	297,370	294,389	80,117	220,584	663,225
Uganda	**1,463,944**	270,918	152,807	67,435	345,959	626,825
Mozambique	**1,423,958**	169,142	157,160	77,466	550,759	469,431
Kenya	**1,370,320**	242,061	208,638	169,148	295,421	455,052
Mali	**789,630**	108,314	54,810	64,608	232,779	329,120
Ghana	**789,250**	62,949	79,755	44,561	261,999	339,985
Madagascar	**490,666**	99,161	23,569	40,096	117,111	210,730

*See Table 39 in Appendix C for a comparison of fully burdened salaries by labor category

Real Estate Costs

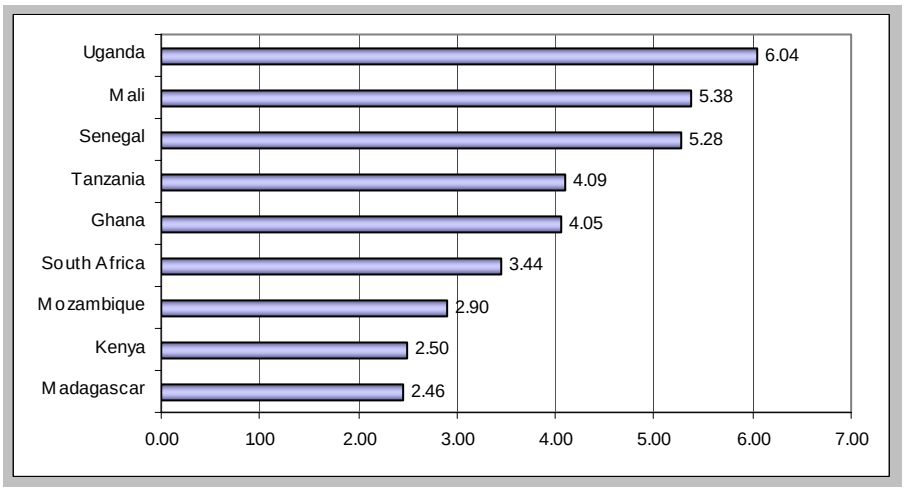
Figure 39: Cost of Agricultural Land *(US$ per m²)*



Although Mali offers a unique advantage in the region by allowing foreign investors to purchase and own land, land suitable for horticulture operations is quite expensive at US$ 22 per m^2 (See Figure 39). However, this must be qualified by noting that because land sales transactions in rural areas are often not governed by commercially free property markets, there are many variances that affect the actual price of land faced by investors. This can lead to situations where parcels of land in close proximity to one another sell or lease for vastly different prices.

Transportation

Figure 40: Cost of Airfreight to Amsterdam *(US$ per kg)*



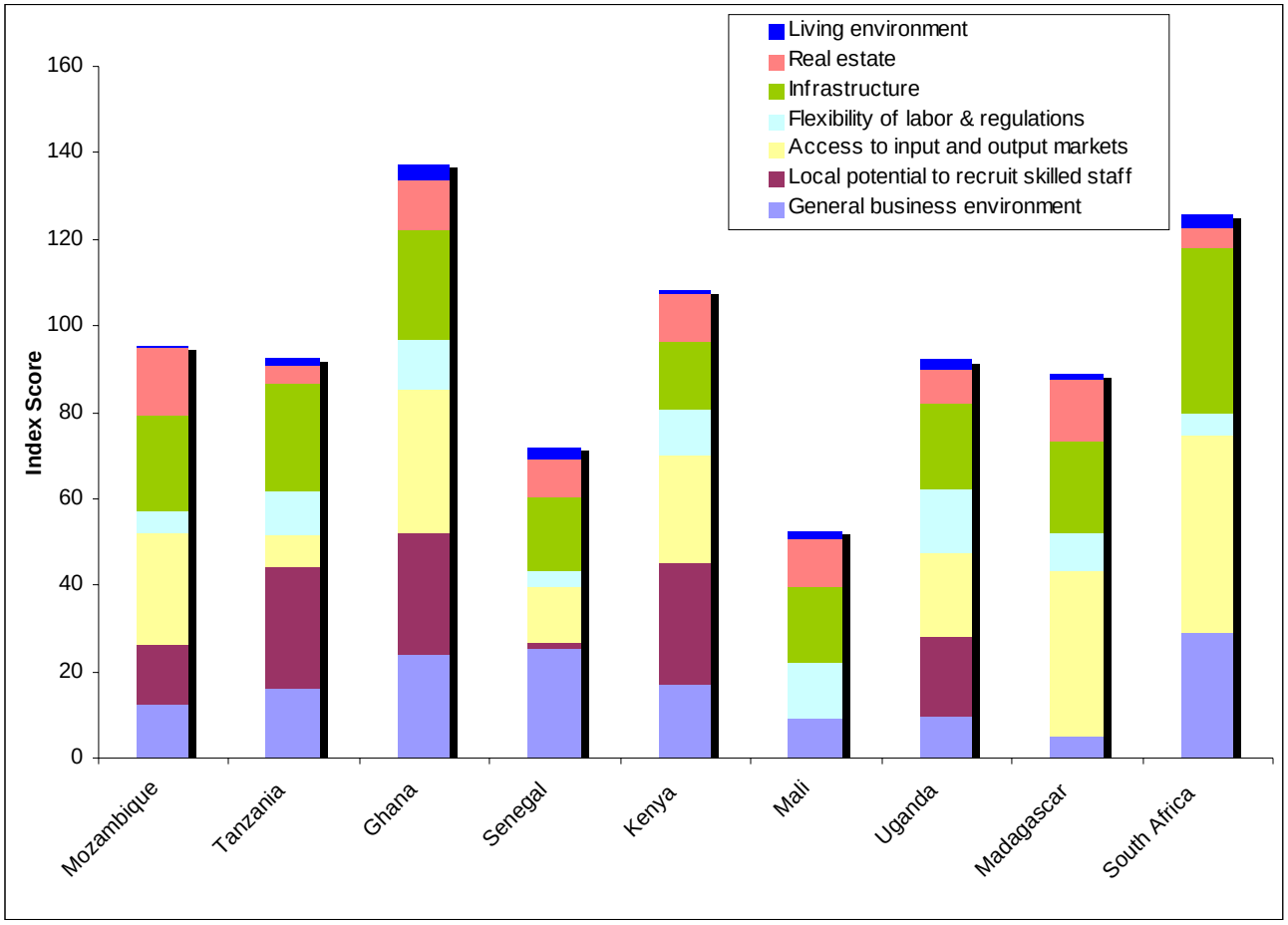
Mali's poor, landlocked location presents one of the most significant obstacles to attracting foreign investors in the horticulture sector, where affordable shipping is one of the key ingredients of a successful operation (See Figure 40). Currently, high air-freight costs persist due to the lack of cargo capacity, with only one flight to Bamako per day. In addition, Mali faces the highest sea freight costs among all surveyed countries because of high costs of transporting shipments by road to regional ports in Abidjan and Dakar.

QUALITY OF OPERATING CONDITIONS

Horticulture investors in Mali face the lowest quality of operating conditions of all surveyed countries (See Figure 41). Mali scores particularly poorly on the 'Access' variable, which is the most important site selection criterion in this industry.

Based on the results of the EBP study, the three most important site selection criteria for horticulture investors are access to input and output markets, infra-structure, and general business environment

Figure 41: Comparison of Weighted Quality Operating Conditions in the Horticulture



Access to Inputs and Output Markets

The 'Access' variable attempts to measure presence and size of an industry cluster through the relative export activity, use of locally produced chemicals and machinery and size of the local market (See Figure 42).

Figure 42: Mali's Access Performance for the Horticulture Sector

Access Factor	Mali Rating	Africa Average	Best Rated Countries
Export Competitiveness (48% Access weight)			
Current fruits and vegetables export performance ranking	107	65.8	South Africa (8)
Change in fruits and vegetables export performance ranking	101	60.9	Kenya (20)
Proximity to Raw Materials, Components, and Equipment and Chemicals (50% Access weight)			
Percentage of imported raw materials, components, and equipment and chemicals	71.7	50.0	South Africa (31.7)
Size of Domestic Market (2% Access weight)			
Gross domestic product (US$ millions)	4,326	26,342	South Africa (159,886)

There are several reasons why Mali rated lower than all other surveyed countries on the 'Access' variable. For example, the size and growth of current exports are currently small due to lack of commercialization, high transportation costs and cumbersome EU certification requirements, which in turn has negative repercussions for supply and cold chain management and access to specialized industry skills.

Second, Mali's access to export markets is hindered by the lack of sector organization in the form of trade associations, which could promote the collective interests of Malian horticulture firms by helping growers to establish direct relationships with retailers and disseminating knowledge among rural skilled workers, whose level of industry expertise is not satisfactory to current investors. Finally, Mali's reliance on imports of everything from Dutch seeds to French fertilizers to EU heavy capital equipment further hurts its score in this category.

Infrastructure

Qualities of air and ocean cargo as well as quality of water supplies are the most important 'Infrastructure' factors in the horticulture sector. Dependable air transportation is extremely important in order to avoid losses associated with spoilage of perishable products and to reliably supply foreign retailers, particularly given Mali's landlocked geography. Currently, Air France Freight Services is the sole airfreight option to Europe with just one daily flight. Typically, cargo will not be put on the airplane if it is at full capacity, which makes consistent fulfilling of customer orders a serious challenge. Moreover, poor access to cold storage facilities and the inadequate state of regional road networks prevent exporters from taking full advantage of seaports in neighboring countries because many perishable products are destroyed due to delays in overland shipping, hurting company business and the reputation of Malian produce abroad.

Mali enjoys a relatively stable water supply, which is evidenced by its below-average number of water shortage days compared to other surveyed countries. Limited availability of public water systems and wastewater management is not as important for horticulture as for some other sectors and therefore has limited implications for investors, although increased levels of chemical and other waste in Malian water supply is a potentially troubling issue for foreign customers who are concerned with quality levels of produce sold on their markets.

Investors are also troubled by relatively poor telecommunications quality. Outside Bamako, installation of fixed line can be challenging. Mobile services, provided by two private companies, have made an important difference in recent years, but remain expensive.

Figure 43 shows all processed factors and ratings for Mali, the best-rated countries and African averages.

Figure 43: Mali's Infrastructure Performance for the Horticulture Sector

Infrastructure Factor	Mali Rating	Africa Average	Best Rated Countries
International Access to People (5% Infrastructure weight)			
Number of direct flights to U.S., E.U., and Asia	11	34.8	South Africa (125)
Yearly passenger arrivals	96,000	1,049,700	South Africa (6,640,000)
Quality of Air Freight (30% Infrastructure weight)			
Percentage of on-time shipments	95	92.9	South Africa (99.5)
Percentage of lost shipments	0.8	0.6	Madagascar and Mozambique (0)

Infrastructure Factor	Mali Rating	Africa Average	Best Rated Countries
Quality of Sea Freight (7.5% Infrastructure weight)			
Percentage of on-time shipments[14]	0	59.8	South Africa (97.3)
Percentage of lost shipments[15]	100	37	South Africa (0)
Quality of Road Freight Transportation (10% Infrastructure weight)			
Percentage of on-time shipments	43	64.6	Senegal and Tanzania (0)
Percentage of lost shipments	10	2.2	Tanzania, Ghana, and Senegal (0)
Quality of Telecommunications (7.5% Infrastructure weight)			
Quality of landline telecommunications	2.6	3.0	Uganda (4.6)
No. days to install new line	118	54.5	Senegal (3.4)
Quality of IT Infrastructure (5% Infrastructure weight)			
Quality of high-bandwidth internet service	1.0	3.0	South Africa (4.4)
No. days to install internet	4.8	22.5	Mozambique (1.0)
Quality of Power Supply (10% Infrastructure weight)			
No. hours blackout per month	52.0	63.9	South Africa and Mauritius (0.4)
No. hours brownout per month	1.1	58.7	South Africa (0)
Quality of Water Supply (20% Infrastructure weight)			
No. days water shortage per year	3.6	8.1	Kenya and Tanzania (0)

General Business Environment

See previous chapters.

Figure 44: Mali's 'General Business' Performance for the Horticulture Sector

General Business Factor	Mali Rating	Africa Average	Best Rated Countries
Economic, Financial, and Political Stability (65% GBE weight)			
Country credit rating	23.7	32.2	South Africa (59.3) *Comparator: France (92.7)*
Country risk	31.2	40.4	South Africa (59.8) *Comparator: Ireland (94.0)*
Doing Business and Bureaucracy (25% GBE weight)			
No. procedures to start business	13	12.1	Senegal, South Africa, Lesotho (9) *Comparator: Ireland (4)*
No. days to start business	42	62.9	Tanzania (35) *Comparator: France (8)*
Corruption perception	3.2	3.3	South Africa (4.6) *Comparator: Ireland (7.5)*
Days to clear customs	5.6[16]	8.5	Senegal (3.3)
Corporate Taxation (10% GBE weight)			
Corporate income tax	35%	31.8%	Uganda, Tanzania, Ghana, Kenya, (30%) *Comparator: Ireland (25%)*
Sales/VAT tax	18%	16.5%	Ghana (12%)

[14] Where shipment by sea was not available, such as in landlocked countries like Mali, companies generally gave a rating of '0' to the 'On-time shipment' variable.
[15] Where shipment by sea was not available, such as in landlocked countries like Mali, companies generally gave a rating of '100' for the 'Lost shipments' variable.
[16] The number of days to clear shipments through Customs varied from industry to industry, according to responses from interviewed firms in Mali and other countries. In Mali, the responses were as follows: Apparel (0.8 days); Textiles (3 days); Shared services (5 days); Hotels (14.6 days); Horticulture (5.6 days); and Food and beverage processing (3.6 days).

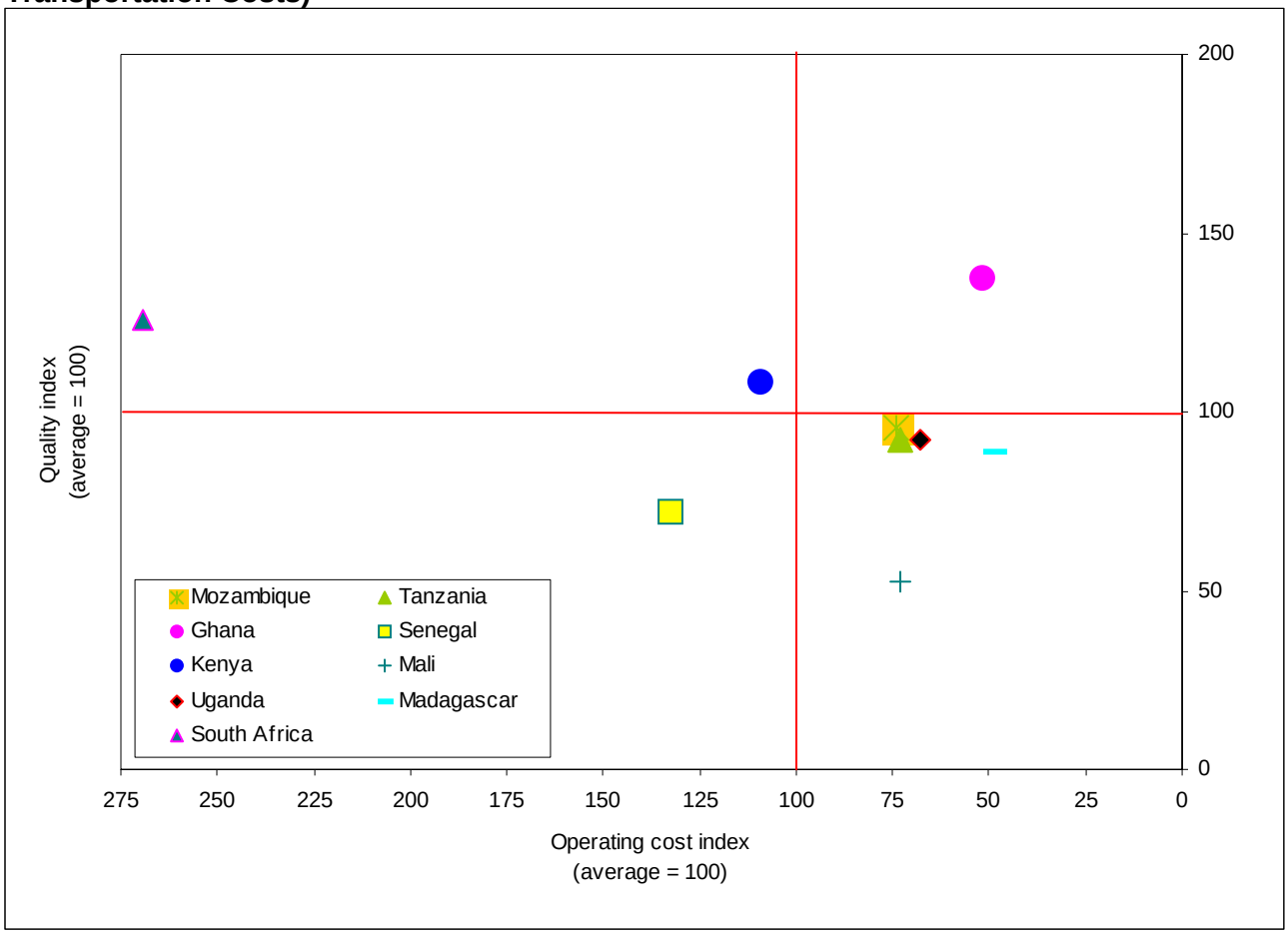
General Business Factor	Mali Rating	Africa Average	Best Rated Countries
			Comparator: Nigeria (5%)

COST AND QUALITY COMPARISON

The EBP Model plotted quality and cost conditions together in Figure 45. The matrix depicts tradeoffs between costs and quality of business operations. It should be noted that the matrix does not depict absolute competitiveness of each participating country, since each investor's mix of needs for quality vs. cost is slightly different, which could result in different location selection. However, it is obvious that Mali must improve its operating conditions as investors can actually operate in a higher quality business environment AND at lower cost by deciding to locate in Ghana, Madagascar or Uganda.

