

# Feed the Lion

---

## *FMCG Opportunities and Challenges in Africa*



# Content

---

Executive Summary	3
The Africa Growth Story and Emergence of the Middle Class	4
Africa – a Medley of Unique Countries	6
FMCG Markets in the Selected Countries	9

## Authors:



**Emilio El-Asmar**  
Consultant, UAE  
elasmar.emilio@adlittle.com



**Thomas Kuruvilla**  
Partner, UAE  
kuruvilla.thomas@adlittle.com



**Adnan Merhaba**  
Manager, UAE  
merhaba.adnan@adlittle.com



**Amit Maheshwari**  
Consultant, UAE  
maheshwari.amit@adlittle.com



**Alejandro González**  
Partner, Spain  
gonzalez.alejandro@adlittle.com

We would like to express our gratitude and appreciation to Mr. Ramesh Lal and Mr. Mahesh Hegde (working with HSA group) for providing invaluable input based on their experience with the FMCG market in the African countries.

# Executive Summary

---

The African continent is seeing rapid economic growth, coupled with a substantial increase in middle-class population and disposable income levels. Slowdown in growth in the BRICS economies (GDP growth (constant 2005 US\$<sup>1</sup>): China 7.7%, Brazil 2.5%, India 5%, Russia 1.3% and South Africa 1.9% in 2013) has forced global companies to seek greener pastures elsewhere. They are eyeing the African market for future growth and investing accordingly, especially in the fast-moving consumer goods (FMCG) segment. However, the business environment in several African countries presents challenges to FMCG companies, in the form of cultural and functional disparities and different preferences of African consumers compared to their more developed counterparts. Limited availability of information on market dynamics and lack of distribution infrastructure further exacerbate the complexity of conducting business in many African markets. Such challenges have led to the majority of companies entering select African countries, and as more companies join them, these markets become increasingly crowded. FMCG companies with long-term belief in the African growth story need to look beyond the obvious and invest in other emerging economies in the African continent.

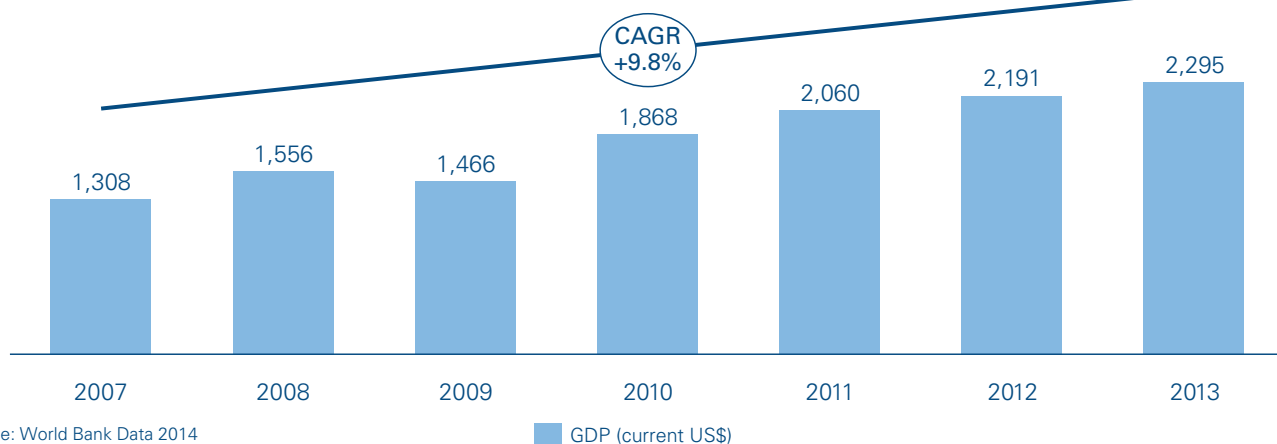
In this paper, we have conducted a two-tiered screening process of African countries, based on

- 1) GDP growth and middle-class penetration and
- 2) market potential and market risks to identify emerging African countries.

We have subsequently detailed characteristics of these select markets from a consumer goods perspective. We foresee these selected countries, with their high GDP growth, rapidly expanding middle classes and rising disposable incomes, as great opportunities for FMCG companies to enter early and gain first-mover advantage to exploit the promise they hold.

# The Africa Growth Story and Emergence of the Middle Class

Figure 1: Real GDP in Africa 2007–13 (Current US\$)



As growth in the BRIC countries slows down, multinational companies are looking for other geographies for growth and recognizing the potential of the African market. Africa is the second-most-populous continent after Asia, and its population is projected to increase from the current 1 billion to approximately 2.3 billion by 2025<sup>2</sup>. The African economy has expanded at a healthy growth rate, with real GDP growing at 9.8% CAGR between 2007 and 2013.

