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CCM/MS/001

STUDY OF THE MARKET FOR CEMENT IN MAURITIUS

EXECUTIVE DIRECTOR'S REPORT

7TH APRIL 2011

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Executive Summary

This is the report of the Executive Director of the Competition Commission of Mauritius (CCM) to the Commission on his findings of the study of the market for cement in Mauritius. The Commission may consult the various stakeholders about their views on the report and more generally on competition in the cement market. It is expected that this consultation will take place through open Hearings.

The purpose of the study, launched in July 2010, was to understand the conditions of competition and recommend action by the Government, if necessary.

Mauritius is a cement importing country, with estimated annual demand at 650,000 tonnes or roughly 500 kg per capita. This is a highly concentrated market with only Lafarge (Mauritius) Ltd and Holcim Cement (Mauritius) Ltd in the distribution of Ordinary Portland Cement Grade 42.5N at the wholesale level. The market is also subject to State intervention through three interlinked mechanisms: (i) price controls on bagged cement; (ii) imports of cement by the State Trading Corporation (STC); and (iii) import control. Current regulations provide that the State determines the total quantity of cement to be imported into the country, of which 50% is ordered by the STC via open tender. The STC does not take delivery but instead requires the two firms currently operating to purchase the ordered cement.

We have assessed the impact of the regulatory framework on the conditions of competition in the cement market and to a limited extent other barriers to entry. We find that competition in the market is constrained by State interventions, mainly by deterring new entry, preventing expansion of existing companies and restricting cement to only one variety.

The options for reforms include complete liberalisation (i.e. price deregulation and imports liberalisation) which can bring considerable benefits in terms of different varieties of cement on the market, new entry and expansion and encourage innovation. The other two options are: (i) price liberalisation with import quotas; and (ii) import liberalisation with price controls.

Liberalisation of prices without removing import controls is unlikely to result in benefits for consumers, as importers will have little incentive to compete for one another's customers if they are constrained in their ability to source cement. Liberalisation of imports without removing price controls is more feasible, but the price controls might deter new entry, and an alternative approach to assessing world market prices must be found.

The major issue for the Commission and thereafter for recommendation to the Government is on the sequencing of the liberalisation, if the latter decides to do so. On one hand, liberalisation prior to entry increases the risk of catelisation and price collusion in a highly concentrated market. But now that Mauritius has a competition law, penalties are in place for such behavior, along with an expert body to enforce the law in the Competition Commission. On the other hand, price controls might discourage entry of firms that is expected to make the market more competitive.

1. Introduction

1.1 Mauritius is a cement importing country. It imports around 630,000 tonnes[1] of cement each year. Cement is an integral part of the construction sector, a key sector of the economy which underpins economic growth. This is a study of the market for cement in Mauritius.

1.2 The study was launched by the Competition Commission of Mauritius (CCM) on 1st of July 2010 under section 30 (h) of the Competition Act 2007 (the Act) which empowers the Executive Director of the CCM to undertake general studies on the effectiveness of competition in individual sectors of the economy. A market study is not an investigation of restrictive practices (investigations of infringement of the Competition Act).

1.3 The objective of a market study is to understand (and publicise) conditions of competition in a sector and the reasons for any lack of competition, and if necessary to recommend action by Government. Our focus is necessarily solely on competition. The CCM has no authority or expertise to investigate environmental matters, for example, or any alleged breaches of law other than the Competition Act. It would be for Government to take such wider concerns into account when considering any recommendations we might make.

Purpose of the study

1.4 The present study relates to the market for cement in Mauritius. We understand that the cement market is highly regulated in terms of prices being fixed by Government and import/export permit requirements for trade in cement. The study aims at assessing how the current regulatory framework and business environment affect the level of competition in the cement sector.

1.5 In carrying out the study, we have benefited from constructive discussions with various stakeholders, including Lafarge (Mauritius) Cement Ltd (Lafarge Mauritius), State Trading Corporation (STC), Holcim (Mauritius) Ltd (Holcim Mauritius) and the Ministry of Industry and Commerce (MoIC). In addition, we have received a detailed written submission from Holcim Mauritius.

Report Structure

1.6 Chapter 2 of the report gives an overview of the cement market including the type of cement being imported into the country, market structure, supply chain and patterns in cement importation and consumption. Chapter 3 reviews the various legislations underlying the cement market and elaborates on the retail pricing mechanism as well as the role of the STC in the cement market. Together, these two chapters provide the necessary context for understanding the rationale for state intervention in the market for cement.