Mali's advantage as a low labor cost operating environment combined with an abundant supply of irrigable land in a relatively stable has not yet turned the country into an attractive horticulture investment destination due to the low quality of its operating conditions. For instance, Mali's low wage costs are offset by a lack of local technical expertise suitable for an export-oriented horticulture industry, forcing many firms to hire more expensive expatriates, particularly for positions in agronomy. Its land abundance and acceptance of foreign land ownership – potentially a unique selling point with investors – are made less attractive by relatively high land costs and difficulty of acquiring plots large enough for commercial production. The situation is further exacerbated by very high transportation costs, which stem from inadequate air cargo capacity and poor cold chain logistics. Finally, tariff-free access to export markets is offset by the lack of a coordinated effort from both growers' associations and the government to actively promote Malian goods by soliciting help from foreign governments in overcoming regulatory restrictions such as ISO and EurepGAP.

Figure 45: Quality Conditions vs. Cost in the Horticulture Sector (Excluding Transportation Costs)



RECOMMENDATIONS

The immediate challenge for the horticulture sector in Mali is to overcome such drawbacks as low air cargo and cold chain logistics capacity while preserving the country's low cost advantage. This can be achieved by

- Encouraging production of non-perishable low bulk / high value goods such as gum arabic, which presently is in short supply and commands prices that are several times higher than all other produce grown in Mali. Mali has a massive potential for supplying international markets with this product, 85% of which is currently produced by a conflict-torn Sudan.
- Promoting producer associations that can disseminate knowledge about growing techniques and export markets and promote the interests of Malian growers in international markets, and subsequently awareness for various requirements to access overseas market.
- Simplifying export certification processes and requirements within Mali.

In the longer term, the government can tackle poor skilled-labor quality through greater attention to rural education, particularly technical education aimed at teaching commercial farming

techniques and improve understanding of the requirements for making their products certified by exporting country's authority.

CHAPTER VIII
RESULTS – FOOD & BEVERAGE PROCESSING

SUMMARY OF FINDINGS

Food and beverage processing firms locate in Mali to serve the local market and extend their brand throughout West Africa. There is currently very little processing of local fruits, vegetables, or meat for export partially due to the constraints on the supply of raw materials as a result of the lack of commercial farming.

Existing investors stated that Mali is a safer location from which to operate than other African countries, particularly countries neighboring Mali that are now engaged in civil disturbances. Access to locally raised fruits, vegetables, and meat, as well as plentiful supplies of water is attractive to food processors. However, the high cost of power and generally low level of knowledge of the food processing industry and standards do not act in Mali's favor.

Strengths	**Weaknesses**
• Availability of local agricultural inputs • Reliable water supply • Safe operating environment • A democratic, pro-business government	• Lack of skilled labor • High transportation costs • Poor road, air and ocean export cargo capacity • High cost of power • Absence of industry clusters with knowledge of international markets
Opportunities	**Threats**
• Exporting to regional markets • Potential for increasing local sourcing of agricultural and horticultural inputs	• Strong regional competition for exports to developed countries • Competition from the domestic 'informal' sector • HACCP and other certification requirements

CONTEXT

Despite that fact that most surveyed Sub-Saharan Africa countries can export their products free of tariffs to the US and EU, the food and beverage processing industry in many of these economies currently lacks scale to compete effectively in international markets and therefore has a largely regional focus. This is certainly true of Mali, where food processors primarily serve the local market while also trying to expand their brand names and reach throughout Western Africa by exporting to Senegal, Burkina Faso and Guinea.

Just like its wider competition, the Sub-Saharan Africa food and beverage processing industry relies on the availability of a reliable and skilled workforce and good access to both production inputs, such as agricultural products, and consumer markets. In Mali, food processing factories included both foreign and jointly owned operations which generally preferred to locate near population centers or on sites where water or raw materials were abundant. For instance, water bottling plants located operations near Diago, while wheat mills located near Kolikoro. Most companies had their own wells, so sites first had to be tested for the presence of abundant underground water. In addition, some companies sought out government-sanctioned industrial zones.

Food and beverage processing industry investors seek out markets that provide abundant supplies of local agricultural inputs while enjoying unrestricted access to large domestic, regional or international markets. Other important investor considerations are availability of properly trained workers, low labor and real estate costs and developed infrastructure – especially reliable water and power supply as well as air, road and ocean cargo capacity. Economies of scale and commercialization of production are also important because of higher efficiency and productivity they create.

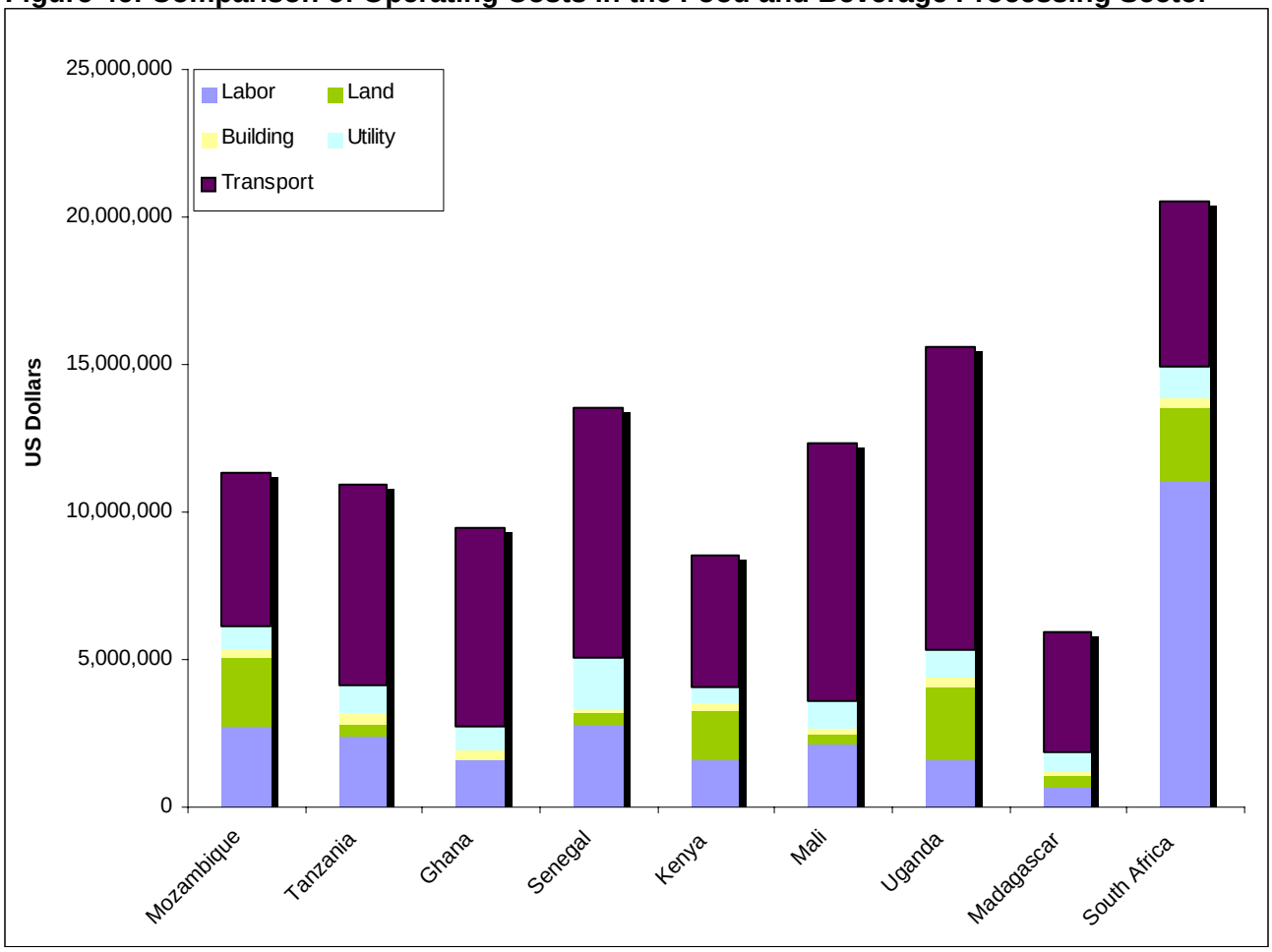
COST

Main Operating Parameters

- Employment: 452 (18 managers, 13 professionals, 19 technicians, 186 skilled labor, 216 unskilled labor)
- Power consumption: 2 million kilowatt hours per year at 1,000 KVA
- Water consumption: 650,000 m^3 / yr
- Property: 3 ha, lease
- Factory: Construction of 12,700 m^2; depreciated over 20 years
- Market: Europe, Western Africa

The EBP Model calculated annual operating costs of a hypothetical horticulture firm with predefined operating parameters. Results of the calculation are illustrated in Figure 46. The model found that operating costs in an export-oriented food and beverage processing factory located in Mali would be slightly above the surveyed African average when the cost of air and sea transportation is included in the calculation. However, excluding costs of transportation, Mali would be one of the cost leaders because the costs of labor, land, construction and utilities (with the exception of electricity) are generally competitive with other Sub-Saharan competitors. In the following section, the three most important cost motivations as identified by food and beverage industry investors are considered in more detail.

Figure 46: Comparison of Operating Costs in the Food and Beverage Processing Sector



Labor Costs

Food and beverage industry wage levels in Mali are generally competitive with those throughout Sub-Saharan Africa. In particular, companies can realize significant cost savings for such labor categories as skilled and professional. At the same time, management costs are quite high in Mali, reflecting the scarcity of top managers with expertise in the food processing sector.

Figure 47: Annual Labor Cost Based on EBP Operating Parameters*

	Total	Management	Professional	Technical	Skilled	Unskilled
South Africa	**11,047,865**	1,596,879	1,349,727	1,055,085	4,482,221	2,563,953
Senegal	**2,784,720**	448,790	200,413	217,979	1,167,438	750,100
Mozambique	**2,754,850**	643,934	194,761	210,787	1,382,448	322,921
Tanzania	**2,411,081**	466,094	295,250	257,657	929,544	462,536
Mali	**2,111,926**	630,044	178,818	157,723	650,935	494,405
Kenya	**1,621,766**	299,740	180,798	118,209	657,276	365,742
Uganda	**1,617,093**	514,950	111,160	84,490	596,941	309,551
Ghana	**1,572,255**	198,311	116,325	107,852	660,534	489,234
Madagascar	**692,875**	286,388	44,015	46,617	206,657	109,198

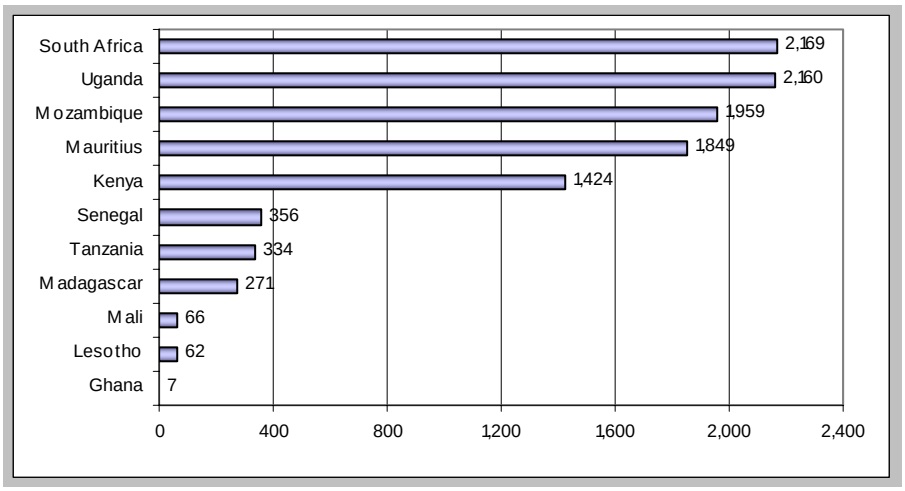
*See Table 42 in Appendix C for a comparison of fully burdened salaries by labor category

Tariff Costs in Export Markets

Processed food and beverage exports from Mali do not face import duties in the EU and US markets. However, this is also the case for every surveyed country except for South Africa, so Mali is no better or worse off than its competitors in this regard.

Real Estate Costs

Figure 48: Annual Lease Cost of 3 Ha Industrial Land *(000s USD)*



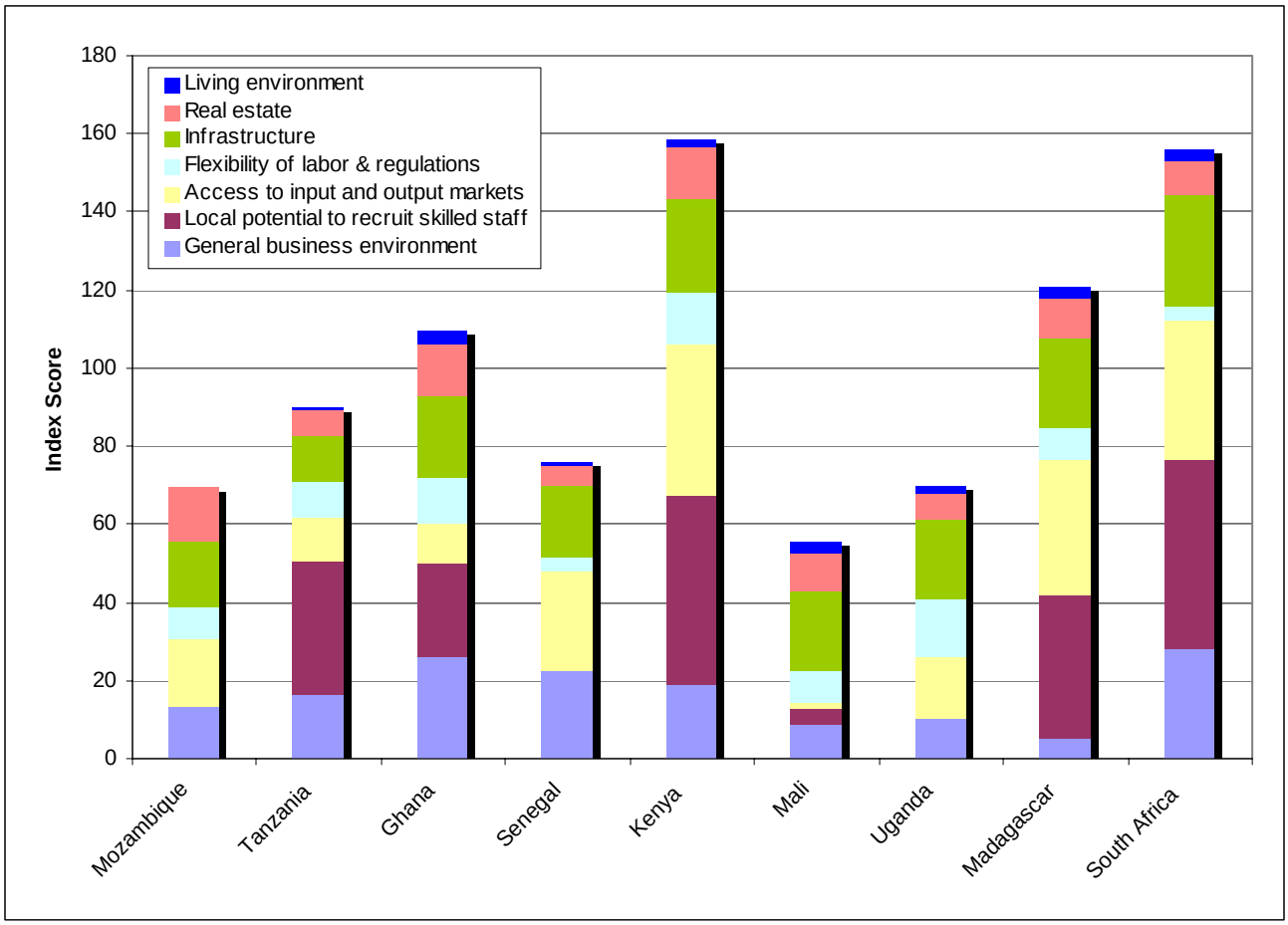
The cost of real estate is an area where Mali has a considerably advantage over its competitors. The EBP Model utilized the average yearly lease price for industrial land near Bamako, which is about US$ 2.20 per square meter. This is considerably less expensive than industrial land in most other surveyed countries including Senegal, Tanzania and Kenya (See Figure 48).