Furthermore, the GDP is expected to grow at approximately 5.7% annually to US\$ 3.4 trillion by 2020<sup>3</sup>. Healthy GDP growth in Africa is resulting in higher per-capita disposable income and expansion of the middle class, which in turn is fueling consumer spending across Africa, especially in countries such as Nigeria and Ethiopia, where consumer spending is projected to grow from US\$115 & 20 billion, respectively, in 2010 to US\$167 & 43 billion, respectively, by 2020 (see figure 2 overleaf).

The projected growth in consumption spending presents attractive opportunities for global and local FMCG companies seeking alternative avenues for growth.

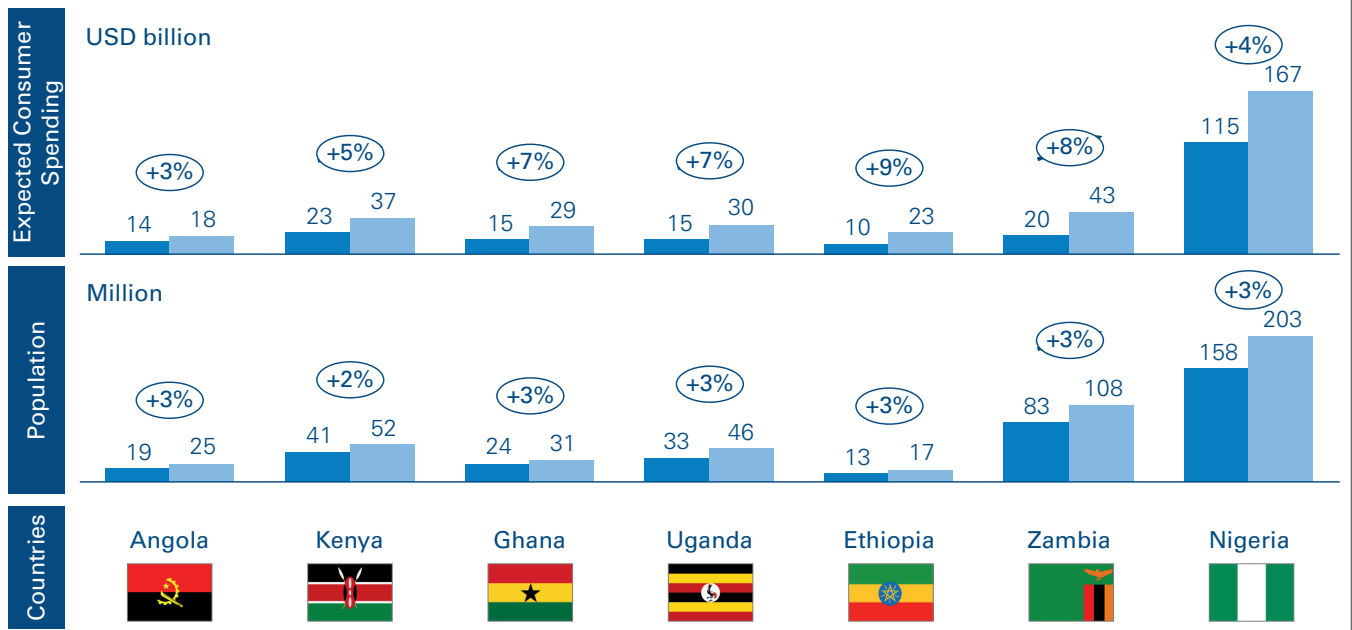
The African continent is a complex landscape with 54 fully recognized countries. While a few countries have a high GDP per Capita at current US\$4 (e.g. South Africa has US\$6,618, Botswana has US\$7,317 in 2013) the rest of the African countries still have very low GDP per capita (e.g. Ethiopia has US\$498, Madagascar has US\$471 in 2013)<sup>4</sup> and low disposable income per household. The majority of the companies that have entered Africa or are planning to enter have chosen countries with higher GDPs per capita and higher disposable income – e.g. South Africa, Egypt, and Morocco. The markets in these countries are thus well penetrated and competitive. Hence, companies with long-term growth perspectives should look beyond the obvious and consider poorer, underdeveloped African economies with high attractiveness – e.g. Nigeria and Kenya. Entering these countries will give FMCG companies first-mover advantage and help them build loyal customers.

*The key is, however, to choose the right countries for investments*

<sup>2</sup> World Bank Data  
<sup>3</sup> CEPII world GDP Growth Report

<sup>4</sup> World Bank Data

Figure 2: Expected consumer spending in 2020 (USD billion) across select African Countries



Source: Euromonitor Africa Consumer Spending 2010

■ 2010 ■ 2020 ○ +X% CAGR



# Africa – a Medley of Unique Countries

As highlighted earlier, the high economic growth witnessed by countries in Africa is attracting foreign FMCG companies seeking rewarding investment opportunities. However, without a detailed analysis, it is difficult to generate a reliable list of attractive countries across the 54 African nations. Therefore, we have developed a robust, two-tiered screening process that takes into account various macroeconomic indicators and economic, political and regulatory risks to ensure a comprehensive review of the African countries, and selected the most attractive ones. The screening process focuses on countries that are poorer and less understood today, but that have a lot of potential and present attractive opportunities for the FMCG sector.