[1] 'tonnes' means metric tons

1.7 Chapter 4 provides an assessment of the competition issues in the cement market, in particular state intervention through price control, import control and the involvement of the STC in the importation of cement.

1.8 Chapter 5 sets out policy options for dealing with the competition issues identified in the earlier chapter, i.e. the extent to which the market for cement can be liberalized and the associated advantages and disadvantages with these options.

1.9 Finally Chapter 6 indicates the various steps from now onwards.

1.10 This report was drafted by the Executive Director of the CCM and his staff, and is not a publication by the Commission itself. The Commission will decide whether to endorse the report.

2. Overview of the Cement Sector

Background

2.1 Mauritius is a cement importing country. The country's estimated yearly consumption[2] of cement is around 650,000 tonnes per year, which correspond to roughly 500 kg per capita. The country imports ordinary portland cement. Currently, there are no cement manufacturing plants[3] in Mauritius.

2.2 The cement market is highly regulated. Pursuant to law[4], cement is a controlled product and subject to maximum price controls. Trade in cement is also regulated; import and export permits are required.

2.3 There are three cement operators importing bulk cement in Mauritius: the STC, a state-owned enterprise, and two private operators, namely Lafarge Mauritius and Holcim Mauritius. The estimated share[5] of imports for the STC is 50% and the remaining 50% is shared between Lafarge Mauritius and Holcim Mauritius.

2.4 The cement market is likely to undergo major structural changes with the coming of new operators establishing cement manufacturing plants in Mauritius. Two cement operators, namely Binani Cement Ltd and Oriental Group (Mauritius) Industry Ltd, have recently obtained their Environmental Impact Assessment licenses for manufacturing cement (grinding of clinker) in Mauritius. The Mauritius Chemical & Fertilizers Industry Ltd (MCFI) is also contemplating to set up a cement manufacturing plant in Mauritius.

Government Intervention in the Cement Market

2.5 Government decided to import cement, through the STC, in 1984. Prior to that, Lafarge Mauritius was the sole importer and distributor of cement in Mauritius. Holcim Mauritius, formerly known as Ciment de L'Ocean Indien Ltee, started operations in Mauritius in 2000 in partnership with Gamma Civic Ltd (Gamma), a local construction company.

2.6 We are given to understand that in the early 1980's; Mauritius was facing supply-side constraints which were harming the construction sector. The sole importer of cement, Lafarge Mauritius, was not in a position to meet the country's demand for cement. Also, during that period the price of cement went up significantly.

2.7 In 1984, the STC started importing 25% of the country's total demand and the remaining 75% was imported by Lafarge Mauritius. As from the year 2000, the STC's share of importation of cement

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[2] Based on interviews with various economic operators in the cement and cement related sectors
[3] Binani Cement Factory (Mauritius) Ltd has been incorporated in May 2009 and Oriental Group (Mauritius) Industry Ltd in October 2009.
[4] Consumer Protection (Price and Supplies Control) Act 1998
[5] Based on meetings with various operators in the cement market.

has increased to 50% of the annual demand, currently estimated at 650,000 tonnes, and the remaining 50% is shared between the two cement companies, namely Lafarge Mauritius and Holcim Mauritius. The table below summarises the share of imports for the three operators:

Table 1: Indicative Share of Importation of Cement in Mauritius (%)

Year	STC	Lafarge Mauritius	Holcim Mauritius
Prior to 1984	-	100	-
1984	25	75	-
1985-2000	50	50	-
2000-2003	50	25	25
2004-2005	25	37.5	37.5
2006	33	33.5	33.5
2007-onwards	50	25	25

Source: CCM, compiled based on factual meetings

Sourcing of Cement Imports

2.8 Lafarge Mauritius and Holcim Mauritius import cement directly from the trading arm of their parent company, namely Marine Cement Ltd and Holcim Trading Pte Ltd respectively. The STC buys cement on the basis of international tenders. There are many manufacturers/suppliers of cement which participate in the international tenders launched by the STC; including Marine Cement Ltd and Holcim Trading Pte Ltd as well as cement traders like Emirates Trading Dubai and Itochu Singapore. The table below summarizes the award made in respect of the supply of cement to the STC for the period 2003 to 2010.