QUALITY OF OPERATING CONDITIONS

Mali scored lower than every other surveyed country on the overall quality of operating conditions scale. The country faces very significant challenges in this industry because food processing firms are currently shut out of world markets as they lack scale and knowledge of export markets, have to deal with delays and logistical difficulties when importing inputs due to Mali's landlocked geography and find it very difficult to find appropriately skilled local workers. On the other hand, Mali offers some positive characteristics to prospective investors, including relatively good electricity and water supply, affordable real estate, flexible labor regulations and a safe operating environment compared to other Sub-Saharan countries (See Figure 49).

> The three most important non-cost site selection factors for food and beverage processing firms are potential to recruit appropriately skilled local labor, access to inputs and output markets, and infrastructure.

Figure 49: Comparison of Weighted Quality Operating Conditions in the Food and Beverage Processing Sector



Potential to Recruit Local Staff

This is the most important non-cost site selection motivation for foreign investors. Mali scores better on this indicator than Mozambique, Senegal and Uganda, but worse than every other country. Interviewed companies in Mali indicated that there is little knowledge of the processed food industry among the workforce and there is little technical education available to support the emergence of a processed food sector. By contrast, firms in countries with much larger food processing sectors have an advantage since they can easily tap into a more experienced labor pool.

Access to Input and Output Markets

This variable includes factors such as 'Export competitiveness', 'Proximity to raw materials' and 'Size of domestic market' (See Figure 50). According to the EBP measures, Mali rates lower than all other surveyed countries on the 'Access' variable. This is primarily due to the fact that Mali does not currently rank as one of the top 184 processed food-exporting countries and therefore is more a reflection of the past rather than an accurate assessment of the sector's potential.

Figure 50: Mali's Access Performance for the Food and Beverage Sector

Access Factor	Mali Rating	Africa Average	Best Rated Countries
Export Competitiveness (59% Access weight)			
Current processed food export performance ranking	185[17]	107.3	South Africa (21) *Comparator:* France (1)
Change in processed food export performance ranking	185	74.3	Senegal (1) *Comparator:* Ireland (72)
Proximity to Raw Materials (35% Access weight)			
Percentage of imported raw materials, components, and equipment and chemicals	52.7%	49.7%	South Africa (4%)
Size of Domestic Market (6% Access weight)			
Gross domestic product (US$ millions)	4,326	26,342	South Africa (159,886)

Infrastructure

Mali scored higher on the 'Infrastructure' variable than Mozambique, Senegal and Tanzania (See Figure 51) primarily because it experiences fewer annual days of water shortage than those three countries (See Table 30 in Appendix C for a comparison). This is important because a consistent water supply is one of the most important factors for reliable food and beverage processing operations. Power cuts, although less frequent than in many other surveyed countries, still exist, prompting some companies to complain of power cuts up to 30 hours per month, with each one typically costing a large factory about $3,900 (CFA 2 million), adding significantly to the cost of doing business.

In addition, Mali's landlocked geography and poor road network complicate industry logistics and often cause transportation delays and spoilage. Transportation options for investors in Mali are severely constrained due to the reliance on foreign sea ports and extreme infrequency of air connections with the rest of the world. Similar to the horticulture industry, food processing relies on dependable air, road and sea transportation in order to avoid losses associated with spoilage of perishable products and to reliably supply local and foreign retailers.

Figure 51: Mali's Infrastructure Performance for the Food and Beverage Processing Sector

Infrastructure Factor	Mali Rating	Africa Average	Best Rated Countries
International Access to People (5% Infrastructure weight)			
Number of direct flights to U.S., E.U., and Asia	11	34.8	South Africa (125)
Yearly passenger arrivals	96,000	1,049,700	South Africa (6,640,000)
Quality of Air Freight (10% Infrastructure weight)			
Percentage of on-time shipments	95	92.9	South Africa (99.5)
Percentage of lost shipments	0.75	0.6	Madagascar and Mozambique (0)
Quality of Rail Freight (7.5% Infrastructure weight)			
Percentage of on-time shipments	NA	48	Uganda (100)

[17] Mali was not ranked as one of the International Trade Centre's 184 largest processed food exporting countries. The country was thus given ratings of 185 for both the Current and Change Indices.

Infrastructure Factor	Mali Rating	Africa Average	Best Rated Countries
Percentage of lost shipments	NA	40.2	Uganda and Senegal (0)
Quality of Sea Freight (15% Infrastructure weight)			
Percentage of on-time shipments[18]	0	59.8	South Africa (97.3)
Percentage of lost shipments[19]	100	37	South Africa (0)
Quality of Road Freight Transportation (7.5% Infrastructure weight)			
Percentage of on-time shipments	90	64.6	Senegal and Tanzania (0)
Percentage of lost shipments	NA	2.2	Tanzania, Ghana, and Senegal (0)
Quality of Telecommunications (5% Infrastructure weight)			
Quality of landline telecommunications	3.4	3.7	Uganda (4.6)
No. days to install new line	38.0	15.3	Senegal (3.4)
Quality of IT Infrastructure (10% Infrastructure weight)			
Quality of internet service	3.0	3.2	South Africa (4.4)
No. days to install internet	2.4	5.8	Mozambique (1.0)
Quality of Power Supply (10% Infrastructure weight)			
No. hours blackout per month	27.8	43.3	South Africa and Mauritius (0.4)
No. hours brownout per month	6.6	26.9	South Africa (0)
Quality of Water Supply (30% Infrastructure weight)			
No. days water shortage per year	10.0	66.4	Kenya and Tanzania (0)

COST AND QUALITY COMPARISON

The EBP Model plotted quality and cost conditions together in Figure 52. The matrix depicts tradeoffs between costs and quality of business operations. It should be noted that the matrix does not depict absolute competitiveness of each participating country, since each investor's mix of needs for quality vs. cost is slightly different, which could result in different location selection. However, the Model's results show quite clearly that Mali has one of the worst combinations of cost and quality conditions among all surveyed countries. Currently, food and beverage processing investors can actually operate in a higher quality business environment AND at lower cost by deciding to locate in Kenya, Ghana, Madagascar or Tanzania.

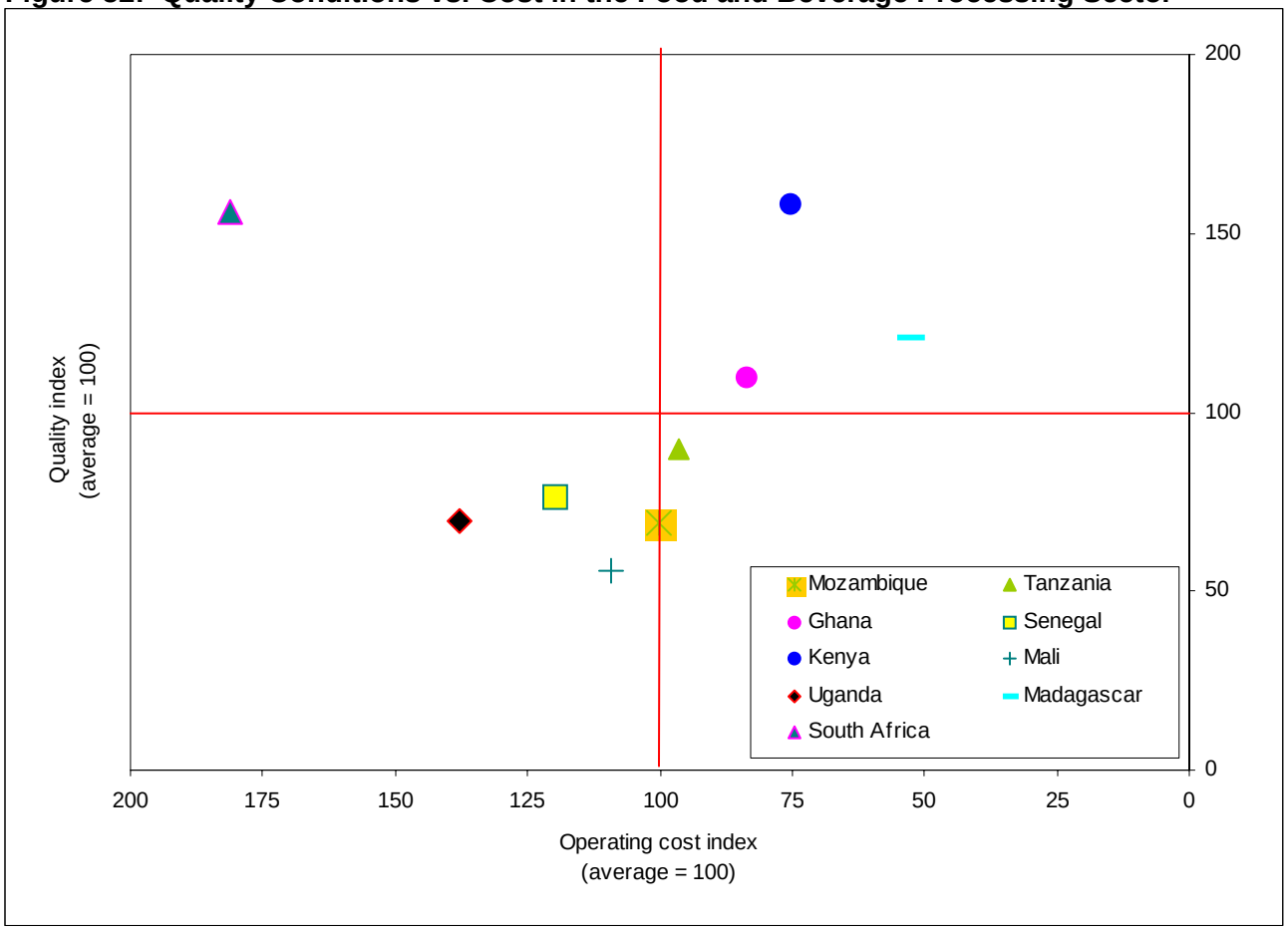
Mali's classification as a low-quality, high-cost country for processed food investors should be qualified by noting that the country is at a cost disadvantage due to very high transportation costs, which are less important for investors with a local or regional focus. In addition, Mali's quality position is seriously hurt by the absence of industry clusters that export products to foreign markets, which reflects past limitations but not future potential. Nonetheless, even adjusting for these two mitigating effects Mali does not offer a very attractive cost-quality mix because its labor force lacks industry-specific skills without offering the benefit of low wage costs and its transportation infrastructure is underdeveloped.

Moreover, a strong Malian export-oriented food processing sector is unlikely to develop and mature without a strong commercial agriculture industry. As the horticulture sector in Mali matures and farmers become skilled in producing commercially viable produce yields, opportunities for higher value chain activities such as canning, freezing and packaging food for export will gradually become more available. Now, however, there is no consistent produce

[18] Where shipment by sea was not available, such as in landlocked countries like Mali, companies generally gave a rating of '0' to the 'On-time shipment' variable.
[19] Where shipment by sea was not available, such as in landlocked countries like Mali, companies generally gave a rating of '100' for the 'Lost shipments' variable.

supply that can fuel large-scale food operations, while the quality of products and packaging in existing food factories are generally not consistent with the standards expected by consumers outside of Africa.

Figure 52: Quality Conditions vs. Cost in the Food and Beverage Processing Sector



RECOMMENDATIONS

The biggest obstacle for the current food processing sector in Mali to become "promotable" seems to be the constraint on the raw material supply. This issue echoes with the problem discussed earlier the horticulture section that it is critical to create an enabling environment for commercial farming to develop.

- Develop a zone that can provide adequate infrastructure at a reasonable price for food processing operators
- Develop technical education programs and partnerships between technical schools and the private food and beverage processing sector.

CHAPTER IX
REVIEW AND RECOMMENDATIONS

MIGA's Enterprise Benchmarking Program was designed with the goal of capturing the point of view of investors. This report has attempted to point out areas where policies and practices have failed local and foreign investors. This analysis concludes with a review of Mali's cross-sectoral strengths and weaknesses vis-à-vis other surveyed countries in Sub-Saharan Africa and suggestions for improving the cost and quality operating environment, where possible, so that Mali might attract a greater share of foreign investment destined for Sub-Saharan Africa. Strengths and weaknesses that pertain to one or two particular industry sectors are discussed in those respective sections of the report.

RECOMMENDATIONS

Private sector development is rapidly advancing throughout Africa and governments are turning their attention to those conditions that make their countries attractive to both local and foreign investment. Improving infrastructure and simplifying regulations provide the most powerful incentives to investors. However, decisions to change policies in favor of foreign investors must be taken in the context of growth and development strategies. Policies should reflect both social and private sector priorities, which are normally complementary and rarely mutually exclusive.

Today, primary impediments to investing in Mali are high cost and poor quality of transportation, general unavailability of skilled and professional labor, lack of industry associations and commercialization, high cost of electricity and IT services, and investor perceptions of excessive bureaucracy. Improving performance in most of these areas will require sustained government commitment whose positive effects can only be felt gradually. However, several short to medium term cross-sectoral initiatives can produce measurable improvement that can affect most of the surveyed industries. These short-term initiatives include:

Needs for Active and Targeted Investment Promotion Efforts

This study, which covered six broadly defined sectors, concluded that in today's Mali it is hard to pick a sector which can be actively promoted immediately as a very promising and competitive sector. However, there may be pockets of opportunities within the broadly defined sectors that may be worthy of special attention and cultivation. It requires an extensive analysis of some potential sub-sectors, identification of potential investors in those sectors, full understanding of the potential investors' priorities, and active, effective and persistent pursuit of those investors to invest in Mali. It is a formidable undertaking that requires the dedication of skilled staff.

A country in the situation like Mali has a lot to gain from the creation of an effective investment promotion agency whose primary function will be to market Malian business opportunities to local, regional and international investors.

The establishment of the IPA should complement but by no means replace ongoing reforms of Mali's business environment. Where attractive conditions currently exist, the IPA should advertise them through marketing materials and promotional campaigns by positioning Mali as a safe, easy to navigate, pro-business environment for international and especially regional

investors. More importantly, the IPA should lobby the government to continue changing existing legislation to ensure that Mali has the most attractive regulatory environment for foreign direct investment in the region. This is critical given the fact that the country faces many 'natural' disadvantages that cannot be overcome, such as its landlocked location and small market size.