In the first step of our screening process, African countries were evaluated along two key dimensions

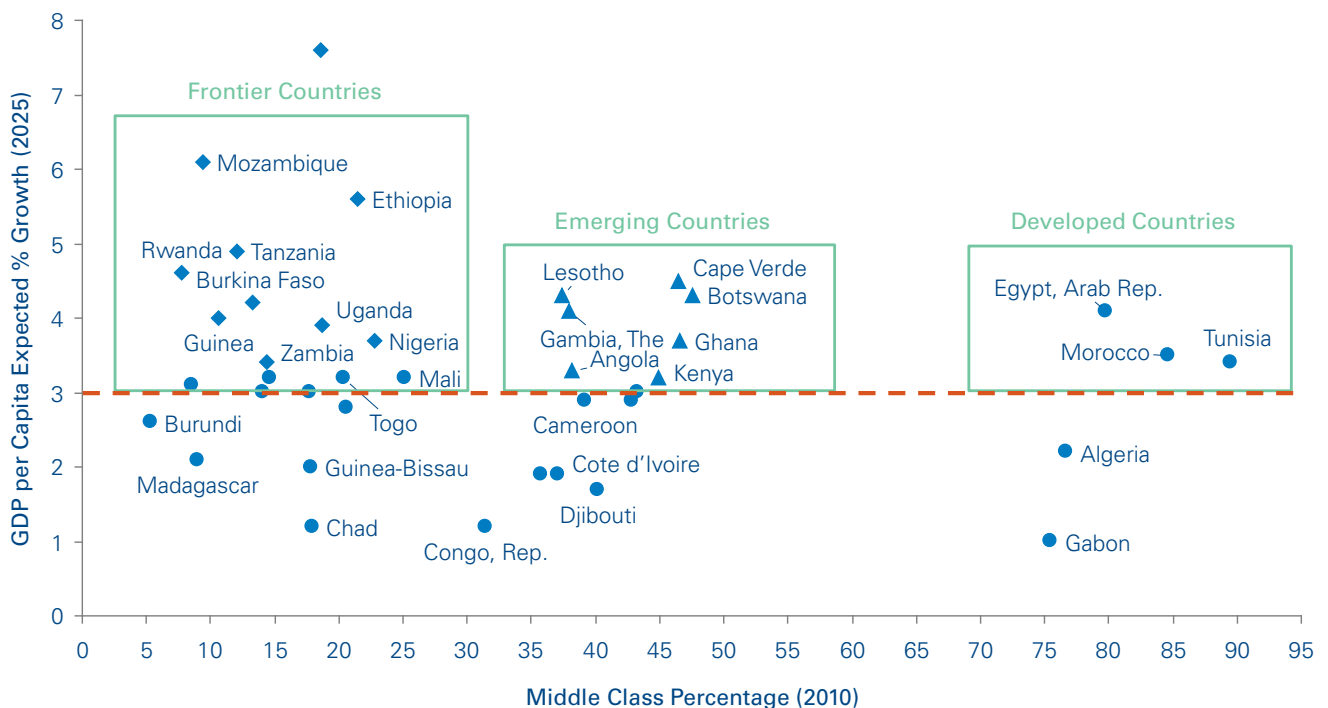
1. Long-term expected GDP per-capita growth rate (expected annual growth until 2025) and

2. Middle-class percentage (2010).

The cut-off for expected GDP per capita growth was pegged at 3%, and the shortlisted countries were further classified into three groups – **Developed countries**, **Emerging countries** and **Frontier countries**.

- **Developed countries:** Countries with high middle-class percentages, i.e. greater than 60% of the total population. These countries are Egypt, Morocco and Tunisia. However, the main opportunities for investment in the FMCG sector have been captured by several local and multinational players. Major global players have a strong presence across the value chain in these markets, and have established local hubs comprising manufacturing facilities and regional offices to serve nearby countries. For example, Unilever has production facilities for home care in Morocco, Tunisia and Egypt, and for foods in Morocco and Egypt.