Table 2: Sourcing of Cement Imports by the STC

Period	Supplier	Contract Quantity (metric tons)
01 Mar 10 – 31 Dec 10	Marine Cement Ltd	250,000
01 Mar 09 - 28 Feb 10	Holcim Trading Pte Ltd	300,000
01 Jan 08 - 31 Dec 08	Emirates Trading Agency LLC (Dubai)	300,000
01 Jan 07 - 31 Dec 07	Marine Cement Ltd	200,000
01 Jan 06 - 31 Dec 06	Marine Cement Ltd	200,000
01 Jan 05 - 31 Dec 05	Marine Cement Ltd	150,000
01 Jan 04 - 31 Dec 04	Itochu Singapore	150,000
01 Jan 03 - 31 Dec 03	Holcim Trading S.A.	150,000

Source: STC's website - http://stc.intnet.mu

Processing and Distribution of Cement in Mauritius

2.9 The role of the STC is limited to the importation of cement. Once cement consignments ordered by the STC reach Port Louis, these are sold to the two private cement operators; Lafarge Mauritius and Holcim Mauritius. Unlike the STC, these two companies have storage, packaging and distribution facilities. In addition, Holcim Mauritius is the only company to own and operate an inland cement unloading facility with its Kovako shore-unloader.

2.10 Lafarge Mauritius seems to have around 55% and Holcim Mauritius 45% market share in the distribution of cement in Mauritius.

2.11 The total cement storage capacity at the port area is around 95,500 tonnes; Lafarge Mauritius has 9 concrete silos with a total store capacity of 35,500 tonnes of cement and Holcim Mauritius has 2 flat silos with a storage capacity of 40,000 tonnes and 20,000 tonnes of cement each.

2.12 Government decides on the volume of cement to be imported by the STC and the two private cement operators. We are given to understand that the STC sells the cement it imports in equal quantities to Holcim Mauritius and Lafarge Mauritius.

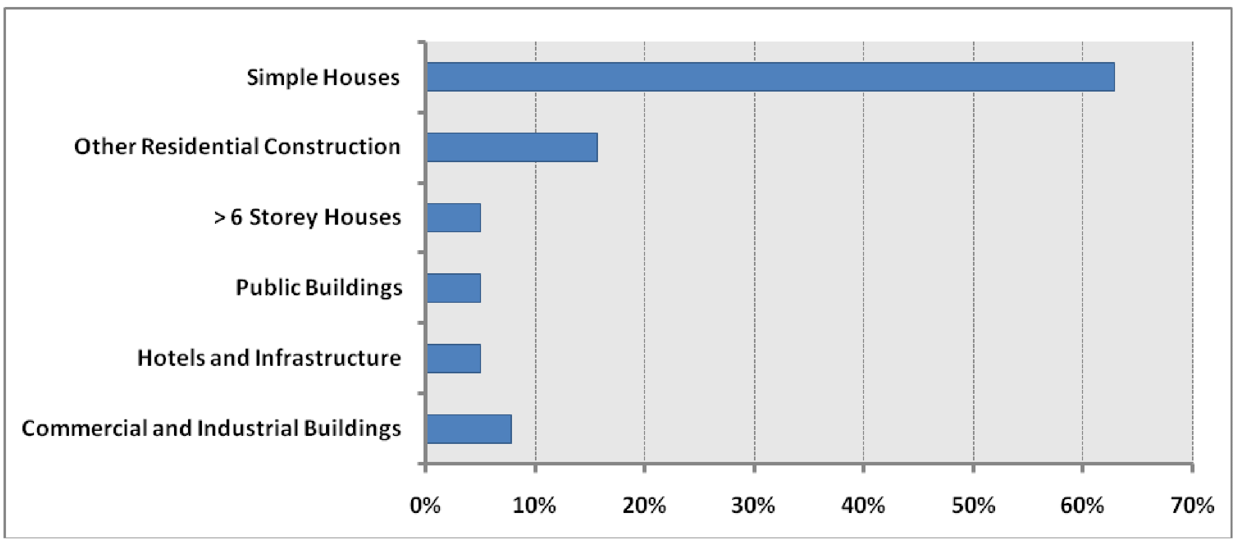
2.13 Both companies have their own bagging plant, situated within the port area. With its three bagging lines, Lafarge Mauritius claims to have a bagging capacity of 5,000 bags per hour in ideal conditions.

2.14 Cement is sold in bags of 50 kg and 25 kg as well as in bulk. Bulk cement is sold to companies in the construction industry for the purpose of manufacturing ready-mixed concrete and mortar. It is estimated that 40% of cement is distributed in bulk and the remaining 60% in bags.

2.15 Annual cement consumption is about 630k-680k tonnes, which represents around 500 kg per capita. The per capita cement consumption is high, at a level equal to that in industrialized economies, but the composition is different. Private cement consumption in Mauritius is high compared to industrialized economies, but infrastructure consumption is low.