Privatization of the CMDT

Since the CMDT was active in cotton farming, shelling, logistics and supply chain management, brokering and marketing, there exist privatization tender opportunities in many areas. Privatization can also open up new opportunities for companies to invest in fiber transformation processes such as yarn and fabric milling, potentially benefiting the apparel manufacturing sector. At the same time, the government must be cognizant of the void of public or quasi-public agricultural extension services left in the wake of CMDT privatization. These are areas in which continued roles for public sector education and organizational involvement may exist.

Industrial Manufacturing Zones

The government should actively encourage the development of industrial development zones where investors would face the most favorable regulatory environment as well as physical infrastructure for their operations. Such concentrated production zones would contribute to increased commercialization of production by allowing firms to take advantage of external economies of scale and lower their average cost.

Notwithstanding the benefits of these short term measures, if the government of Mali is serious about attracting investment in the longer term it must address such significant impediments to foreign investment as high cost and poor quality of transportation, low education levels of the workforce, lack of commercial industry organization, high costs of electricity and telecommunications, and investor perceptions of excessive bureaucracy and public sector involvement in business. While there is no single cure for these competitiveness disadvantages, the following initiatives can provide significant corrective benefits.

Transportation Network Improvements

Malian authorities should give serious consideration and priority to opening new and improving existing transportation links between Mali and other countries. A key focus for the government and private sector alike should be making faster and more reliable rail service to Dakar and improving road connection to Conakry, while increasing air passenger and cargo capacity at Bamako airport. Although this airport lacks infrastructure facilities for extensive growth, adding just one more daily flight would double capacity, especially benefiting tourism, horticulture and food processing sectors. A coordinated approach to the problems of transportation will help investors in all sectors and will become the first serious step in addressing lower competitiveness brought about by the country's landlocked location. An interesting study by USAID pointed out that as much as 60 percent of the cost savings can be made on international shipping cost, if domestic trucking industry were rationalized.

Education and Technical Training

Malian primary and secondary education systems should continue to expand to reach greater numbers of the population and a push for multilingual literacy must remain a priority. Tertiary and technical education must be made available in ICT, textiles, agronomy, business, foreign languages, and tourism and hospitality to develop the skills needed across all sectors. Curricula at technical schools should incorporate input from the private sector to reflect the skill sets and technologies in actual demand by firms. The government of Mali could also entice companies to provide their own training by giving training grants, tax credits, easy credit pools, or social benefits subventions (such as a waiver of 'training' fees when a company does its own training). Sectors where such programs should be implemented include modern horticulture and commercial cereal and cotton farming, food and beverage processing, tourism, textiles, and information and communication technology.

Telecommunications and VoIP

Mali's telecommunications reliability and cost are worse than in many other Sub-Saharan African countries and require upgrading if the country is serious about courting investors in this sector. Investors in export-oriented shared services are not likely to seriously consider Mali unless voice over internet protocol (VoIP) is fully liberalized. Currently, VoIP cannot be resold to others, which is done with the aim of protecting the Malian telecommunications monopoly. Because of its impact, VoIP will alter the way internet and telecommunications businesses operate in Africa. VoIP will become as big in Africa as mobile telecommunications have. VoIP will allow a shift from low-volume, high-margin telecommunication business model to a model of high volumes and low margins. Twenty to twenty five percent of African telecommunications companies are signing VoIP agreements, but are not necessarily passing the savings on to customers or allowing rival companies to use the technologies. Mali should not venture down this same path. The time is ripe to signal to investors inside and outside Africa that Mali is ready and open to doing business with twenty-first century technology available to all.

Comprehensive Tourism Strategy

Tourism development can spur private enterprise and employment generation. Too often, however, tourism is developed haphazardly without strategic planning or infrastructure development. Mali's attraction to international tourists lies in its natural and cultural uniqueness. These are fragile assets, however, which deserve protection. Tourist development that erodes the natural landscape or cultural landscapes will destroy Mali's original beauty and attraction. A comprehensive tourism strategy, therefore, should include targeted areas for tourism development, master plans, zoning, and architecture guidelines for those areas, and a schedule and commitment to provide basic levels of road, water, power, and sewerage infrastructure to those areas. The plan should be accompanied by promotion to hotel investors, air transportation companies, and to travel agencies and investors alike.

APPENDIX A
ACRONYMS AND ABBREVIATIONS

AGOA:	Africa Growth and Opportunity Act
BDM:	Banque de Développement du Mali
CFA:	West African franc
CMDT:	Compagnie Malienne pour le Développement des Textiles
CTI:	Computer telephony integration
EBA:	Everything but arms
EDM:	Énergie du Mali
EurepGAP:	Euro-Retailer Produce Good Agricultural Practices
FAO:	Food and Agriculture Organization
FIDA:	International Fund for Agricultural Development
FOB:	Free on board
GSP:	Generalized System of Preferences
HACCP:	Hazard Analysis and Critical Control Point
IFC:	International Finance Corporation
ICT:	Information and communications technology
IFAD:	International Fund for Agricultural Development
Inc.:	Incorporated
IPA:	Investment promotion agency
ISO:	International Organization for Standardization
IT:	Information technology
ITC:	International Trade Center
Kbps:	Kilobytes per second
KVA:	Kilovolt ampère
KW:	Kilowatt
LPDSC:	Lettre de Politique de Développement du Secteur Coton
LPG	Liquefied petroleum gas
Kwh:	Kilowatt-hour
LDC:	Lesser developed country
MIGA:	Multilateral Investment Guarantee Agency
NA:	Not available
No.:	Number
OMC:	Organisation Modiale du Commerce (World Trade Organization)
SESRTCIC:	Economic and Social Research and Training Center for Islamic Countries
SPS:	Sanitary and phytosanitary
SWOT:	Strengths, Weaknesses, Opportunities, and Threats
TSG:	The Services Group, Inc.
UEMOA:	Union Economique at Monétaire Ouest Africaine (West African Monetary Union)
U.S.:	United States
US$:	United States dollar
USA:	United States of America
USAID:	United States Agency for International Development
VAT:	Value-added tax
VoIP:	Voice over internet protocol
WAEMU:	West African Monetary Union
WTO:	World Trade Organization

APPENDIX B
DATA DEFINITIONS AND RESOURCES

Cost and quality datum definitions utilized by MIGA's Enterprise Benchmarking Model, as well as sources of those data, are described in this appendix. This is provided for a transparent understanding of the variables utilized in the study, and for recommended future replication of the study.

LABOR COST

DATUM SOURCE: Company interviews

Labor cost data were collected during the course of 25 company interviews, and aggregated by industry sector for analysis by the Enterprise Benchmarking Model. Company officials were asked to indicate the average annual fully burdened gross salaries of workers—including expatriate—they typically hired in the following six job categories.

Management:	Mid- to upper-level managers
Professionals:	Chief financial officer, lawyer, consultant
Technical Workers:	Engineer, programmer, systems analyst, agronomist, accountants
Skilled Workers:	Data entry clerks, customer service representatives, assembly line workers with special skills
Unskilled Workers:	Drivers, janitors, chamber maids, entry level assembly line workers, farmhands

Gross salaries include wages and benefits such as mandatory pension or social security contributions, healthcare, transportation, lodging, and any other benefits paid by the employer. Companies were instructed to provide average salary information for the types of workers that typically fill the above positions. The higher the labor costs, the lower the level of desirability to potential investors.

LABOR QUALITY

Potential to Recruit Local Staff

Availability of Qualified Personnel

DATA SOURCES: Company interviews

Companies rated their satisfaction in recruiting local staff for six categories of job positions—management, professional, technical, skilled, and unskilled workers. Satisfaction ratings were given on a scale of 1 to 5 according to the following criteria.

Score = 5:	There are very many qualified candidates. It is an employer's market.
Score = 4:	There is a large enough pool of qualified workers, and the company usually has no difficulty in hiring employees.

Score = 3:	The company needs to search hard, but eventually finds the right personnel.
Score = 2:	At least 50 percent of the time, the company can find the right personnel after a lengthy search.
Score = 1:	It is impossible to find the right personnel.

Mastery of Required Language Skills

DATUM SOURCES: Company interviews

Companies then listed the languages they require employees to speak in the workplace. They were then asked to rate the ease with which they can actually find workers with satisfactory command of those languages. Satisfaction ratings were given on a scale of 1 to 5 according to the following criteria.

Score = 5:	There are very many qualified candidates. It is an employer's market.
Score = 4:	There is a large enough pool of qualified workers, and the company usually has no difficulty in hiring employees.
Score = 3:	The company needs to search hard, but eventually finds the right personnel.
Score = 2:	At least 50 percent of the time, the company can find the right personnel after a lengthy search.
Score = 1:	It is impossible to find the right personnel.

Flexibility of Labor Environment

Rigidity of Employment

DATUM SOURCE: Rigidity of Employment Index, *Doing Business in 2005,* World Bank

Data on the rigidity of employment was sourced directly from the World Bank's *Doing Business in* 2005 publication. The index measures how difficult it is to hire a new worker, how rigid the restrictions are on expanding or contracting the number of working hours, and how difficult and costly it is to dismiss a redundant worker. Specifically, the index is the average of three employment indices that evaluate the following.

Difficulty in Hiring:	Allowance of term contracts for temporary tasks
	Regulated minimum length of term contracts
	Ratio of mandated minimum wage to average value-added per worker
Rigidity of Hours:	Restrictions on night work
	Allowance of weekend work
	Legal workweek of 5 ½ days or more
	Allowance for workday to extend to 12 hours or more
	Annual paid vacation of 21 days or less
Difficulty in Firing:	Ability to fire workers on grounds of redundancy
	Need to notify union for firing one worker
	Need to notify union for group dismissals
	Need for union approval for firing one redundant worker
	Need for union approval for dismissing a group of workers
	Legal mandate for training or replacement of worker prior to dismissal
	Application of priority rules for dismissals

Application of priority rules for reemployment

'Rigidity of employment' scores are indexed on a scale of 0 to 100. The higher the value of the index score, the more rigid are labor regulations.

Average Weekly Working Hours

DATUM SOURCES: Company interviews

Firms were asked to indicate the average weekly working hours per employee. This often differed from the legally mandated workweek length, and varied by industry. The longer the workweek, the more attractive the working environment was considered for investors.

Social Climate

DATUM SOURCE: Cooperation in Labor-Employer Relations, *Global Competitiveness Report 2004 - 2005,* World Economic Forum

The World Economic Forum conducts an annual Executive Opinion Survey of firms throughout the world. Entrepreneurs and business executives were asked to rate the labor-employer relations in their countries on a scale of 1 ("Generally confrontational") to 7 ("Generally cooperative").

Degree of Unionization

DATUM SOURCES: Company interviews

Interviewed firms indicated the percentage of workers in their companies that belonged to labor unions. The Enterprise Benchmarking Model is programmed under the assumption that investors prefer low degrees of unionization to high union membership.

Labor Turnover

DATUM SOURCES: Company interviews

Companies were asked to indicate the annual average turnover among employees. 'Annual turnover' refers to the number of employees who resigned voluntarily in the past year, divided by the total number of employees. Lower rates of turnover are considered more preferable to investors than high turnover rates.

INFRASTRUCTURE COST

Cost of Freight Transportation

Cost of Air Freight

DATUM SOURCES: Freight forwarders, air freight companies, and airlines. In Mali—Air France Freight Service

The cost of shipping a parcel of 45 kilograms or less by air was calculated from the capital city of each country to the following destinations.

Kennedy International Airport, New York City, USA (East Coast)
Los Angeles International Airport, Los Angeles, USA (West Coast)
Schipol International Airport, Amsterdam, Holland
Changi International Airport, Singapore
New Tokyo International Airport, Narita, Japan

Costs do not include the price of insurance, handling, or other charges.

Cost of Sea Freight

DATUM SOURCES: Freight forwarders and sea freight companies. In Mali—Maersk Lines and Groupe Ami GCM GMM

The costs of shipping a regular 40-foot container, a refrigerated 40-foot container, and bulk items per kilogram were calculated from the capital city of each country—including overland transportation to the nearest seaport—to the following locations.

Port of New York City, USA (East Coast)
Port of Long Beach, USA (West Coast)
Port of Rotterdam, Holland
Port of Singapore
Port of Yokohama, Japan

Costs do not include insurance, handling charges, or other fees.

Cost of Telecommunications

DATUM SOURCES: Telecommunication companies. In Mali — Société des telecommunications du Mali (Sotelma)

Data were gathered on the per minute cost of landline telephone calls from the capital city of each country to the following locations.

Domestic call within the same country
Call to a neighboring country
Call to the United States

Cost of High-Speed Internet

Monthly High-Bandwidth Internet Charge

DATUM SOURCES: Internet service providers. In Mali—IKATEL

Data were gathered on the monthly charges for a 256-kbps internet connection.

Internet Usage Charges

DATUM SOURCES: Internet service providers. In Mali—IKATEL

Data were gathered on the per minute usage charges for high-speed (256-kpbs) internet, if any.

Cost of Power

Electricity Capacity Demand Charges

DATUM SOURCES: Electricity utilities in each country. In Mali—Energie du Mali.

Data were collected on charges levied by power companies for the maximum capacity of electricity demanded for low to medium voltage power, measured in kilowatts (KW) or in kilovolt amperes (KVA).

Electricity Usage Charges

DATUM SOURCES: Electricity utilities in each country. In Mali—Energie du Mali.

Data were collected on the charges per kilowatt-hour (Kwh) for industrial electricity usage during peak operating periods.

Cost of Power Generator Operation

DATUM SOURCES: Company interviews

Interviewees were asked whether or not their firms used their own power generators, how many hours the generators operated each month, and the cost of generator operation per hour. These data were used to calculate the overall cost of electricity for the average firm in each sector.

Cost of Water

DATUM SOURCES: Water utilities in each country. In Mali—Energie du Mali.

Data were collected on the charges per cubic meter for water used for industrial and agricultural uses.

Cost of Gas

Cost of Natural Gas (Methane)

DATUM SOURCES: Natural gas utilities, where available

The costs of methane gas was collected, measured in cubic meters.

Cost of Liquefied Petroleum Gas (Propane or Butane)

DATUM SOURCES: LPG providers

The costs of propane or butane gas was collected, measured in kilograms.

INFRASTRUCTURE QUALITY

Freight Shipment by Air

Punctuality of Air Shipments

DATUM SOURCES: Company interviews

Investors were asked the percentage of time that air freight shipments reach their destinations on schedule. If air freight transportation was not available, a response of '0' was entered.

Loss of Air Shipments

DATUM SOURCES: Company interviews

Investors were asked to indicate the percentage of air freight shipments that become lost or never reach their destination. If air freight transportation was not available, as response of '0' was entered.

Freight Shipment by Train

Punctuality of Rail Shipments

DATUM SOURCES: Company interviews

Investors were asked the percentage of time that rail freight shipments reach their destinations on schedule. If rail freight transportation was not available, a response of '0' was entered.

Loss of Rail Shipments

DATUM SOURCES: Company interviews

Investors were asked to indicate the percentage of rail freight shipments that become lost or never reach their destination. If rail freight transportation was not available, as response of '0' was entered.

Freight Shipment by Sea

Punctuality of Sea Shipments

DATUM SOURCES: Company interviews

Investors were asked the percentage of time that sea freight shipments reach their destinations on schedule. If sea freight transportation was not available, a response of '0' was entered.

Loss of Sea Shipments

DATUM SOURCES: Company interviews

Investors were asked to indicate the percentage of sea freight shipments that become lost or never reach their destination. If sea freight transportation was not available, as response of '0' was entered.

Freight Shipment by Road

Punctuality of Road Shipments

DATUM SOURCES: Company interviews

Investors were asked the percentage of time that road freight shipments reach their destinations on schedule. If road freight transportation was not available, a response of '0' was entered.

Loss of Road Shipments

DATUM SOURCES: Company interviews

Investors were asked to indicate the percentage of road freight shipments that become lost or never reach their destination. If road freight transportation was not available, as response of '0' was entered.

Telecommunications

Quality of Telephone Service

DATUM SOURCES: Company interviews

Companies were asked to rate the quality of landline telecommunications on a scale of 1 to 5, corresponding to the following.

Score = 5:	Connections are always clear. Calls are never dropped. Lines are never down
Score = 4:	Connection is usually clear. Calls are almost never dropped. Lines are almost never down.
Score = 3:	Connection is sometimes not clear. Some calls are dropped. Lines are sometimes down.
Score = 2:	Connection is sometimes not clear. There is a problem with dropped calls. The line is often down.
Score = 1:	Connection is never clear. Calls are always dropped. Lines are often down, or no landline is available, and mobile telephones are necessary for communication.