Figure 3: First Screening – GDP per Capita Expected Growth vs. Middle Class %



Source: The Middle of the Pyramid Report (African Development Bank Group) and CEPII World GDP Growth Report

- Emerging countries:** Countries with moderate middle-class percentages that range from 30% to 60% of the total population. These countries include Angola, Kenya, Ghana, Gambia, Lesotho, Botswana and Cape Verde. Several FMCG companies have ventured into these countries, and penetration in these markets is growing rapidly. For example, 15 FMCG companies are present in Kenya, and 18 are present in Ghana. However, large middle-class populations and increasing disposable income in these countries present a huge opportunity for FMCG companies.
- Frontier countries:** Countries with low middle-class percentages, less than 30% of the total population. A large number of countries fall under this category, notably Nigeria, Ethiopia, Mozambique, Tanzania, Rwanda, Burkina Faso, Uganda and Zambia, among others. FMCG markets in these Frontier countries are less explored by FMCG companies – a limited number of MNCs have entered these markets, with the exception of Nigeria, which features about 26 global FMCG players. The number drops significantly across other countries; e.g., in Angola, only 11 global companies are present in the market<sup>5</sup>. The future growth in consumption of FMCG products, driven by an increase in middle class and higher disposable income and limited competition in

these markets, presents a unique opportunity for FMCG companies.

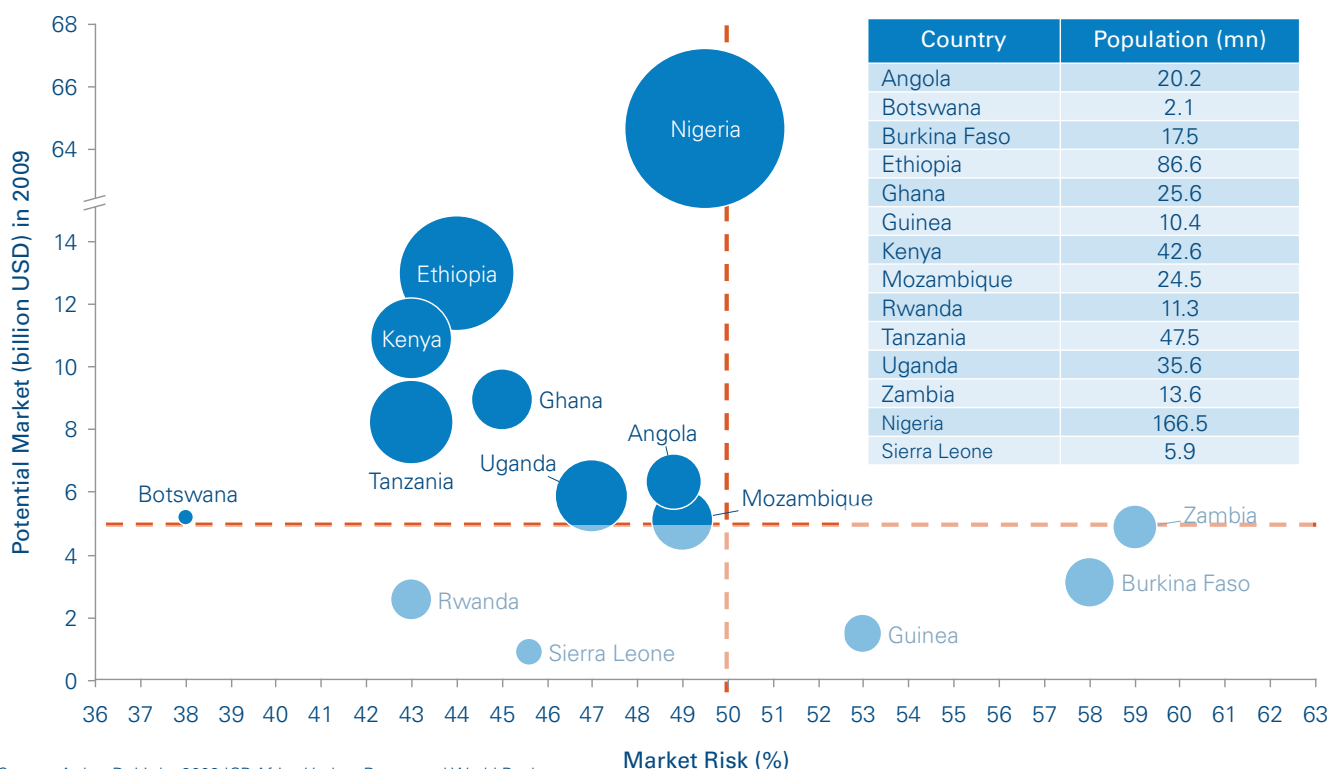
Based on their expected GDP per-capita growth, growth in middle class and relatively un-penetrated markets, the **Emerging and Frontier countries** were shortlisted for further analysis. (South Africa, which is an emerging country, has been excluded, as its FMCG market is already well penetrated.) Even though these countries look promising in terms of expected GDP per capita growth and current middle-class population, analyzing market size and market risks will provide additional insight into the business attractiveness of these countries.

In the second step of our screening process, Emerging and Frontier countries were further evaluated based on three key parameters – market size (total food & beverage consumption), population and market risks, and an aggregate of economic, political and business risks.