2.16 Cement is used for commercial and industrial buildings, hotels and infrastructures, public buildings, houses and other residential constructions. The estimated shares of cement consumption for the different categories are shown below:

Table 3: Use of cement by category



Source: Holcim Mauritius

Types of Cement

2.17 Currently the local market for cement is restricted to ordinary Portland cement Grade 42.5. Based on interviews with market players and the pattern of consumption, it appears that there is a high rate of mortar application. For instance, more than 60% of cement is used for simple houses and the mortar application rate for simple houses is 35%. For other commercial and industrial buildings, the mortar application rate is around 15%. This implies that there is a good market for lower strength cement types, i.e 22.5 and 32.5 and not necessarily 42.5.

New Entrants

2.18 Binani Cement Ltd has announced planned construction of a cement manufacturing plant with a capacity of 1 million tonnes of cement, targeting both local and export markets. Also, the Oriental Group (Mauritius) Industry Ltd has announced the capacity of its cement manufacturing plant to be 200,000 tonnes for the purpose of the Jin Fei Economic Zone project. Other local companies, including the MCFI, Holcim Mauritius and Lafarge Mauritius are also contemplating the setting up of cement manufacturing or blending plants in Mauritius.

3. Regulatory Framework

3.1 Cement, amongst other specified products, is a controlled product under the Consumer Protection (Price and Supplies Control) Act 1998 (Consumer Protection Act). The wholesale and retail prices of cement may be fixed by the Government. The Consumer Protection Act also empowers the Minister responsible for consumer protection to make such regulations as he thinks fit for this Act and for the purpose of regulating trade, supply and prices.

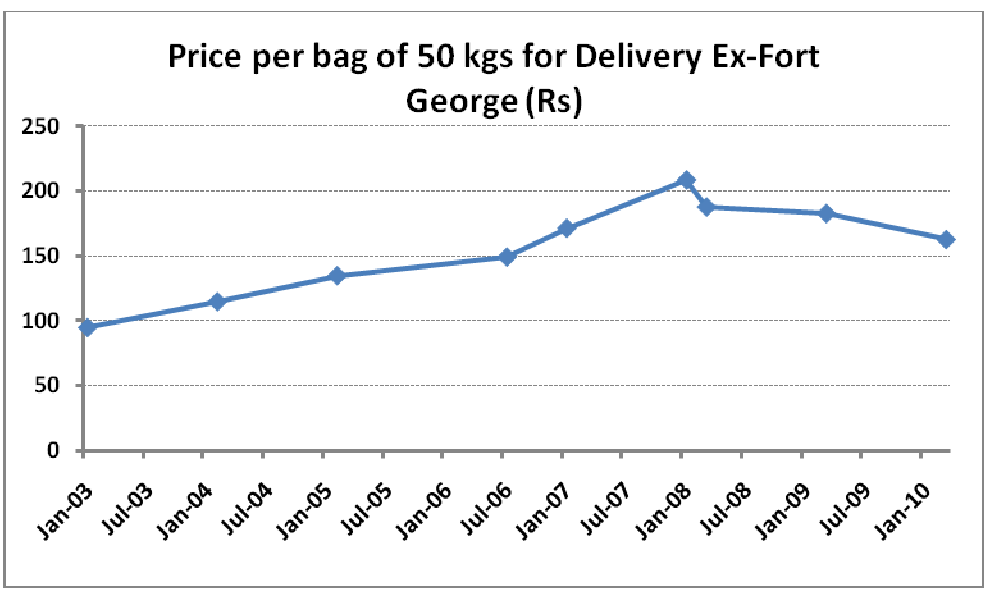
Pricing Mechanism

3.2 The fixing of the price of cement is done under the Consumer Protection (Consumer Goods) (Maximum Price) Regulations 1998, where every person who imports or manufactures cement shall apply to the Minister to fix the maximum price of the product.

3.3 The retail prices of bagged cement (50 kg and 25 kg) are fixed but that of bulk cement is not. Around 40% or 220,000 tonnes of cement is sold in bulk. We are given to understand that the regulated price of bagged cement constrains the price of bulk cement.

3.4 The retail price of bagged cement (50 kg bags) was first fixed by the Consumer Protection (Control of Price of Taxable and Non-Taxable Goods) Regulations 1998. These regulations were subsequently amended to include 25 kg cement bags. From time to time, amendments are brought to these regulations to reflect new prices, as fixed by the Government. The chart below shows the price of cement per bag of 50 kg for delivery at Ex-Fort George for the period 2003-2010. This price is adjusted for transportation costs and thus the price of cement across the country differs by that amount.

