

A Land of Opportunity?

Dom Pavlopoulos and Claudia Stefanoiu, Cement Business Research, provide a market analysis of the cement industries in East Africa.

This article offers a regional review of five East African cement industries, based on a recently published report by Cement Business Research (CemBR). CemBR is a research firm addressing the global cement sector. The following markets are assessed in this regional report: Ethiopia, Kenya, Mozambique, Tanzania, and Uganda.

The current situation

The region has one of the lowest cement consumptions per capita globally, while exhibiting strong urbanisation growth. This offers an opportunity for the region to grow significantly, assuming that certain conditions are satisfied.

Currently, the region has a population of 292 million and cement demand of just

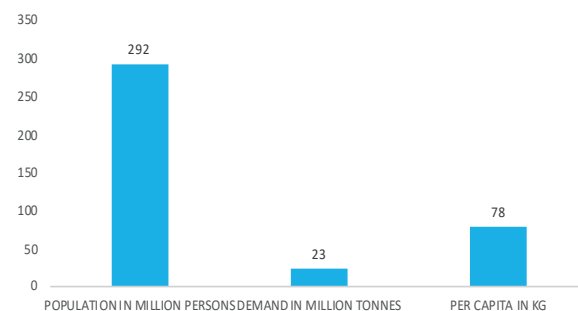


Figure 1. Population, demand, and per capita consumption.

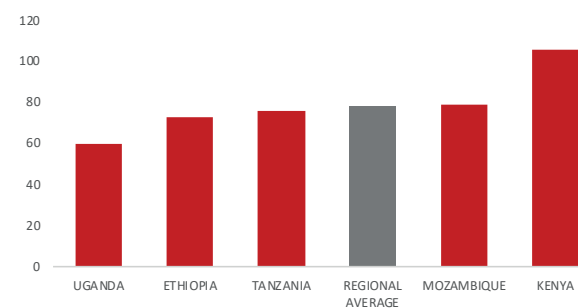


Figure 2. Per capita consumption in the region in 2017.

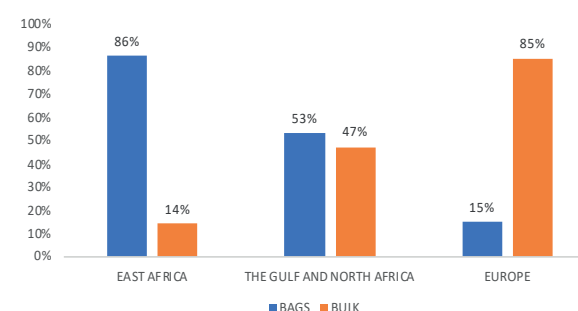


Figure 3. Bags vs bulk regional percentages.

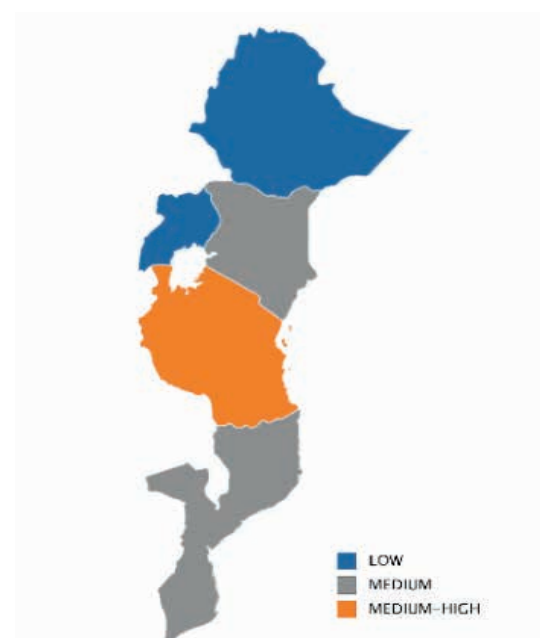


Figure 4. International trading assessment matrix – results.

23 million tpy. As a result, the regional average consumption per capita is only 78 kg.

Per capita consumption throughout the region is low – one of the lowest globally. Some markets are higher consumers than others, with Kenya outperforming the rest by a significant margin and Uganda lagging behind.