The second screening highlights eight countries that present market sizes greater than US\$5 billion and with market risk of less than 50%. The selected countries are Nigeria, Ethiopia, Kenya, Ghana, Tanzania, Angola, Uganda and Mozambique. Although potential market size in Botswana is approximately US\$5 billion and market risk is 38%, Botswana’s population of only 2 million inhabitants makes it less attractive for long-term

5 Imara SSA FMCG Sector Report 2012

Figure 4: Second Screening - Potential Market vs. Market Risk



Source: Arthur D. Little, 2009 ICP Africa Update Report and World Bank  
 Note: Size of Bubble refers to the population of that country

investment; therefore, it has been excluded from this study. On the other hand, Mozambique, which has a similar market size to Botswana and higher market risk (49%), has been selected, as its population size of about 24 million makes it a country too large to be ignored.

Selected countries provide the best long-term investment opportunities for FMCG companies planning to enter/expand in Africa. The next step is to gain further insight into the characteristics and dynamics of the FMCG markets in these selected countries. Insight into the FMCG sector in the identified countries is drawn from extensive primary and secondary research, and is detailed below.

### About Market Risk

Market risk associated with investing in the selected countries is estimated by assigning an equal weightage to three key risk parameters:

1. long-term political risk,
2. long-term economic risk and
3. ease of doing business.

Long-term political risk is measured by taking into account the political stability of the country, the nature of the ruling regime (democratic, authoritarian, military, etc.), the corruption level, and the country's political relationship with nearby and global countries. Long-term economic risk is calculated based on current and forecasted economic performance, inflation percentages, currency performance, FDI flow, trading levels and infrastructure adequacy. The ease-of-doing-business indicator is provided by the World Bank and includes several legal and regulatory parameters, including ease of starting a business, dealing with construction permits, getting electricity, registering property, paying taxes, trading across borders, getting credit, protecting investors, enforcing contracts, resolving insolvency and employing workers. The potential market vs. potential risk analysis serves as a tool to identify the most attractive countries for investment that present a promising potential future.



# FMCG Markets in the Selected Countries

It is imperative for interested FMCG companies to develop deep understanding of various nuances of the FMCG markets in these countries. This knowledge will serve as a key input when the FMCG companies develop their market-entry strategies. FMCG markets in these countries have several common characteristics, which are detailed below. Individual country characteristics will be highlighted later.

## 1. Consumer Preference

The majority of the populations in these countries are poor, with per-capita consumption of less than US\$4/day. As per an AfDB report, 70% of Kenya's population has consumption below US\$4/day (the lowest among selected countries), while 97% population of Mozambique and Tanzania have consumption below US\$4/day (the highest among selected countries). This population with consumption below US\$4/day mainly comprises of daily-wage laborers. Due to lower income, most of the purchases of these consumers are planned and not impulse purchase. They have high aspirations, but can only purchase in small quantities; hence, having small SKUs is key to serving these consumers. For example, Promasidor, an African company that operates in 25 countries, sold 4 billion sachets of dairy beverages and seasoning priced between 10 naira (6 US cents) and 20 naira each in Nigeria in 2012<sup>6</sup>. It is important to introduce the consumers to your products early on and build a loyal customer base. As purchasing power of these consumers increases, their consumption will grow as well, and they will migrate from smaller SKUs to larger packs. Scooping (a practice in which the shopkeeper opens the pack and sells smaller quantities instead of complete packs) is a common practice in these countries due to small purchases.

Consumers in these markets are extremely price sensitive, so product affordability is quite important. Any abrupt change in the pricing can impact sales significantly. For example, when Promasidor tried to increase the price of its cheapest milk sachet from 10 naira to 15 naira, sales dropped nearly 90 percent<sup>6</sup>.

## 2. Distribution

In some of these selected countries, the population is sparsely distributed across the country, and reaching these remote

consumers can be challenging. For example, in Uganda, out of the total population of 36.3 million, about 84% live in small towns and villages. Additionally, infrastructure is not well developed in most of these countries, which poses challenges in transporting products to retail outlets.

The retail landscape in these countries is dominated by small stores/kiosks/open markets. International FMCG companies commonly use one of the following two ways to distribute their products:

- **Distribution through Importers:** In this model, FMCG companies send their shipments to importers who, in turn, sell them to distributors/wholesalers. FMCG companies play an inactive role and do not participate in any operational activities within the destination country. All the marketing- and distribution-related activities are undertaken by importers, based on mutual agreement with FMCG companies. FMCG companies select this distribution model to minimize their risks, make short-term gains, or understand the market and gauge market response for their products before making significant investments.
- **Distribution through "Key" Distributors:** In this model FMCG companies distribute their products to wholesalers/retailers through one or several "key" distributors. FMCG companies play an active role in this model. They are involved in marketing, consumer research and distribution coverage. FMCG companies opt for this model when they want to invest and develop a market from a long-term perspective.

Due to default risks, companies deal with importers/key distributors in cash, and credit is offered only after strong relationships are established.