Length of Time to Install Landline Telephone Service

DATUM SOURCES: Company interviews

Interviewed companies indicated the length of time it normally takes to install a new telephone landline.

IT Infrastructure

Quality of Internet Service

DATUM SOURCES: Company interviews

Companies were asked to rate the quality of high bandwidth internet (speed greater than 256 kpbs) on a scale of 1 to 5, corresponding to the following.

Score = 5:	Internet is always operational. Internet service is never down or disconnected.
Score = 4:	Internet service is usually operational. Service is almost never down or disconnected.
Score = 3:	Internet service is sometimes not operational. Sometimes the service is dropped or not operational.
Score = 2:	Internet service is sometimes not operational. There is a problem with frequent disconnections of service.
Score = 1:	High-speed internet connections are not available.

Length of Time to Install Internet Service

DATUM SOURCES: Company interviews

Interviewed firms indicated the length of tome it normally takes to install internet service in their locations.

Power Supply

Number of Blackouts

DATUM SOURCES: Company interviews

Companies were asked the number of hours per month that they experienced a total loss of power without the use of back-up generators. Firms that were totally reliant on generator power were considered to be under permanent blackout conditions, and a value of 300 hours per month was entered in the Enterprise Benchmarking Model.

Number of Brownouts

DATUM SOURCES: Company interviews

Companies were asked to indicate the number of hours per month they experience reductions voltage lower than the minimum voltage specified for the system, or upward spikes in the power supply.

Water Supply

DATUM SOURCES: Company interviews

Interviewed firms were asked to indicate the number of days per year they experience a shortage of water supply from the publicly supplied water provider. Companies that did not have access to municipal water supplies and were reliant on their own wells or private water delivery were considered to experience a permanent shortage of water. A value of 365 was entered in these cases, except for horticulture firms, which are typically in rural areas without expectation for municipal water supplies.

Waste Treatment

DATUM SOURCES: Company interviews

Interviewed companies rated the quality of the public waste treatment system on a scale of 1 to 5, as follows.

Score = 5:	Public waste treatment facility provides first stage (solid particle removal), second stage (aeration, organic matter killed), and third stage (removal of heavy metals and chemicals) biological and chemical treatment to the highest international standards. Tap water is chlorinated and potable.
Score = 4:	Public waste treatment facility provides first, second stage, and third stage biological and chemical wastewater treatment, but tap water is not potable.
Score = 3:	Public waste treatment facility provides first and second stage treatment only. Wastewater smells.
Score = 2:	Public waste treatment facility provides first stage treatment only. Wastewater remains harmful to the environment.
Score = 1:	Public wastewater treatment is not available. Raw sewage freely enters the environment, or company has its own treatment facility.

Access to International Tourists

Number of Weekly Direct Flights from Country

DATUM SOURCES: Travel agents, airports, and airlines that serve each country. In Mali—Regie Administrative de l'Activité, assistance (RAGAAE), Monsieur Maïga, Chef d'escale Airport Service, Bamako

Data were collected on the number of weekly direct flights from each country to the United States, to Europe, and to Asia. 'Direct flight' is defined as a flight given a single flight number that originates in the studied country and terminates or discharges passengers in the U.S., E.U, or Asia. Direct flights do not necessarily have to be non-stop, as long as passengers remain on the same aircraft.

Passenger Arrivals

DATUM SOURCE: World Tourism Organization[20]

Data on the number of annual arrivals of tourists were collected as an indication of the size of the current market for hotels and other tourist services in each country.

[20] In the case of Mozambique, this datum was collected from the Economic and Social Research and Training Center for Islamic Countries (SESRTCIC).

REAL ESTATE COST

Cost of Land

Purchase Price of Industrial Land

DATUM SOURCES: Real estate agencies, investment promotion agencies, and free zones and industrial estates. In Mali—Average of the prices quoted by the following: AZI Sa Agence de zones industrials du Mali; ACI Agence de cessions immobilières; Architect/expertise AUE; Architect Coulibaly Concept AU; IFA Baco agence immobilières.

The cost of purchasing industrially zoned land or industrial estate was researched and entered in the Enterprise Benchmarking Model as the cost per square meter. These data were verified in company interviews, when respondents were asked how much they paid for their sites. Where purchase of land was not allowed by law, long-term leases were also considered as "purchases" for the purpose of this datum.

Lease Price of Industrial Land

DATUM SOURCES: Real estate agencies, investment promotion agencies, and free zones and industrial estates. In Mali—Not available, so calculated lease at 10% of purchase price.

The cost of a yearly lease for industrially zoned land or industrial estate was researched and entered into the Enterprise Benchmarking Model.

Additional Industrial Site Occupancy Charges

DATUM SOURCES: Real estate agencies, investment promotion agencies, and free zones and industrial estates. In Mali—Average of the prices quoted by the following: AZI Sa Agence de zones industrials du Mali; ACI Agence de cessions immobilières; Architect/expertise AUE; Architect Coulibaly Concept AU; and IFA Baco agence immobilières.

In cases where industrial estates or free zones charge additional maintenance fees or security charges, those data were entered into the model as additional costs per square meter.

Purchase Price of Tourist Hotel Land

DATUM SOURCES: Real estate agencies and investment promotion agencies. In Mali—Average of the prices quoted by the following: AZI Sa Agence de zones industrials du Mali; ACI Agence de cessions immobilières; Architect/expertise AUE; Architect Coulibaly Concept AU; and IFA Baco agence immobilières.

The purchase price of land in locations suitable for tourist development—beaches, game parks, and city center—was researched and entered into the Enterprise Benchmarking model as the cost per square meter. Where purchase of land was not allowed by law, long-term leases were also considered as "purchases" for the purpose of this datum.

Cost of Office Space

Lease Price of Class A Office Space

DATUM SOURCES: Real estate agencies and office building management companies. In Mali—Average of prices provided by SICG Habitat, Blal; Agence de cessions immobilières; Architect Sidibe; and IFA Baco agence immobilières.

Class A office space is defined as offices in or near the center of the capital city. These costs were entered in the model as the price per square meter for a one-year lease.

Lease Price of Class B Office Space

DATUM SOURCES: Real estate agencies and office building management companies. Average of prices provided by SICG Habitat, Blal; Agence de cessions immobilières; Architect Sidibe; and IFA Baco agence immobilières.

Class B office space is defined as office buildings within 20 kilometers outside the city center. These costs were entered in the model as the price per square meter for a none-year lease.

Additional Office Space Occupancy Charges

DATUM SOURCES: Real estate agencies and office building management companies. Average of prices provided by SICG Habitat, Blal; Agence de cessions immobilières; Architect Sidibe; and IFA Baco agence immobilières.

In cases where office buildings charge additional maintenance, parking or security fees, those data were entered into the model as additional costs per square meter.

Construction Costs

Cost of Warehouse Construction

DATUM SOURCES: Local engineering and construction companies. In Mali—Average of prices provided by SICG Habitat; Architect Sidibe AUE; Architect Coulibaly Concept; and IFA Baco agence immobilières.

The price of construction of a concrete block warehouse was entered into the Enterprise Benchmarking Model as the cost per square meter of construction. Warehouse construction cost was also used as a proxy for the construction of a simple factory shell, since there is little actual difference in cost. This study did not investigate the cost of outfitting a factory with machinery.

Cost of Hotel Construction

DATUM SOURCES: Local engineering and construction companies. In Mali—Average of prices provided by SICG Habitat; Architect Sidibe AUE; Architect Coulibaly Concept; and IFA Baco agence immobilières.

The price of construction of a five-star quality hotel was entered into the Enterprise Benchmarking Model as the cost per square meter of construction. This study did not investigate the cost of outfitting a hotel with furnishings and equipment.

REAL ESTATE QUALITY

Availability of Land

DATUM SOURCES: Company interviews

Firms were asked to recall the number of industrial, agricultural, hotel, or office sites within the country they considered during their initial investment decision. The greater the number of sites, the higher the quality score calculated by the Enterprise Benchmarking Model.

Availability of Agricultural Land

DATUM SOURCE: Availability of Arable Areas, *Food and Agriculture Production Yearbook,* United Nations Food and Agriculture Organization

This study utilized the FAO's Annual survey of agricultural land. The availability of arable land is gathered and noted in thousands of hectares for each surveyed country.

Availability of Industrial Land and Buildings

DATUM SOURCES: Real estate agencies, free zones, and industrial estates. In Mali—Average of values provided by Agence des zones industrials; Agence de cessions immobilières; and IFA Baco Agence immobilières.

The vacancy rates, or percentage of available industrial land and buildings, within 20 kilometers of the capital city was gathered and entered into the Enterprise Benchmarking Model.

Availability of Office Space

DATUM SOURCES: Real estate agencies and office building management companies. In Mali—Average of values provided by Agence des zones industrials; Agence de cessions immobilières; and IFA Baco Agence immobilières.

The vacancy rates, or percentage of available office space in the center of the capital city was gathered and entered into the Enterprise Benchmarking Model.

QUALITY OF LIVING CONDITIONS

Cost of Living

DATUM SOURCES: Company interviews

Companies were asked to rate the cost of living in the investment location. Responses differed depending on whether the interviewee was a local or foreign. Cost of living was rated on a scale of 1 to 5 according to the following criteria.

Score = 5: Much less expensive than where company headquarters is. Or, very inexpensive.
Score = 4: Slightly less expensive than where company headquarters is. Or, fairly inexpensive.
Score = 3: About the same as where the company headquarters is. Or, mediocre, but not ideal.
Score = 2: Slightly more expensive than where company headquarters is. Or, fairly expensive.
Score = 1: Much more expensive than where company headquarters is. Or, very expensive.

Level of Safety

DATUM SOURCES: Company interviews

Companies were asked to rate the level of personal and company in the investment location. Responses differed depending on whether the interviewee was a local or foreign. Level of safety was rated on a scale of 1 to 5 according to the following criteria.

Score = 5: Much safer than where company headquarters is. Or, very safe.
Score = 4: Slightly safer than where company headquarters is. Or, fairly safe.
Score = 3: About the same as where the company headquarters is. Or, mediocre, but not ideal.
Score = 2: Slightly less safe than where company headquarters is. Or, fairly unsafe.
Score = 1: Much less safe than where company headquarters is. Or, very unsafe.

Schools

Number of International Schools

DATUM SOURCES: Ministries of Education, investment promotion agencies, and school district offices. In Mali—Ministry of Education.

Data on the number of international schools in the capital city of each country were collected.

Quality of International Schools

DATUM SOURCES: Company interviews

Companies were asked to rate the quality of international schools in the investment location. Responses differed depending on whether the interviewee was a local or foreign. Level of safety was rated on a scale of 1 to 5 according to the following criteria.

Score = 5: Much better than schools where company headquarters is. Or, excellent.
Score = 4: Slightly better than schools than where company headquarters is. Or, good.
Score = 3: About the same as where the company headquarters is. Or, mediocre, but not ideal.
Score = 2: Slightly worse than schools where company headquarters is. Or, fairly bad.
Score = 1: Much worse than schools where company headquarters is. Or, very bad.

Quality of Local Schools

DATUM SOURCES: Company interviews

Companies were asked to rate the quality of local schools in the investment location. Responses differed depending on whether the interviewee was a local or foreign. Level of safety was rated on a scale of 1 to 5 according to the following criteria.

Score = 5: Much better than schools where company headquarters is. Or, excellent.
Score = 4: Slightly better than schools than where company headquarters is. Or, good.
Score = 3: About the same as where the company headquarters is. Or, mediocre, but not ideal.
Score = 2: Slightly worse than schools where company headquarters is. Or, fairly bad.
Score = 1: Much worse than schools where company headquarters is. Or, very bad.

Healthcare

DATUM SOURCES: Company interviews

Companies were asked to rate the quality of healthcare in the investment location. Responses differed depending on whether the interviewee was a local or foreign. Level of safety was rated on a scale of 1 to 5 according to the following criteria.

Score = 5: Much better than healthcare where company headquarters is. Or, excellent.
Score = 4: Slightly better than healthcare than where company headquarters is. Or, good.
Score = 3: About the same as where the company headquarters is. Or, mediocre, but not ideal.
Score = 2: Slightly worse than healthcare where company headquarters is. Or, fairly bad.
Score = 1: Much worse than healthcare where company headquarters is. Or, very bad.

Quality of Recreational Activities

DATUM SOURCES: Company interviews

Companies were asked to rate the quality of recreational activities in the investment location, such as access to restaurants, family activities, golf and other sports, nature-related, and other activities. Responses differed depending on whether the interviewee was a local or foreign. Level of safety was rated on a scale of 1 to 5 according to the following criteria.

Score = 5: Much better than where company headquarters is. Or, excellent, many activities.
Score = 4: Slightly better than where company headquarters is. Or, good, some activities.
Score = 3: About the same as where the company headquarters is. Or, mediocre, but not ideal.
Score = 2: Slightly worse than where company headquarters is. Or, fairly bad, not many activities.
Score = 1: Much worse than where company headquarters is. Or, very bad, hardly any activities.

Data on this variable were collected and utilized in the report, but not processed by the EBP Model.

ACCESS TO MARKETS

Export Competitiveness

Current Export Performance

DATUM SOURCE: ITC Trade Performance Current Index, International Trade Center

The ITC Trade Performance Current Index measures the trade performance of a sector in a variety of countries. The index covers 184 countries and 14 sectors. It provides a static view of a country's recent export performance, ranked between 1 and 184. If a country did not show up in the index, it means that the country was not a big performer in trade in a particular industry. In those cases, a value of 185 was entered in the Enterprise Benchmarking Model. The ITC Index for textiles, processed foods, and fresh fruits were utilized in the model.

Change in Export Performance

DATUM SOURCE: ITC Trade Performance Change Index, International Trade Center

The ITC Trade Performance Change Index captures recent trends of the change of a country's export performance. The index ranks 184 countries in 14 sectors. If a country does not have a change ranking for a sector, it means that the country is not likely a large performer in trade in that particular industry. In those cases, a value of 185 was entered in the Enterprise Benchmarking Model. The ITC Index for textiles, processed foods, and fresh fruits were utilized in the model.

Availability of Raw Materials

DATUM SOURCES: Company interviews

Company managers were asked the percentage of raw materials they imported for use in their production. 'Raw material' refers to any input that has not yet undergone significant processing, such as raw cotton, timber, sugar, milk, steel ingot, etc. It is assumed that locations in which raw materials can be sourced locally are more attractive than those where raw materials must be imported.

Presence of Suppliers or Clusters Network

Availability of Components

DATUM SOURCES: Company interviews

Company managers were asked the percentage of components they imported for production. 'Component' refers to any input that has undergone significant processing or transformation, such as yarn, fabric, precision molded plastic, engines, etc.) It is assumed that locations in which components can be sourced locally are more attractive to investors than those where components must be imported.

Availability of Capital Equipment or Chemicals

DATUM SOURCES: Company interviews

Company managers were asked to indicate the percentage of equipment and chemicals required for production that they import. 'Equipment' or 'chemicals' refer to all capital inputs like machinery, computers, telephones, fertilizers, hotel furnishings, etc.) It is assumed that locations in which capital equipment can be sourced locally are more attractive to investors than those where equipment must be imported.

Average Tariff for Imported Inputs

DATUM SOURCE: Consolidated Trade Database, World Trade Organization

Data on the average import tariffs for textiles and electric machinery were gathered and entered into the Enterprise Benchmarking Model. These data serve as indications as to the openness of a country to imports as well as the cost of importing needed capital inputs and intermediate goods for production.

Size of Domestic Market

DATUM SOURCE: Gross domestic product, *World Development Indicators,* World Bank

This datum takes each country's gross domestic product as a proxy for the size of the domestic market. Many firms, particularly in the apparel and food processing sectors specifically chose their locations in order to serve the local markets in Mali and other Sub-Saharan African countries.

QUALITY OF GENERAL BUSINESS ENVIRONMENT

Economic, Financial, and Political Stability

Country Credit Rating

DATUM SOURCE: *Institutional Investors*

This Index is based on a biannual survey of leading commercial banks, and captures risk perceptions of the main commercial lenders. The Index is widely referenced in International Finance Corporation/World Bank Group.