The current demand of 23 million tpy is met by a regional supply of approximately 51 million tpy from 30 integrated plants and 34 grinding plants. These figures result in a Domestic Capacity Utilisation Factor (DCUF™ – domestic demand/domestic capacity) of 45%. The individual markets exhibit varying supply-demand characteristics, although interestingly their DCUFs are all fairly similar. This is with the exception of Mozambique, which has a DCUF of around 37%.

Vertical integration in the region is fairly low, with the ready-mixed concrete (RMC) market being under-developed in most markets examined and onsite mixing still prevalent. Cement is sold in both bags and bulk; however, bulk cement sales are a relatively new concept for the region and are still significantly lower than bagged sales. The region is at the low end of development regarding the bags vs bulk split. Figure 3 shows the percentage of sales of bag and bulk for East Africa, the Gulf and North Africa, and Europe.

Demand projections

The future outlook for the region in terms of cement demand is positive overall. As a result, the DCUF for the region is projected to improve from 45% in 2018 to 52% in 2023, as demand is expected to grow at a slightly higher rate than supply. The increase in demand is expected to go from 22.8 million tpy to 36.9 million tpy, accompanied by an increase in supply from 50.9 million tpy to 71.5 million tpy. The various markets within the region are projected to grow at similar rates of demand, with the exception of Mozambique, which is expected to grow at a slower rate than the rest of the region. On the other hand, capacity additions vary considerably within the region. If all mooted cement plant projects are commissioned, Tanzania could double its existing capacity over the next five years, whereas Ethiopia and Mozambique are expected to add much smaller levels of capacity.

The demand projections are risk adjusted by asking the following questions: is there a need for such growth? Does the country/industry have the capability to deliver such growth? Is funding available to support such growth?

The results from these assessments vary from country to country. In some, demand projections are judged to offer upside potential, whereas in others the risk is on the downside. Using

Ethiopia as an example, the country's cement market is expected to grow significantly over the next five years on the back of robust economic growth driving a clear need for increasing cement consumption. However, there are issues facing the capability to deliver the expected demand, as well as issues surrounding the required funding. These issues are detailed in the report.

International Trading Assessment Matrix

In similarity to other regions around the world, the last few years of capacity additions have led to significant oversupply. As a result of this, the report assesses the ability and potential of each market to export its excess capacity. For this purpose, the report examines the International Trading Assessment Matrix (ITAM™) tool. This tool is also applied to imports where needed (e.g. clinker and coal imports). The criteria examined in ITAM are the following:

- Trade supporting legislation.
- Port infrastructure and capacity.
- Existence of coastal plants.
- Cost of haulage.
- Economics of trading.

The individual markets in this report have varying ITAM scores for several reasons. For

example, Uganda's ITAM is lower than others in the region, due to the fact that it is landlocked and therefore unable to benefit from seaborne trade. Kenya, on the other hand, has a higher ITAM score, driven by its streamlined access to clinker and coal imports. However, when exporting, Kenyan cement companies are restricted to land transportation, which limits its competitiveness when compared to cheaper Asian imports or regional competitors, who report better economics of trading overall.

An overall assessment was made for each country. Figure 4 shows a graphical representation for the ITAM findings for the region.

The DCUF and ITAM combined examine the propensity and ability of each market to export/import. In addition, CemBR assesses each industry's existing or potential destination markets to see whether exporting excess capacity is a viable solution.

In many cases in this region, exporting large quantities of cement is challenging. There is an overall excess capacity in the region, which implies that deficit destination markets in the vicinity have dried out. Furthermore, as a result of the regional excess capacity, all exporting markets face fierce competition from traditional exporters, as well as each other. As a result, exporting may prove difficult for the region.

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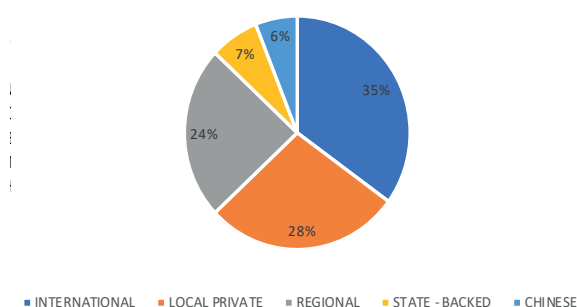


Figure 5. Nature of capacity owners in the region, as calculated by the ownership of cement capacity.