In all the selected countries, modern trade is small but growing rapidly. Establishing relationships with modern retail is extremely important, as going forward, modern retail is expected to expand rapidly and form a significant proportion of retail FMCG sales. It is recommended that companies hold negotiations centrally with modern retail outlets spread across countries.

### 3. Marketing and Branding

Marketing and branding are crucial, as brand perception is a key factor in consumer purchases. Consumers in these markets have high aspirations. Consumers are brand conscious and willing to pay slight premiums for branded products, especially edible products. However, high premiums will turn consumers away due to low disposable incomes. Consumers associate brands with product quality. Local brands are usually perceived to be of lower quality compared to foreign brands.

Generating brand awareness can be challenging, and apart from commonly used media, e.g. television, traditional marketing channels such as radio, roadshows, billboards and street plays play an important role in reaching out to the end consumer.

Trademark protection is extremely important in African markets, as counterfeit products are a big issue in these markets. Hence, companies should register their products/brands to protect their trademarks.

### 4. Competition

International FMCG companies acknowledge the future potential of these countries, and are expanding in some of the identified countries. Notable among them are Unilever, Nestle, P&G and Danone. Nestle has manufacturing locations in Nigeria, Kenya, Mozambique and Ghana, among others. Danone recently acquired Fan Milk International, a frozen dairy products company with 85% and 89% market share<sup>7</sup> in Nigeria and Ghana, respectively. Similarly, Unilever and P&G are investing heavily in setting up manufacturing locations and establishing distribution networks in these countries.

Apart from these international FMCG companies, the main competitors are local business houses. Local business houses have been present in these markets for a long time, and own some very popular local brands. A common business strategy used by these local players is to sell cheap products in high volumes, as the majority of end consumers are poor. These local houses are politically well connected, and in some cases, have enough leverage to either prevent companies from entering the market or drive them out by creating various roadblocks using their political nexuses.

### 5. Market Entry

Companies mindful of the risks associated with conducting business in these African countries prefer to enter the market through trade. The company develops a better understanding of the market after trading for two to three years, and

subsequently decides whether to establish onshore presence. For example, Unilever traded its products in Algeria from Morocco for many years before finally building a factory and setting up its own distribution network. Companies interested in Africa also tend to cluster countries they plan to enter based on various parameters to realize potential synergies. The key synergies can be categorized as (1) tariff/duty benefits – e.g. Kenya, Tanzania and Uganda can be clustered together as they fall under COMESA; (2) Scale benefits – e.g. Angola and Congo DRC can be clustered together due to their geographical proximity and the fact that, where possible, duplication of business functions can be prevented; (3) miscellaneous benefits – e.g. viable TV channels common across countries in the cluster can lead to advertising overflow synergy (common TV channels) for common brands.

Another significant need when planning market entry in Africa is to establish strong partnerships. Based on the requirements of the entrant, a partner can bring local regulatory knowledge and political contacts, knowledge of the local FMCG market, access to local distribution network, etc. However, even more important than establishing a partnership is selecting the right partners. Inability to choose the right partner may jeopardize the entire business. The two most important parameters in selecting the partners are “aligned vision” and “transparency”. When formulating a partnership, the option to acquire the partner’s stake at a later stage should be considered by inserting a clause into the JV agreement.

In the selected countries, acquisitions are rare and not usually aimed at acquiring local brands, as these brands don’t command significant premiums, unlike in BRICS countries, where global FMCG players acquired local brands to gain market share. (For example, Coca-Cola entered the Indian market with the acquisition of local cola brand “Thumbs Up” to gain a significant market share.) Instead, the underlying reason for most acquisitions in these African countries is to gain access to a local distribution network.

Companies can also use a hub and spoke model to serve the African market. One or more countries can be established as a hub to service other African countries. E.g. Ghana is considered a gateway to West Africa. Ghana stands out in terms of relative ease of doing business compared to its other West African counterparts and can hence be used as a base to serve other West African markets.

As highlighted earlier, despite some commonalities across the selected geographies, there are differences that need to be understood. Country-specific FMCG sector insights are outlined below.

<sup>7</sup> Business Day Live publication

## Nigeria

Nigeria has a total population of 166 million, and the middle class is approximately 23%. With total food and non-alcoholic beverage consumption of approximately US\$64 billion per annum and expected GDP per-capita growth of approximately 4% (until 2025), Nigeria offers significant opportunities for FMCG companies.

Modern trade constitutes about 3–5% of total retail sales; the remainder is split evenly between convenience stores and table-top shops. In terms of distribution network, the majority of FMCG companies supply directly either to “Key” distributors or to local importers. Nigeria has about 120 Key distributors, which cover the entire country. Trading usually occurs in a large wholesale city market in Lagos, where the retailers, usually owners of convenience stores and table-top shops, purchase the goods from Key distributors. Vans are used to reach retail shops in distant locations. The majority of transactions are conducted using cash.

Nigerian consumers display high brand loyalty and exhibit a strong preference towards foreign brands. For marketing, a large share of the advertising dollar, about 30%, is spent on radio spots.