Country Risk Rating

DATUM SOURCE: *Euromoney*

The data are taken from *Euromoney's* semiannual rating of the political and economic performances of 185 sovereign countries. It uses the views of experts, heads of syndication and loans, as well as data from the World Bank, forfeiting houses, and credit rating agencies.

Doing Business and Bureaucracy

Number of Procedures Required to Start a Business

DATUM SOURCE: *Doing Business in 2005,* World Bank

The Doing Business survey examines the start-up of commercial or industrial firms. It counts all procedures required to incorporate and register a firm. A 'procedure' is defined as any interaction of the company founder with external parties such as government agencies, lawyers, auditors, notaries.

Number of Days Normally Required to Start a Business

DATUM SOURCE: *Doing Business in 2005,* World Bank

The Doing Business survey examines the start-up of commercial or industrial firms. It counts the number of days required to incorporate and register a newly formed company. Time is recorded in calendar days.

Corruption Perception Index

DATUM SOURCE: Transparency International

This Index measures countries in terms of the degree to which corruption is perceived to exist among public officials and politicians. The Index is the composite of corruption indices from independent sources. Countries are given an index score between 0 and 10, with a score of '10' indicating no perceived corruption and a score of '0' indicating extreme perceived corruption.

Customs Clearance

DATUM SOURCES: Company interviews

Interviewed company managers were asked how long it normally takes for imported inputs to clear customs based on the experience of their firms.

Intellectual Property Rights Protection

DATUM SOURCE: *Global Competitiveness Report 2004 – 2005,* World Economic Forum

Data are based on a survey of intellectual property rights by the World Economic Forum.

Corporate Taxation

Corporate Tax Rate

DATUM SOURCES: PriceWaterhouseCoopers Tax Guide and/or local tax authorities. In Mali—Maître Cheickne Touré ACGE Tax Adviser

Data on the highest corporate tax rate in each country were collected and entered in the Enterprise Benchmarking Model

Sales Tax Rate

DATUM SOURCES: PriceWaterhouseCoopers Tax Guide and/or local tax authorities. In Mali—Maître Cheickne Touré ACGE Tax Adviser

Data on sales tax or VAT were entered in the benchmarking model.

Property Tax Rate

DATUM SOURCES: PriceWaterhouseCoopers Tax Guide and/or local tax authorities. In Mali—Maître Cheickne Touré ACGE Tax Adviser

Data on property tax rates were entered in the model. In some countries, property is taxed as a corporate profit based on the value of the property rental income. In those cases, the rental income of a property was assumed to be 10 percent of the property value. In those cases, the property tax rate was entered as 10 percent of the corporate tax rate.

APPENDIX C
TABLES OF FINDINGS

Table 1	Main Countries											Comparator Countries			
Business Climate	Mozambique	Tanzania	Ghana	Senegal	Kenya	Mali	Uganda	Madagascar	South Africa	Lesotho	Mauritius	Tunisia	France	Ireland	Nigeria
Institutional Investors Country Credit Rating	25.8	26.3	29.3	33.1	26.5	23.7	21.2	18.7	59.3	32.0	57.8	55.1	92.7	90.5	21.1
Euromoney Country Risk Poll	35.7	37.2	40.5	39.2	38.0	31.2	35.9	31.6	59.8	37.7	57.1	56.8	91.4	94.0	33.3
Number Procedures Required to Start Business	14.0	13.0	12.0	9.0	12.0	13.0	17.0	13.0	9.0	9.0	6.0	9.0	7.0	4.0	10.0
No. Days Required to Start Business	153.0	35.0	85.0	57.0	47.0	42.0	36.0	44.0	38.0	92.0	46.0	14.0	8.0	24.0	44.0
Corruption Perception Index	2.8	2.8	3.6	3.0	2.1	3.2	2.6	3.1	4.6	NA	4.1	5.0	7.1	7.5	1.4
Intellectual Property Protection	2.2	3.0	3.3	3.7	2.7	2.4	2.7	2.8	4.7	NA	3.7	4.7	5.8	4.7	2.6
Rigidity of Employment Index	64.0	65.0	34.0	64.0	24.0	66.0	7.0	49.0	52.0	27.0	37.0	54.0	66.0	29.0	44.0
Labor Relations Index	4.0	4.6	4.3	3.7	3.6	4.4	4.1	4.0	3.8	NA	4.2	4.6	3.5	5.0	3.5

Table 2	Main Countries											Comparator Countries			
Tax Rates	Mozambique	Tanzania	Ghana	Senegal	Kenya	Mali	Uganda	Madagascar	South Africa	Lesotho	Mauritius	Tunisia	France	Ireland	Nigeria
Corporate Income Tax (Percent)	32.0	30.0	30.0	33.0	30.0	35.0	30.0	35.0	35.0	35.0	25.0	35.0	34.3	25.0	35.0
Sales / VAT Tax (Percent)	17.0	20.0	12.5	18.0	16.0	18.0	17.0	20.0	14.0	14.0	15.0	18.0	19.6	21.0	5.0
Property Tax (Percent)	1.0	0.2	0.1	3.9	0.6	15.0	10.0	3.9	3.0	2.8	2.5	3.0	3.0	2.0	10.0

Table 3	Main Countries											Comparator Countries			
Access to Markets/ Tariff Rates for Textiles	Mozambique	Tanzania	Ghana	Senegal	Kenya	Mali	Uganda	Madagascar	South Africa	Lesotho	Mauritius	Tunisia	France	Ireland	Nigeria
ITC Trade Performance Current Index - Textile	185	99	185	88	95	185	97	90	39	185	60	68	4	42	185
ITC Trade Performance Change Index - Textile	185	108	185	28	92	185	87	6	25	185	1	7	73	4	185
Average Tariff on Textile Imports to US	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	24.0	0.0
Average Tariff on Textile Imports to Europe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	NA

Table 4	Main Countries										Comparator Countries			
Access to Markets/ Tariff Rates for Apparel	Mozambique	Tanzania	Ghana	Senegal	Kenya	Mali	Uganda	Madagascar	Lesotho	Mauritius	Tunisia	France	Ireland	Nigeria
ITC Trade Performance Current Index - Apparel	185	111	185	185	91	108	185	68	185	31	8	12	185	185
ITC Trade Performance Change Index - Apparel	185	107	185	185	14	29	185	25	185	97	34	75	185	185
Average Tariff on Apparel Imports to US	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	12.2	0.0
Average Tariff on Apparel Imports to Europe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA

Table 5	Main Countries											Comparator Countries			
Access to Markets/ Tariff Rates for Processed Food	Mozambique	Tanzania	Ghana	Senegal	Kenya	Mali	Uganda	Madagascar	South Africa	Lesotho	Mauritius	Tunisia	France	Ireland	Nigeria
ITC Trade Performance Current Index - Processed Food	118	130	121	93	73	185	113	112	21	185	59	111	1	9	185
ITC Trade Performance Change Index - Processed Food	19	143	138	1	26	185	34	123	91	185	102	111	104	72	185
Average Tariff on Processed Food Imports to US	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.5	NA
Average Tariff on Processed Food Imports to Europe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	5.2	0.0	0.0	NA

Table 6	Main Countries											Comparator Countries			
Access to Markets/ Tariff Rates for Fruits / Vegetables	Mozambique	Tanzania	Ghana	Senegal	Kenya	Mali	Uganda	Madagascar	South Africa	Lesotho	Mauritius	Tunisia	France	Ireland	Nigeria
ITC Trade Performance Current Index - Fruits	96	51	46	119	36	107	53	76	8	185	98	99	5	17	185
ITC Trade Performance Change Index - Fruits	34	107	68	21	20	101	87	46	64	185	120	102	125	160	185
Average Tariff on Vegetable Imports to US	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	20.0	NA
Average Tariff on Vegetable Imports to Europe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NA

Table 7	Main Countries											Comparator Countries			
Access to Tourist Markets	**Mozambique**	**Tanzania**	**Ghana**	**Senegal**	**Kenya**	**Mali**	**Uganda**	**Madagascar**	**South Africa**	**Lesotho**	**Mauritius**	**Tunisia**	**France**	**Ireland**	**Nigeria**
Number of Direct Weekly Flights to US	0	0	0	7	0	0	0	0	10	0	0	0	308	67	0
Number of Direct Weekly Flights to Europe	3	13	33	22	50	11	7	11	92	0	29	147	0	0	20
Number of Direct Weekly Flights to Asia	0	11	7	0	18	0	0	2	23	0	19	2	147	0	7
Annual Passenger Arrivals (Thousands)	246	552	483	427	927	96	254	170	6640	186	702	5114	75048	6369	887

Table 8	Main Countries											Comparator Countries			
	Mozambique	**Tanzania**	**Ghana**	**Senegal**	**Kenya**	**Mali**	**Uganda**	**Madagascar**	**South Africa**	**Lesotho**	**Mauritius**	**Tunisia**	**France**	**Ireland**	**Nigeria**
Availability of Arable Areas (Square Kilometers)	4200	4000	4181	2460	4600	4660	5100	2950	14753	330	100	2771	18449	1121	30200

Table 9	Main Countries											Comparator Countries			
Real Estate	**Mozambique**	**Tanzania**	**Ghana**	**Senegal**	**Kenya**	**Mali**	**Uganda**	**Madagascar**	**South Africa**	**Lesotho**	**Mauritius**	**Tunisia**	**France**	**Ireland**	**Nigeria**
Vacancy Rate for Industrial Buildings (Percent)	95.00	20.00	62.50	27.21	40.00	26.00	5.00	70.00	8.00	32.50	9.00	NA	NA	NA	NA
Vacancy Rate for Offices (Percent)	37.00	4.00	42.50	27.96	50.00	33.00	20.00	90.00	25.10	10.00	30.00	NA	NA	NA	NA
Surveyed Companies Purchasing Real Estate (Percent)	65.28	60.71	50.00	58.06	46.67	68.00	54.55	48.57	58.33	25.00	36.84	NA	NA	NA	NA
Sale Price of Industrial Land (US$/ m^2) (Realtors)	7.50	12.58	12.35	43.00	186.00	22.10	5.93	15.00	58.00	8.15	18.00	NA	10.70	NA	12.68
Sale Price of Hotel Land (US$/ m^2) (Realtors)	80	12.97	45	43	60	62.40	19	45	300	33	32	71	544	458	42
Surveyed Companies Leasing Real Estate (Percent)	34.7	39.3	50.0	41.9	53.3	32.0	45.5	51.4	41.7	75.0	63.2	NA	NA	NA	NA
Lease Price of Industrial Site (US$/ m2 / year) (Realtor)	65.31	11.12	0.247	11.88	47.48	2.21	72	9	72.3	2.05	61.64	3.48	25.45	33.92	1.90
Class A Office Rental Occupancy Cost (US$/ m^2/ year)	184	178.4	213.2	130.6	121.57	243.5	199.1	72.46	146.6	11.24	180.8	NA	589.5	496.2	NA
Class B Office Rental Occupancy Cost (US$/ m^2/ year)	124.7	174	134.4	78.38	70.764	84.77	85.61	41.4	127	8.428	92.05	NA	166.6	328.5	NA

Table 10	Main Countries											Comparator Countries			
Construction Costs (US$/ m^2)	Mozambique	Tanzania	Ghana	Senegal	Kenya	Mali	Uganda	Madagascar	South Africa	Lesotho	Mauritius	Tunisia	France	Ireland	Nigeria
Warehouse	300	550	400	217	330	289	450	190	450	350	130	183	793	935	132
Office Building	550	1000	1400	326	1200	720	550	320	700	570	710	415	2387	2451	151
Hotel	550	600	1600	543	1370	900	750	220	800	733	1610	567	2999	3483	188

Table 11	Main Countries											Comparator Countries			
Utility Costs	Mozambique	Tanzania	Ghana	Senegal	Kenya	Mali	Uganda	Madagascar	South Africa	Lesotho	Mauritius	Tunisia	France	Ireland	Nigeria
Local Calls (US$/ minute)	0.06	0.07	0.02	0.23	0.04	0.03	0.07	0.08	0.06	0.33	0.03	0.01	0.02	0.05	0.16
Calls to an Adjacent Country (US$/ Minute)	0.42	0.47	0.28	1.07	0.16	0.59	0.38	0.75	0.26	0.36	0.19	0.48	0.17	0.15	0.43
Calls to US (US$/ Minute)	0.77	1.11	0.39	1.07	0.88	0.89	0.76	0.90	0.54	1.08	0.19	0.52	0.17	0.19	1.45
High Bandwidth Internet Charge (US$/ month)	594	1900	252	57	1690	1089	3548	840	42	814	188	18	34	43	236
Electricity Capacity (US$/ kVA)	5.25	6.01	12.29	13.10	3.68	2.91	2.33	12.02	0.88	7.07	3.25	1.48	NA	8.70	NA
Electricity Usage (US$/ kWh)	0.05	0.06	0.05	0.14	0.06	0.12	0.10	0.08	0.08	0.04	0.06	0.07	0.07	0.12	0.28
Water (US$/ m^3)	0.88	0.67	0.77	1.56	0.42	0.56	0.76	0.26	1.38	0.49	0.38	0.68	1.99	1.63	0.91

Table 12	Main Countries											Comparator Countries			
Shipping Costs (US$)	**Mozambique**	**Tanzania**	**Ghana**	**Senegal**	**Kenya**	**Mali**	**Uganda**	**Madagascar**	**South Africa**	**Lesotho**	**Mauritius**	**Tunisia**	**France**	**Ireland**	**Nigeria**
Rotterdam 40' Container by Sea	3500	3123	1953	2193	2000	4392	3800	3111	1450	2606	1948	1118	1097	1161	2161
Rotterdam Refrigerated 40' Container by Sea	6500	4842	4948	4239	5475	5218	9500	2940	2900	3750	5948	2118	1097	1161	3824
Schipol (Amsterdam) by Air (per kg)	2.90	4.09	4.05	5.28	2.50	5.38	6.04	2.46	3.44	4.47	2.70	4.50	2.39	2.20	1.95
New York 40' Container by Sea	6800	4621	3500	4500	4900	6926	3800	4552	3500	3540	5445	4286	2891	5050	4756
New York Refrigerated 40' Container by Sea	8400	5146	4500	5902	5675	7754	10691	7975	7000	4405	None	6786	2891	5050	7256
JFK (New York) by Air (per kg)	4.65	5.39	8.20	3.81	3.80	9.68	10.64	3.6	3.51	4.56	10.10	7.50	1.55	2.20	3.85
Long Beach 40' Container by Sea	7000	5071	2900	6477	5400	8525	4100	5600	3700	3850	5755	4350	NA	5815	5456
Long Beach Refrigerated 40' Container by Sea	8800	6546	4200	9362	7075	9377	10691	4775	7000	5500	None	6900	NA	5815	7956
LAX (Los Angeles) by Air (per kg)	5.00	4.43	8.20	4.63	4.00	11.50	12.37	3.96	3.51	4.56	13.07	NA	1.90	3.83	NA
Yokohama 40' Container by Sea	3500	2131	3500	2431	2200	4703	3200	2852	1250	1700	2484	NA	NA	NA	NA
Yokohama Refrigerated 40' Container by Sea	4500	5456	4500	6706	6275	7168	10691	5800	2500	3600	5084	NA	NA	NA	NA
Narita (Tokyo) by Air (per kg)	4.30	8.10	16.26	17.57	4.90	15.96	7.95	4.14	3.39	4.4	4.70	NA	NA	14.00	NA
Singapore 40' Container by Sea	3500	1731	3500	2106	1400	4393	3000	1700	1100	1500	1684	NA	NA	NA	NA
Singapore Refrigerated 40' Container by Sea	4500	5256	2600	6206	6075	7061	10491	4800	2000	3000	5284	NA	NA	NA	NA
Changi (Singapore) by Air (per kg)	4.00	41.65	14.84	18.27	4.00	16.18	3.40	2.15	3.39	4.4	2.66	NA	NA	12.77	NA