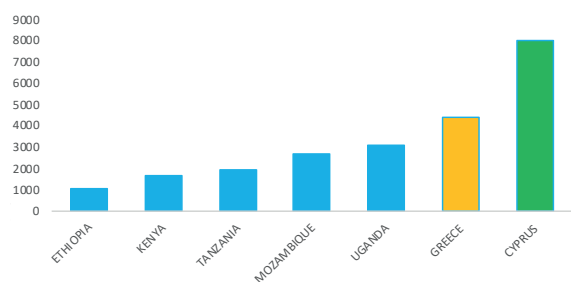


Figure 6. Consolidation index.

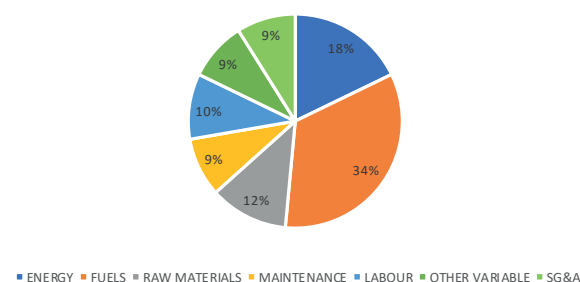


Figure 7. Regional cost breakdown.

Industry Structure Dynamics

Industry Structure Dynamics (ISD™) examine in detail the nature of participants, the consolidation index of the industry, and the cost structure and dynamics of the industry. The findings of the ISD are informative and insightful. The nature of participants determines their behaviour in a given market, whereas a highly consolidated industry provides useful messages regarding prices going forward. The industry cost structure and dynamics show the current situation of the industry in terms of technology, improvement potential, and industry profitability. Some of the regional findings of ISD are shown in Figure 5.

The nature of participants provides some very useful insights into each industry. For example, the prevalence of international players should signify a high level of vertical integration. With international players representing 35% of regional capacity, higher levels of vertical integration would be expected. However, due to the unregulated and underdeveloped RMC market, cement producers have chosen to eschew vertical integration, opting to take control of their distribution channels instead.

The current nature of participants for the region is shown in Figure 5. It should be noted that this is expected to change over the next five years as new capacity comes on stream.

Another useful tool within ISD is the industry consolidation (consolidation index), which provides a view of the competitive situation within a market. The lower the consolidation index, the more fragmented a market is and vice versa. The consolidation characteristics that the region exhibits are shown in Figure 6.

Figure 6 shows the consolidation indexes of all markets in the region, as well as Greece (consolidated) and Israel and Cyprus (highly consolidated). The markets in the region are highly fragmented, with Ethiopia being the least consolidated in the region.

At the integrated level, on average the region shows the production cost breakdown shown in Figure 7.

Conclusion

The individual cement markets have different production cost profiles. For example, fuel costs in Ethiopia are more important (47% from total cost vs the average of 34%). Although the country has large deposits of coal and natural gas, they are not yet extracted at a large scale. Consequently, the cement sector is dependent on costly coal imports from South Africa. By contrast, Uganda's fuel costs are rated below the regional average, being the country with the highest overall alternative fuel substitution rate (40%).

The region offers the highest growth potential in the global cement sector. However, recent capacity additions and relatively high industry fragmentation has led to diminishing financial results across the board. The case of Kenya-based ARM Cement, currently in administration, is a stark example of these unfavourable conditions. Looking ahead, the region may need to adopt a more consolidation-driven strategy, while allowing cement growth to absorb the current excess capacity. ■

About the authors

Dom Pavlopoulos has been instrumental in developing and launching CemBR, where he has assumed roles in both sales and marketing, and in research and analysis in the cement sector.

Claudia Stefanoiu is the Head of Research at CemBR. Claudia has been a senior researcher and consultant in the cement and building materials industries for over a decade, accumulating extensive experience in producing off-the-shelf and bespoke reports for cement companies and financial institutions around the world.