Nigeria’s local regulatory red tape is one of the biggest deterrents for multinational corporations looking to enter the FMCG market.

## Ethiopia

Ethiopia has a total population of approximately 87 million, and the middle class is approximately 21.5%. With total food and non-alcoholic beverage consumption of approximately US\$13 billion per annum and expected GDP per-capita growth of approximately 6% (until 2025), Ethiopia is another country that offers an attractive opportunity for FMCG companies. Annual per-capita consumption in Ethiopia is lowest among the selected African countries at approximately US\$150, resulting in food money being spent mainly on wheat and oil, while other snacks, such as biscuits, are considered luxuries.

Despite adequate infrastructure in terms of road connectivity and electricity surplus, local manufacturing (especially by international FMCG companies) in Ethiopia is very limited due to lack of port access required for sourcing raw materials. Most foreign companies import and distribute their products through local importers, which, in turn, sell the products directly to convenience store owners/wholesalers in an open market in the town center. The majority of transactions are conducted using cash. In Ethiopia, 83% of the population lives in small towns

and villages spread across the country; hence, setting up a nationwide distribution network can be challenging.

Similarly to other selected countries, Ethiopians exhibit strong brand affinity, especially towards imported FMCG products, which are available in abundance due to lack of local manufacturing facilities. The bulk of branding occurs through billboards; however, radio and TV are increasingly being used as alternative advertising media.

The Ethiopian government is quite receptive towards FDI investments, and provides assistance to external investors.

## Kenya

Kenya has a total population of approximately 43 million, and the middle class is approximately 45%. Kenya has a total food and beverage consumption of approximately US\$11 billion per annum, and expected GDP per-capita growth of 3% (until 2025). The Kenyan FMCG market is similar to the Nigerian market in terms of consumer preferences and distribution network, except that modern trade has grown faster in Kenya due to the growth of the tourism sector. Modern trade comprises 10–15% of total retail sales in Kenya. In addition, an increasing number of FMCG companies are setting up local manufacturing units to cater to the needs of local as well as neighboring countries’ markets.

In addition to advertising through TV, radio and billboards, branding also takes place through sampling in modern trade outlets.

Similarly to Nigeria, Kenya is infamous for its red tape.

## Tanzania

Tanzania has a total population of approximately 48 million, and the middle class is approximately 12.1%. Although the Tanzanian total food and beverage consumption of US\$8.1 billion per annum is smaller compared to markets in some of the other selected countries, it is expected to grow at a fast pace in the coming years, as the GDP per capita is anticipated to grow at approximately 5% (until 2025). The modern trade is less developed in Tanzania and constitutes only about 2% to 3% of total retail sales.

Consumers in Tanzania are poorer than consumers in Nigeria. This limited purchasing power has an impact on purchase behavior. Tanzanians prefer buying smaller packages, and often scoop from the large containers displayed at retail stores. Packaging of larger containers (usually plastic) is important, as these containers are often recycled and used for other purposes, such as transporting water or storing other goods.

Advertising is mainly executed through wall and van paintings, as well as some basic TV advertising. Radio also corners a relatively large share of the advertising dollar, as Tanzanians spend a large amount of time in traffic listening to radio channels.

The Tanzanian market is dominated by a handful of large local business groups, which are politically well connected and dominate the market. They play a critical role in preempting the entry of foreign players. Companies considering investing in Tanzania should pick their local partners diligently and act in a discreet manner to avoid catching the attention of large local business groups and facing operational disruptions.

## Uganda

Uganda has a total population of approximately 36 million, and the middle class is approximately 18.7%. Uganda has a relatively small food and beverage consumption of approximately US\$6 billion per annum and expected GDP per-capita growth of approximately 4% (until 2025). The Ugandan market exhibits a lot of similarities to the Kenyan market, although as a whole the country is less developed than Kenya. Modern trade constitutes about 3% to 4% of overall retail sales, and wholesale trade constitutes a large percentage of the market. Wholesalers, in turn, sell to table tops that are widespread in both towns and rural areas.

There is some local manufacturing, but a large number of products are imported from Kenya.

The population in Uganda is more concentrated geographically compared to other countries; hence, it is easier to reach through a distribution network.

## Mozambique

Mozambique has a total population of approximately 25 million, and the middle class is approximately 9.4%. Mozambique has a relatively small food and beverage consumption of approximately US\$5.1 billion per annum, but high expected GDP per-capita growth of approximately 6% (until 2025). Mozambique enjoys a stable political environment and growing disposable income across its 25 million inhabitants due to planned expansion in the oil & gas sector. Modern trade has been growing steadily over the past few years and currently constitutes about 5% of total retail sales. Import duties in Mozambique are approximately 20%, well above the African average of 16–17%. However, due to a free-trade agreement with South Africa as part of SADC (South African Development Community), large volumes of goods are imported from South

Africa, which results in a strong presence of South African goods in the local market.