Table 13	Main Countries										
Labor Market, Apparel	Kenya	Uganda	Tanzania	Lesotho	Mali	Senegal	Ghana	Madagascar	Mozambique	Mauritius	Average
Availability of Managers	3.1	2.9	1.3	1.7	3.0	2.7	3.2	2.0	2.8	2.8	2.5
Availability of Professionals	3.9	2.3	2.5	2.3	3.5	3.7	4.6	2.2	3.3	2.9	3.1
Availability of Technicians	3.7	2.3	2.0	2.3	3.0	3.0	3.4	2.3	3.0	3.0	2.8
Availability of Skilled Labor	3.7	2.9	2.8	2.3	2.5	2.7	3.8	3.3	2.8	2.3	2.9
Availability of Unskilled Labor	4.1	4.6	5.0	4.8	4.5	4.6	4.8	4.5	5.0	3.1	4.5
Ease of finding workers with command of language	4.6	4.6	5.0	3.2	3.0	3.6	4.6	3.6	4.0	4.4	4.1
Number of weekly work hours per employee	45.4	48.3	45.0	45.0	40.0	40.0	41.0	52.3	45.7	49.3	45.2
Percentage of Unionized Workers	80.7	0.0	0.0	17.9	50.0	53.6	64.0	51.8	61.0	19.3	39.8
Average Annual Turn-Over Rate	4.4	20.1	6.7	7.6	11.0	0.4	1.0	11.0	3.2	8.5	7.4

Table 14	Main Countries									
Labor Market, Hotel	Kenya	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Mauritius	Average
Availability of Managers	2.7	2.2	3.5	2.5	3.0	2.0	2.2	3.4	2.8	2.7
Availability of Professionals	3.3	1.7	4.0	3.0	4.2	3.4	2.6	3.4	3.4	3.2
Availability of Technicians	3.7	2.7	2.0	3.0	3.8	2.4	2.6	3.6	2.6	2.9
Availability of Skilled Labor	3.7	3.8	2.0	3.4	4.2	2.8	2.4	4.0	2.4	3.2
Availability of Unskilled Labor	4.5	4.7	4.0	5.0	4.2	3.8	3.8	4.4	3.8	4.2
Ease of finding workers with command of language	4.3	3.5	4.0	3.8	3.8	2.8	2.6	4.2	3.0	3.6
Number of weekly work hours per employee	47.5	50.2	45.3	46.5	40.0	44.6	42.4	42.0	46.4	45.0
Percentage of Unionized Workers	83.3	21.3	81.7	54.0	96.0	21.0	56.2	17.8	5.0	48.5
Average Annual Turn-Over Rate	5.6	17.1	6.3	1.6	1.7	8.4	2.7	7.3	15.8	7.4

Table 15	Main Countries									
Labor Market, Horticulture	Kenya	Uganda	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Average
Availability of Managers	2.4	2.2	1.6	4.2	3.4	4.4	2.0	3.3	2.5	2.9
Availability of Professionals	2.8	3.4	2.0	4.0	4.0	4.2	3.0	3.0	3.8	3.4
Availability of Technicians	3.4	1.8	2.0	3.6	3.6	4.0	2.9	2.7	2.8	3.0
Availability of Skilled Labor	3.8	3.2	4.0	2.6	2.8	4.6	3.0	3.3	2.8	3.3
Availability of Unskilled Labor	4.8	4.7	4.8	4.2	4.4	4.8	4.3	4.5	4.3	4.5
Ease of finding workers with command of language	4.6	4.3	4.2	4.0	4.0	4.0	3.2	3.5	3.5	3.9
Number of weekly work hours per employee	45.4	49.2	46.2	50.5	37.3	44.8	44.0	36.3	45.1	44.3
Percentage of Unionized Workers	24.2	0.2	74.0	0.0	0.0	49.6	1.7	47.5	45.3	26.9
Average Annual Turn-Over Rate	7.0	14.3	8.2	7.4	1.8	26.9	12.8	4.8	19.4	11.4

Table 16	Main Countries										
Labor Market, Call Center	**Kenya**	**Uganda**	**Tanzania**	**Mali**	**Senegal**	**Ghana**	**Madagascar**	**Mozambique**	**South Africa**	**Mauritius**	**Average**
Availability of Managers	3.2	2.5	3.0	2.4	3.6	4.6	2.0	2.3	2.6	3.0	2.9
Availability of Professionals	3.8	4.0	3.0	3.0	4.0	4.6	3.2	3.0	3.4	3.4	3.5
Availability of Technicians	4.4	4.0	3.0	2.8	4.0	4.8	2.5	3.7	3.0	3.2	3.5
Availability of Skilled Labor	4.4	3.5	3.3	3.3	4.5	4.4	3.5	4.0	3.6	3.6	3.8
Availability of Unskilled Labor	4.4	4.9	4.0	4.0	4.4	5.0	4.4	4.7	4.8	3.8	4.4
Ease of finding workers with command of language	5.0	4.5	3.0	3.6	4.0	4.4	3.0	3.7	4.2	3.6	3.9
Number of weekly work hours per employee	49.0	44.4	44.7	39.4	39.4	40.0	41.9	40.5	39.0	42.3	42.1
Percentage of Unionized Workers	0.0	0.0	1.7	12.0	19.0	69.8	2.0	19.0	16.0	0.0	13.9
Average Annual Turn-Over Rate	17.6	17.9	20.3	6.1	5.1	1.7	13.7	3.6	11.7	22.5	12.0

Table 17	Main Countries											
Labor Market, Textile	Kenya	Uganda	Tanzania	Lesotho	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Mauritius	Average
Availability of Managers	3.3	2.7	2.5	1.3	1.3	2.8	3.0	2.1	2.8	2.6	2.3	2.4
Availability of Professionals	4.0	2.7	2.3	2.7	2.0	3.0	3.5	3.0	3.3	3.2	2.5	2.9
Availability of Technicians	4.5	2.0	2.5	1.7	1.7	3.3	3.3	3.0	3.0	2.0	2.3	2.6
Availability of Skilled Labor	4.8	3.5	3.0	1.7	1.7	3.3	3.5	3.4	2.8	2.8	1.5	2.9
Availability of Unskilled Labor	5.0	4.6	4.3	4.9	4.3	5.0	4.3	4.6	5.0	4.6	3.0	4.5
Ease of finding workers with command of language	5.0	4.8	4.5	3.1	2.0	4.3	3.8	3.5	4.0	4.2	4.8	4.0
Number of weekly work hours per employee	45.8	43.4	45.3	45.0	40.7	44.0	40.0	50.0	45.7	45.6	48.9	44.9
Percentage of Unionized Workers	81.3	0.0	12.5	29.0	66.7	93.8	94.4	36.2	61.0	69.2	45.0	53.5
Average Annual Turn-Over Rate	4.5	22.0	5.0	4.8	0.1	0.0	14.3	6.2	3.2	3.4	10.6	6.7

Table 18	Main Countries										
Labor Market, Processed Food	**Kenya**	**Uganda**	**Tanzania**	**Lesotho**	**Mali**	**Senegal**	**Ghana**	**Madagascar**	**Mozambique**	**South Africa**	**Average**
Availability of Managers	4.3	2.4	1.7	3.0	2.0	3.4	3.2	3.0	2.7	2.6	2.8
Availability of Professionals	4.3	2.4	1.4	2.0	3.8	3.8	3.4	3.4	2.0	2.8	2.9
Availability of Technicians	4.3	3.2	2.6	1.0	3.4	3.6	3.4	3.3	3.0	4.0	3.2
Availability of Skilled Labor	4.5	3.0	3.8	4.0	2.8	3.0	4.0	3.4	2.7	3.8	3.5
Availability of Unskilled Labor	5.0	4.5	4.7	5.0	4.8	4.2	4.0	4.7	4.7	5.0	4.7
Ease of finding workers with command of language	5.0	4.3	4.1	4.0	3.1	4.4	4.4	2.4	3.3	4.2	3.9
Number of weekly work hours per employee	51.9	50.3	47.8	40.0	44.0	42.0	40.0	42.9	44.6	40.7	44.4
Percentage of Unionized Workers	0.0	10.0	43.8	53.0	78.0	37.0	85.0	2.5	66.3	51.2	42.7
Average Annual Turn-Over Rate	0.7	24.9	10.4	10.0	4.8	1.1	3.4	7.3	0.3	6.5	6.9

Table 19	Main Countries										
Access to Inputs and Outputs, Apparel	Kenya	Uganda	Tanzania	Lesotho	Mali	Senegal	Ghana	Madagascar	Mozambique	Mauritius	Average
Percentage of Raw Materials Needed for Production Imported	86.0	55.8	67.5	97.5	90.0	52.9	52.5	80.8	99.0	48.3	73.0
Percentage of Components Needed for Production Imported	99.3	70.4	95.0	79.2	85.0	70.0	68.8	97.1	99.6	77.1	84.2
Percentage of Equipment/ Chemicals Needed for Production Imported	100.0	100.0	100.0	88.3	60.0	100.0	84.0	96.0	98.8	76.0	90.3
Number of Days to Clear Customs	13.0	6.2	5.1	8.1	0.8	5.7	7.6	5.8	8.0	3.2	6.3

Table 20	Main Countries									
Access to Inputs and Outputs, Hotel	Kenya	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Mauritius	Average
Percentage of Raw Materials Needed for Production Imported	6.7	NA	20.8	0.0	NA	NA	80.0	0.0	50.0	26.3
Percentage of Components Needed for Production Imported	53.3	NA	68.1	22.0	NA	78.0	55.0	0.0	NA	46.1
Percentage of Equipment/ Chemicals Needed for Production Imported	47.5	88.0	92.5	46.0	100.0	78.0	70.0	0.0	NA	65.3
Number of Days to Clear Customs	18.0	52.3	14.6	6.7	15.5	NA	9.0	NA	NA	19.3

Table 21	Main Countries									
Access to Inputs and Outputs, Horticulture	Kenya	Uganda	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Average
Percentage of Raw Materials Needed for Production Imported	76.0	21.7	80.0	42.0	64.0	21.4	50.0	31.7	0.0	43.0
Percentage of Components Needed for Production Imported	96.0	26.0	96.0	100.0	47.0	42.0	0.0	35.0	0.0	49.1
Percentage of Equipment/ Chemicals Needed for Production Imported	98.0	81.7	98.8	73.0	64.0	45.0	10.0	86.7	15.0	63.6
Number of Days to Clear Customs	13.3	5.5	9.4	5.6	3.3	19.0	5.0	3.4	12.0	8.5

Table 22	Main Countries									
Access to Inputs and Outputs, Call Center	Kenya	Uganda	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Average
Percentage of Raw Materials Needed for Production Imported	66.7	0.0	NA	NA	NA	80.0	0.0	NA	0.0	29.3
Percentage of Components Needed for Production Imported	NA	0.0	NA	65.0	59.0	10.0	100.0	NA	0.0	39.0
Percentage of Equipment/ Chemicals Needed for Production Imported	100.0	99.3	100.0	83.2	81.6	95.0	100.0	100.0	2.0	84.6
Number of Days to Clear Customs	14.0	7.8	21.0	5.0	8.4	12.7	NA	7.0	NA	10.8

Table 23	Main Countries											
Access to Inputs and Outputs, Textile	Kenya	Uganda	Tanzania	Lesotho	Mali	Senegal	Ghana	Madagascar	Moazambique	South Africa	Mauritius	Average
Percentage of Raw Materials Needed for Production Imported	77.5	36.0	65.6	98.8	16.7	12.5	75.0	78.0	99.0	70.8	56.7	62.4
Percentage of Components Needed for Production Imported	100.0	62.6	90.6	89.6	70.0	47.0	1.5	97.0	99.6	55.6	95.0	73.5
Percentage of Equipment/ Chemicals Needed for Production Imported	100.0	100.0	100.0	94.2	69.0	75.0	96.3	95.4	98.8	62.6	62.5	86.7
Number of Days to Clear Customs	12.8	3.3	12.0	11.5	3.0	4.3	13.5	4.8	8.0	5.5	13.4	8.4

Table 24	Main Countries										
Access to Inputs and Outputs, Processed Food	Kenya	Uganda	Tanzania	Lesotho	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Average
Percentage of Raw Materials Needed for Production Imported	37.5	40.0	43.8	100.0	52.7	67.0	61.0	31.2	60.0	4.0	49.7
Percentage of Components Needed for Production Imported	43.5	31.5	30.0	100.0	49.2	34.0	34.4	1.2	90.0	5.8	42.0
Percentage of Equipment/ Chemicals Needed for Production Imported	97.5	70.8	97.8	100.0	86.0	97.0	74.4	60.0	90.0	41.0	81.4
Number of Days to Clear Customs	10.0	4.5	58.8	2.0	3.6	4.0	6.6	7.8	3.3	9.7	5.7

Table 25	Main Countries										
Infrastructure, Apparel	Kenya	Uganda	Tanzania	Lesotho	Mali	Senegal	Ghana	Madagascar	Mozambique	Mauritius	Average
Quality of Landline Communications	3.3	4.0	3.8	2.3	4.0	4.4	3.4	3.3	3.8	4.1	3.6
Number of days to install a phone	26.4	7.3	4.0	105.5	12.0	5.0	19.5	86.8	3.5	9.3	27.9
Quality of Internet	3.3	2.0	3.0	1.0	1.0	3.0	3.0	1.0	3.7	4.3	2.5
Number of days to install a broadband line	6.4	8.3	3.5		1.0	7.4	10.5	2.8	1.0	26.5	7.5
Number of hours of blackouts experienced per month	19.6	32.0	12.0	1.8	2.0	7.5	7.0	13.6	25.7	1.1	12.2
Number of hours of brownouts experienced per month	31.4	28.3	8.0	0.2	0.0	1.5	5.4	24.2	8.5	6.6	11.4
Average number of hours of generator usage per month	16.8	32.3	16.0	0.1	2.0	3.0	7.8	30.0	5.0	0.1	11.3
Number of days per year of water supply shortage	17.1	0.3	172.0	61.1	0.0	5.7	3.8	8.2	296.0	2.4	56.7
Quality of the public waste treatment system	4.1	1.6	2.0	1.8	1.5	1.0	4.3	1.0	1.0	3.9	2.2
Number of alternative sites considered during investment process	1.3	4.0	1.6	1.2	1.0	1.2	1.0	5.0	1.5	1.6	1.9

Table 26	Main Countries									
Infrastructure, Hotel	Kenya	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Mauritius	Average
Quality of Landline Communications	2.6	3.5	2.7	3.6	3.0	3.4	3.8	4.0	3.8	3.4
Number of days to install a phone	57.0	32.3	35.3	76.6	184.8	43.8	1.7	14.3	26.4	52.5
Quality of Internet	3.2	4.0	3.2	3.2	4.0	1.0	3.8	4.0	4.3	3.4
Number of days to install a broadband line	5.8	28.0	3.4	3.2	8.7	22.0	1.7	25.1	95.6	21.5
Number of hours of blackouts experienced per month	123.7	278.5	9.0	36.0	13.4	36.3	52.6	10.5	6.5	62.9
Number of hours of brownouts experienced per month	0.7	450.0	1.0	1.8	16.6	85.5	80.5	0.0	10.0	71.8
Average number of hours of generator usage per month	209.0	274.5	8.4	34.0	13.4	45.0	124.8	3.9	6.5	79.9
Number of days per year of water supply shortage	18.0	301.7	7.2	73.6	10.0	0.7	4.6	0.2	1.9	46.4
Quality of the public waste treatment system	3.5	1.2	1.0	1.0	4.8	1.0	1.0	4.2	2.0	2.2
Number of alternative sites considered during investment process	1.0	1.7	11.0	1.4	1.0	3.3	1.8	2.0	1.0	2.7

Table 27	Main Countries									
Infrastructure, Horticulture	Kenya	Uganda	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Average
Quality of Landline Communications	2.2	3.3	2.2	2.6	3.8	2.6	3.3	3.8	3.4	3.0
Number of days to install a phone	94.7	8.3	21.0	118.0	10.0	9.6	52.5	1.7	174.4	54.5
Quality of Internet	3.2	3.5	3.6	1.0	2.4	3.6	2.6	3.8	3.8	3.0
Number of days to install a broadband line	117.6	25.8	4.3	4.8	5.8	4.6	NA	1.7	15.8	22.5
Number of hours of blackouts experienced per month	5.8	179.5	45.6	52.0	58.4	76.8	95.0	52.6	9.2	63.9
Number of hours of brownouts experienced per month	102.0	6.6	120.4	1.1	7.5	106.0	101.7	80.5	2.5	58.7
Average number of hours of generator usage per month	93.0	330.0	54.8	48.0	58.0	76.8	45.0	124.8	9.2	93.3
Number of days per year of water supply shortage	0.0	0.3	0.0	3.6	63.0	1.0	0.4	4.6	0.0	8.1
Quality of the public waste treatment system	3.2	4.7	1.0	1.0	1.0	3.2	1.0	1.0	4.0	2.2
Number of alternative sites considered during investment process	1.0	7.3	1.8	4.0	4.2	2.0	4.2	1.8	1.3	3.1