Chart 1: Evolution of cement price



Source: Ministry of Commerce and Industry

3.5 The pricing structure of cement is defined under the Consumer Protection (Provision for Incidental Matters) Regulations 2006. As per these regulations, the Permanent Secretary of the Ministry for Consumer Protection may, in respect of cement (bulk or bagged) or any other controlled goods, by written direction, provide for –

(i) the price structure ;

(ii) the collection by an importer an amount under the items "Price Equalisation Account" and "Exchange Loss Recovery Account"; and

(iii) the collection of an amount under the Rodrigues Subsidy.

3.6 The pricing structure of bagged cement (50 kg and 25 kg) includes the following items:

(i) CIF price of cement obtained by the STC on the basis of international tenders;

(ii) Cement unloading charges;

(iii) STC administrative charges;

(iv) Mauritian Rupee/USD exchange rate Rs/USD;

(v) Price Equalisation Account;

(vi) Rodrigues Subsidy;

(vii) Gross margin allowable to the private operators; and

(viii) Value Added Tax (VAT) of 15%.

3.7 The CIF price obtained by the STC on the basis of international tenders is used in fixing the retail price of bagged cement.

3.8 The unloading fee (currently USD 9 per tonne) is added to the CIF price when the cement consignments from STC are on conventional vessels. The unloading fee is for the services of the Holcim's Kovako shore-unloader.

3.9 For the year 2010, USD 0.40 per tonne is included in the price structure to allow the STC to cover its administrative expenses related to the importation of cement.

3.10 For the purpose of fixing the prices of bagged cement, the exchange rate used to convert the USD CIF price into MUR (Mauritian Rupee) is fixed for a year. The Price Equalisation Account is included in the pricing structure of cement to create a contingency fund to compensate for any loss due to fluctuations in exchange rates.

3.11 The Rodrigues subsidy is provided for by way of regulations made by the Minister under Section 35(2)(b) of the Consumer Protection (Price and Supplies Control) Act 1998. The Rodrigues subsidy is a fixed amount levied on each bag of cement sold in Mauritius to cover for the transportation costs of bagged cement by ship to Rodrigues. The grant is collected by an importer of bulk or bagged cement.

3.12 The gross margin, which is fixed by the Government after consulting the private operators, along with the VAT of 15% are taken into account before arriving at the price of bagged cement.

Import and Export Controls

3.13 Pursuant to law[6], the Minister for Consumer Protection may make such regulations as he thinks fit for the purpose of regulating trade, supply and prices on controlled products. Import permit[7] and export permit[8] are required for the importation and exportation of cement. We are given to understand that under the current regulatory framework, the MoIC allocates import permits to the two private cement operators on a residual basis. The STC is currently importing 300,000 tonnes of cement (around 50%) of the country's annual requirement and the MoIC issues import permits for the remaining 50% to Lafarge Mauritius and Holcim Mauritius.

3.14 We are given to understand that the assessment of the annual requirement of cement is done by the MoIC. The private cement operators are consulted prior to finalizing the figure. The volume of cement to be imported by the STC is decided by the Government. We also understand that the volume to be imported by the STC is set to allow a tender of sufficient quantity to obtain a competitive price on the international market for cement.

[6] Consumer Protection (Price and Supplies Control) Act 1998
[7] The Consumer Protection (Control of Import) Regulations 1999
[8] The Consumer Protection (Export Control) Regulations 2000

4. Assessment of competition issues in the cement sector

4.1 In a competitive market, prices and output are determined by the forces of demand and supply. The advantages of a competitive market are, *inter alia*, encouraging firms to innovate, expand and adopt cost effective production techniques. Competitive markets also result in lower prices, more choice and better quality to consumers.

4.2 If the scope for competition is constrained, then some of these benefits will be lost. To have a truly competitive market, sellers must be free to set different prices, with choices by consumers rewarding those with the best offers and penalizing those with the worst ones. It must also be possible for more successful firms to expand sales, acquiring market share from their less-successful rivals. In the longer term, new potential suppliers must be able to come into the market, possibly displacing less efficient existing players. And ultimately, suppliers which are unable to compete effectively must be allowed to fail. No real-world market is perfectly competitive, but without these basic elements, a competitive process cannot produce good outcomes.