Mozambique has a high number of cash-and-carry outlets, which are very popular. Some distribution also happens through vans. From a long-term perspective and to develop strong brands, onshore presence is necessary.

## Angola

Angola has a total population of approximately 20 million, and the middle class is 38.1%. Angola has a relatively small food and beverage consumption of approximately US\$6.3 billion per annum and expected GDP per-capita growth of approximately 3.3% (until 2025).

Angola has five major importers, which have warehouses and stores in seven cities. The income levels are higher, and modern trade is expected to grow faster than in some of the poorer countries. Unlike in Kenya, local manufacturing is minimal, and required goods are mainly imported. Hence, Angola presents a better opportunity for potential entrants. The regulatory regime is open to new investors. However, obtaining visas can be an issue, and investors/expats are not welcomed by the locals, as they are perceived to take the nation's wealth out.

## Ghana

Ghana has a total population of approximately 26 million, and the middle class is 46.6%. Ghana's food and beverage consumption is approximately US\$8.9 billion per annum and expected GDP per-capita growth is approximately 3.7% (until 2025). As Ghana begins to ramp up its crude oil production, per-capita income is expected to grow which in turn will fuel the consumption in Ghana.

The FMCG sector in Ghana is highly competitive, with many global FMCG players such as Unilever, P&G and Nestle already present in the market.

# Conclusion

---

International FMCG companies are eyeing the African market for investment and future growth. Due to various challenges faced by businesses in African markets, companies are entering in selected African countries and, as a result, these markets are beginning to saturate. For companies planning to enter/expand in Africa, the key is to look beyond the obvious and invest in other emerging economies in the African continent for sustained growth. Based on GDP growth, middle-class population percentage, market saturation, market potential and market risk, countries in Africa that should be considered by FMCG companies for future investments are Nigeria, Ethiopia, Kenya, Ghana, Tanzania, Angola, Uganda and Mozambique.

In order to be successful, FMCG companies should study in detail the FMCG markets in the selected countries. Though there are several commonalities across the FMCG markets in these selected countries, each FMCG market has its own unique features, including consumer preferences, distribution infrastructure, branding and advertising, retail channels and regulatory environment, which should be taken into account when formulating an entry strategy .

During recent years Arthur D. Little has supported numerous clients in assessing foreign markets and developing optimal market entry strategies for FMCG industry in countries in South America, Middle East and Africa. Arthur D. Little has conducted successful in depth market assessments in a resource and time efficient manner to enable senior management in decision making. We consistently strive to provide pragmatic recommendations to the client that provides maximum value to the client.

# Notes

---





# Contacts

---

If you would like more information or to arrange an informal discussion on the issues raised here and how they affect your business, please contact:

## **Austria**

Wilhelm Lerner  
lerner.wilhelm@adlittle.com

## **Italy**

Saverio Caldani  
caldani.saverio@adlittle.com

## **Singapore**

Thomas Kuruvilla  
kuruvilla.thomas@adlittle.com

## **Belgium / Luxemburg**

Dirk Luyten  
luyten.dirk@adlittle.com

## **Japan**

Maki Kurosawa  
kurosawa.maki@adlittle.com

## **Spain**

Salman Ali  
ali.salman@adlittle.com

## **China**

Antoine Doyon  
doyon.antoine@adlittle.com

## **Korea**

Daesoon Hong  
hong.daesoon@adlittle.com

## **Switzerland**

Wilhelm Lerner  
lerner.wilhelm@adlittle.com

## **France**

Aurelia Bettati  
bettati.aurelia@adlittle.com

## **Malaysia/Middle East**

Thomas Kuruvilla  
kuruvilla.thomas@adlittle.com

## **UK**

Richard Eagar  
eagar.richard@adlittle.com

## **Germany**

Wilhelm Lerner  
lerner.wilhelm@adlittle.com

## **The Netherlands**

Martijn Eikelenboom  
eikelenboom.martijn@adlittle.com

## **USA**

John Brennan  
brennan.john@adlittle.com

## **India**

Ashish Chandra  
chandra.ashish@adlittle.com

## **Nordics**

Daniel Roos  
roos.daniel@adlittle.com



## Arthur D. Little

As the world's first consultancy, Arthur D. Little has been at the forefront of innovation for more than 125 years. We are acknowledged as a thought leader in linking strategy, technology and innovation. Our consultants consistently develop enduring next generation solutions to master our clients' business complexity and to deliver sustainable results suited to the economic reality of each of our clients.

Arthur D. Little has offices in the most important business cities around the world. We are proud to serve many of the Fortune 500 companies globally, in addition to other leading firms and public sector organizations.

For further information please visit [www.adl.com](http://www.adl.com)

Copyright © Arthur D. Little 2014. All rights reserved.

[www.adl.com/FeedTheLion](http://www.adl.com/FeedTheLion)