Table 28	Main Countries										
Infrastructure, Call Center	Kenya	Uganda	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Mauritius	Average
Quality of Landline Communications	3.6	4.6	3.5	2.8	4.4	3.6	3.3	4.0	4.0	3.4	3.7
Number of days to install a phone	11.8	5.0	24.0	49.4	3.4	26.5	44.8	2.8	39.3	10.8	21.8
Quality of Internet	3.4	3.9	3.0	2.4	3.2	3.8	2.8	3.7	4.4	4.0	3.5
Number of days to install a broadband line	8.3	6.7	13.0	5.4	5.2	10.5	15.8	1.0	4.5	3.5	7.4
Number of hours of blackouts experienced per month	10.3	66.9	38.0	16.2	16.4	16.8	54.8	4.5	0.4	0.4	22.5
Number of hours of brownouts experienced per month	4.7	8.3	92.7	1.5	67.8	47.6	11.0	2.0	0.0	1.4	23.7
Average number of hours of generator usage per month	NA	74.6	15.3	16.3	14.4	42.4	96.7	NA	0.4	0.5	32.6
Number of days per year of water supply shortage	0.6	0.6	14.0	0.0	0.5	2.0	0.0	0.5	0.0	0.0	1.8
Quality of the public waste treatment system	5.0	3.3	2.7	1.0	1.0	1.0	1.0	1.0	4.4	4.0	2.4
Number of alternative sites considered during investment process	1.4	3.3	2.0	3.0	2.2	2.0	8.2	2.0	2.7	3.0	3.0

Table 29	Main Countries											
Infrastructure, Textile	Kenya	Uganda	Tanzania	Lesotho	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Mauritius	Average
Quality of Landline Communications	2.0	4.3	3.3	2.7	2.3	4.5	3.3	2.8	3.8	4.2	4.5	3.4
Number of days to install a phone	39.5	6.7	13.8	63.3	46.0	6.8	11.0	67.4	3.5	19.6	7.0	25.9
Quality of Internet	3.0	3.0	2.5	1.0	2.0	2.3	3.3	1.4	3.7	4.0	4.3	2.8
Number of days to install a broadband line	8.8	9.4	5.0	NA	7.5	6.7	7.0	2.5	1.0	68.2	3.7	12.0
Number of hours of blackouts experienced per month	19.5	31.5	79.0	1.2	2.0	3.3	9.0	4.9	25.7	1.2	1.8	16.3
Number of hours of brownouts experienced per month	52.8	28.3	96.3	0.4	0.0	2.9	12.0	0.9	8.5	0.2	11.9	19.5
Average number of hours of generator usage per month	16.0	22.0	16.0	0.0	2.0	2.9	9.0	7.6	5.0	0.8	2.2	7.6
Number of days per year of water supply shortage	7.5	0.0	48.7	30.5	0.7	0.8	93.0	9.8	296.0	9.6	4.5	45.5
Quality of the public waste treatment system	4.0	1.6	2.0	2.4	1.3	1.0	3.3	1.0	1.0	3.4	4.0	2.3
Number of alternative sites considered during investment process	1.0	5.6	1.0	2.1	2.7	1.0	1.3	4.3	1.5	1.0	1.7	2.1

Table 30	Main Countries									
Infrastructure, Processed Food	Kenya	Uganda	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Average
Quality of Landline Communications	2.8	4.0	4.0	3.4	4.4	3.4	3.4	3.8	3.6	3.6
Number of days to install a phone	14.5	7.0	10.4	38.0	10.6	5.6	41.9	4.0	19.3	16.8
Quality of Internet	3.3	2.8	3.1	3.0	2.0	3.3	1.4	3.8	4.0	3.0
Number of days to install a broadband line	5.8	5.3	4.3	2.4	7.0	4.0	5.0	3.0	15.5	5.8
Number of hours of blackouts experienced per month	14.0	166.3	54.6	27.8	36.8	56.8	36.0	40.0	1.2	48.2
Number of hours of brownouts experienced per month	13.0	137.8	42.3	6.6	10.0	54.8	67.4	NA	0.4	41.5
Average number of hours of generator usage per month	25.0	26.5	133.3	28.8	25.0	62.6	50.0	NA	1.2	44.1
Number of days per year of water supply shortage	0.0	5.0	236.9	10.0	38.5	4.4	0.7	365.0	0.0	73.4
Quality of the public waste treatment system	3.8	1.4	1.6	1.0	1.0	4.4	1.0	1.5	4.0	2.2
Number of alternative sites considered during investment process	1.0	1.7	1.1	1.6	2.8	1.3	1.4	2.0	1.5	1.6

Table 31	Main Countries										
Living Conditions, Apparel	Kenya	Uganda	Tanzania	Lesotho	Mali	Senegal	Ghana	Madagascar	Mozambique	Mauritius	Average
Cost of Living	1.7	2.9	1.7	1.7	2.0	2.0	4.2	2.8	3.4	3.4	2.6
Level of Safety	2.0	3.6	2.3	1.8	3.5	4.0	4.4	3.3	3.6	4.0	3.3
Quality of International Schools	4.1	2.4	2.7	3.2	1.5	4.3	4.2	3.6	2.3	3.8	3.2
Quality of Local Schools	3.3	2.5	2.0	2.0	1.5	3.0	4.2	3.0	2.8	4.3	2.8
Health Care	2.7	2.1	1.3	2.2	3.0	3.3	4.2	2.0	2.4	3.6	2.7
Quality of Recreational Services	3.6	2.1	2.0	1.2	1.5	3.0	4.2	2.5	2.2	2.6	2.5

Table 32	Main Countries									
Living Conditions, Hotel	Kenya	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Mauritius	Average
Cost of Living	2.3	3.0	2.0	3.0	4.0	2.2	3.0	4.0	3.0	2.9
Level of Safety	2.3	3.5	3.5	3.8	4.4	3.2	2.4	1.6	3.2	3.1
Quality of International Schools	4.3	2.0	3.5	4.3	4.0	4.5	2.3	3.8	3.8	3.6
Quality of Local Schools	3.5	1.4	1.8	1.7	4.0		1.8	3.3	3.0	2.6
Health Care	1.8	1.3	1.7	3.0	3.4	2.0	1.4	4.0	3.2	2.4
Quality of Recreational Services	3.8	1.3	1.7	3.0	2.2	1.8	1.8	4.0	3.4	2.6

Table 33	Main Countries									
Living Conditions, Horticulture	Kenya	Uganda	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Average
Cost of Living	2.6	3.2	3.0	2.9	3.0	4.4	2.0	2.7	3.6	3.0
Level of Safety	1.4	3.2	2.0	4.2	4.0	4.2	3.7	1.3	2.2	2.9
Quality of International Schools	4.0	3.7	3.4	4.0	3.8	3.4	3.2	NA	3.6	3.6
Quality of Local Schools	2.2	1.8	1.6	2.0	3.8	3.2	NA	1.7	3.0	2.4
Health Care	2.2	2.0	2.0	2.0	3.4	3.8	1.8	1.7	2.8	2.4
Quality of Recreational Services	4.0	3.5	2.6	2.6	4.0	3.6	1.8	2.3	4.2	3.2

Table 34	Main Countries									
Living Conditions, Call Center	Kenya	Uganda	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Mauritius
Cost of Living	2.4	4.0	3.0	2.2	2.0	3.8	3.2	2.5	4.6	3.3
Level of Safety	2.4	3.4	2.5	4.2	4.0	4.6	2.8	1.8	2.6	3.5
Quality of International Schools	4.2	3.1	3.0	2.9	4.0	4.0	4.0	2.7	4.2	3.7
Quality of Local Schools	3.5	2.1	3.0	1.5	3.1	3.6	1.7	2.0	4.2	2.0
Health Care	2.5	1.9	3.5	1.3	2.6	4.0	2.0	1.8	4.2	2.0
Quality of Recreational Services	3.8	2.0	3.0	1.6	3.0	2.6	3.3	2.5	4.4	2.8

Table 35	Main Countries										
Living Conditions, Textile	Kenya	Uganda	Tanzania	Lesotho	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Mauritius
Cost of Living	2.5	3.0	4.0	2.3	2.0	1.5	3.5	2.8	3.4	3.4	3.0
Level of Safety	1.0	3.0	2.5	1.4	4.3	3.5	3.8	3.2	3.6	2.8	3.0
Quality of International Schools	4.5	1.8	4.0	3.6	2.0	4.0	3.5	3.5	2.3	3.4	NA
Quality of Local Schools	4.0	2.0	2.0	2.0	1.0	3.0	3.3	3.0	2.8	3.8	3.0
Health Care	2.0	1.8	2.0	2.1	1.0	3.0	3.0	1.6	2.4	3.0	3.0
Quality of Recreational Services	4.0	2.2	2.0	2.1	1.3	2.0	3.0	2.6	2.2	4.0	4.0

Table 36	Main Countries									
Living Conditions, Processed Food	Kenya	Uganda	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Average
Cost of Living	2.5	2.6	1.4	3.0	2.0	4.0	3.1	2.0	4.2	2.8
Level of Safety	2.0	3.8	3.9	4.4	3.8	3.8	3.6	2.3	2.2	3.3
Quality of International Schools	4.5	3.0	3.3	3.2	3.8	3.6	4.3	3.5	3.8	3.7
Quality of Local Schools	3.3	3.0	2.2	1.7	3.6	4.0	2.0	2.5	2.8	2.8
Health Care	2.0	1.8	1.9	2.1	3.4	3.6	2.3	1.7	3.0	2.4
Quality of Recreational Services	2.8	2.6	2.0	2.8	4.0	3.0	3.6	2.3	4.2	3.0

Table 37	Main Countries										
Operating Costs, Apparel (US Dollars)	Kenya	Uganda	Tanzania	Lesotho	Mali	Senegal	Ghana	Madagascar	Mozambique	Mauritius	Average
Manager Gross Salary	15,771	17,637	9,321	22,557	14,252	9,878	4,519	17,751	7,854	22,945	14,248
Professional Gross Salary	11,127	11,821	10,834	27,704	5,048	12,074	6,554	5,604	15,071	15,822	12,166
Technical Worker Gross Salary	6,603	8,346	8,533	23,086	3,266	8,981	8,053	2,581	3,712	16,137	8,930
Skilled Worker Gross Salary	1,420	2,253	1,377	6,645	2,286	2,925	1,011	1,293	2,145	2,871	2,423
Unskilled Worker Gross Salary	1,048	1,067	855	4,772	1,158	1,746	570	581	998	2,989	1,578
Average wage burden as percentage of gross salary	79.4	77.4	87.5	95.0	75.5	78.5	88.0	71.3	66.8	81.7	80
Interest Rate (Percent)	12.7	16.0	10.2	12.8	NA	11.7	16.0	17.0	7.1	10.5	13

Table 38	Main Countries									
Operating Costs, Hotel (US Dollars)	Kenya	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Mauritius	Average
Manager Gross Salary	19,156	30,379	30,438	27,645	4,295	21,272	29,396	38,111	42,164	26,984
Professional Gross Salary	10,950	27,223	10,933	16,396	6,085	7,828	13,092	43,974	30,685	18,574
Technical Worker Gross Salary	5,196	17,941	6,325	12,239	2,021	1,916	6,214	21,889	7,301	9,005
Skilled Worker Gross Salary	2,465	4,644	2,888	4,794	1,678	1,009	2,588	12,508	4,575	4,128
Unskilled Worker Gross Salary	1,274	2,654	1,545	2,287	1,275	706	1,932	6,078	2,452	2,245
Average wage burden as percentage of gross salary	85.0	74.3	78.7	71.6	88.0	61.6	61.1	70.3	78.0	74
Interest Rate (Percent)	13.8	6.1	12.3	8.5	NA	15.9	6.6	10.5	12.0	11

Table 39	Main Countries									
Operating Costs, Horticulture (US Dollars)	Kenya	Uganda	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Average
Manager Gross Salary	20,172	22,577	24,781	9,026	36,413	5,246	5,980	14,095	50,814	21,012
Professional Gross Salary	16,049	11,754	22,645	4,216	19,398	6,135	1,813	12,089	36,547	14,516
Technical Worker Gross Salary	10,572	4,215	5,007	4,038	9,947	2,785	1,683	4,842	19,924	7,001
Skilled Worker Gross Salary	1,846	2,162	1,379	1,455	2,629	1,637	708	3,442	14,169	3,270
Unskilled Worker Gross Salary	1,037	1,428	1,511	750	1,223	774	408	1,069	3,721	1,325
Average wage burden as percentage of gross salary	79.0	81.1	87.2	56.0	80.8	88.0	30.5	83.8	79.4	74.0
Interest Rate (Percent)	6.6	9.1	8.9	12.8	9.8	22.0	19.3	5.1	8.1	11.3

Table 40	Main Countries										
Operating Costs, Call Center (US Dollars)	Kenya	Uganda	Tanzania	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Mauritius	Average
Manager Gross Salary	14,846	33,045	20,814	28,674	30,080	23,265	10,284	25,713	65,472	17,123	28,021
Professional Gross Salary	11,171	14,247	24,660	20,068	20,100	25,502	3,226	12,871	101,792	14,498	25,960
Technical Worker Gross Salary	8,421	9,480	NA	11,863	13,534	10,738	2,642	7,838	51,010	11,416	14,441
Skilled Worker Gross Salary	3,921	4,701	4,045	7,942	8,445	5,369	1,104	3,199	29,121	4,281	7,538
Unskilled Worker Gross Salary	1,444	2,648	NA	2,496	4,902	3,803	698	1,685	12,899	2,414	3,822
Average wage burden as percentage of gross salary	86	81	75	75	70	78	65	89	82	83	77.8
Interest Rate (Percent)	16	18	7	7	7	9	NA	NA	10	NA	10.7

Table 41	Main Countries											
Operating Costs, Textile (US Dollars)	Kenya	Uganda	Tanzania	Lesotho	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Mauritius	Average
Manager Gross Salary	13,183	18,581	7,580	14,413	18,511	12,569	23,190	25,511	7,854	64,463	20,420	20,571
Professional Gross Salary	12,051	13,822	11,603	27,704	4,553	10,293	20,581	5,245	15,071	45,181	17,637	16,704
Technical Worker Gross Salary	6,670	11,221	10,089	14,051	3,096	9,897	8,575	2,845	3,712	39,394	16,027	11,416
Skilled Worker Gross Salary	2,398	2,970	1,190	5,203	2,316	4,150	3,505	1,135	2,145	12,510	2,962	3,680
Unskilled Worker Gross Salary	1,065	1,615	704	3,090	1,029	2,082	1,417	618	998	5,315	3,339	1,934
Average wage burden as percentage of gross salary	83	70	81	95	77	83	88	81	67	79	75	80
Interest Rate (Percent)	16	15	12	11	10	11	20	18	7	10	10	13

Table 42	Main Countries										
Operating Costs, Processed Food (US Dollars)	Kenya	Uganda	Tanzania	Lesotho	Mali	Senegal	Ghana	Madagascar	Mozambique	South Africa	Average
Manager Gross Salary	16,652	28,608	25,894	29,316	35,002	24,933	11,017	15,910	35,774	88,715	31,182
Professional Gross Salary	13,908	8,551	22,712	32,573	13,755	15,416	8,948	3,386	14,982	103,825	23,806
Technical Worker Gross Salary	6,222	4,447	13,561	19,544	8,301	11,473	5,676	2,454	11,094	55,531	13,830
Skilled Worker Gross Salary	3,534	3,209	4,998	9,772	3,500	6,277	3,551	1,111	7,433	24,098	6,748
Unskilled Worker Gross Salary	1,693	1,433	2,141	4,886	2,289	3,473	2,265	506	1,495	11,870	3,205
Average wage burden as percentage of gross salary	75	79	83	NA	72	79	82	79	70	75	77
Interest Rate (Percent)	8	11	12	11	10	10	20	19	NA	11	13