4.3 The cement sector in many countries is subject to government regulations, many of which limit one or the other of these conditions for competition. However, it must be recognised that there are *inherent* limitations on the likely level of competition in an unregulated market for cement, particularly in a smaller market because of the need for large scale production for the industry to be efficient. As a result, the sector is often dominated by a few multinational firms. This industry has a history of being found by competition authorities to have engaged in price-fixing and other abuses of competition law, at the national and international levels. This probably reflects the characteristics of the product itself: a bulk, undifferentiated commodity produced under conditions of economies of scale[9].

4.4 We understand that in Mauritius, the intention of the Government in intervening[10] in the cement market is to ensure security of supply of cement and for local consumers to benefit from a competitive cement pricing. Government's intervention in the cement market takes place through three interlinked, mechanisms:

(i) Retail price controls on bagged cement;

(ii) Imports of cement by STC; and

(iii) Import controls.

4.5 It is important to understand how the current regulatory framework fits together in achieving its objectives. In particular, we have to assess whether the existing regulatory framework is promoting or distorting competition in the cement market.

[9] Other industries such as chemicals, paper and aggregates, with similar physical characteristics, also have a long history of cartel actions by competition authorities.
[10] National Assembly Debate No. 5 of 27.03.2007

Regulation of Cement price

4.6 Given the high degree of concentration in the downstream wholesale market for cement, the rationale behind having price control seems to be primarily as a safeguard against excessive pricing. The STC told us that price control does not necessarily mean that the cement market is not doing well. As an illustrative example, the STC states that the entry of Holcim Mauritius in the year 2000 is in itself a proof that the exercise of price control was not a handicap that was preventing the market from evolving and innovating. The MoIC is also of the opinion that high market concentration could effectively constrain competition and that price control in such a market would be less distortionary. MoIC told us that price liberalization would work better in a market with more players.

4.7 Cement suppliers, however, told us that price control would not be in the interest of competition and eventually consumers, as it deprives them from having better quality and choice. For instance, Lafarge Mauritius told us that the price of bagged cement being fixed on the basis of international tenders launched by the STC is for OPC CEM1 (i.e. Ordinary Portland Cement Grade 42.5, full strength at 28 days) whereas within this category the chemical properties of the cement vary depending on the length of processing. STC's suppliers offer OPC CEM1 of the minimum quality (EN 197, as per European Norms) which requires shorter grinding period and hence lower cost of production compared to a superior OPC CEM1 in terms of chemical properties (mainly in terms of lower CA3 with higher resistance). Lafarge Mauritius is constrained to importing lower quality OPC CEM1 because the price of bagged cement is fixed based on this product. In addition, Lafarge Mauritius told us that it will be incurring losses if it were to import a higher quality of OPC CEM1 because the margin set within the price structure of cement is very tight. Thus, the cement price control is adversely affecting competition in the market.

4.8 Holcim Mauritius argues that the current price structure of cement that uses STC's tender price as reference price is limited in its attempt to obtain the best price. This is because of the inherent structural limitation adopted by the STC in finalizing freight. Although the STC purchases higher volume of cement (around 300,000 tonnes), delivery is restricted to 25,000 tonnes per shipment. In so doing, the STC is not benefiting from a lower freight rate that it could otherwise have obtained on a higher shipment capacity. Holcim Mauritius claims that it could have shipments up to a capacity of 45,000 tonnes compared to 25,000 tonnes. However, the STC cannot consider in its tender such large import volumes per shipment because of the capacity constraint of Lafarge Mauritius. The latter's stock capacity is limited to 35,000 tonnes. Consequently, the STC has been imposing on both cement distributors (Holcim Mauritius and Lafarge Mauritius) which purchase from it 25,000 tonnes vessels at higher freight costs. Holcim Mauritius also believes that it is being deprived from being able to maximise on its management of its own assets, in having additional storage capacity.

4.9 Holcim Mauritius also claims that there are no clear rules for the calculations of the Gross Margin, as with any other components of the price structure, namely Exchange Rate, and Price Equalisation Account. Each of these items is fixed at the sole discretion of the Ministry. As an example, Holcim Mauritius states that the Gross Margin has never taken into consideration the components of the cement bagging and distribution (e.g. cost of paper bags, Euro fluctuations, diesel price, cost of wear and tear and replacement). The current pricing system creates high level of uncertainty in the industry inhibiting investments; neither can returns be assured nor are they dependent on the competitiveness of the business itself. [✂][11] told us that the industry players cannot invest to become more efficient with a negative cost quality trade off which is passed on end users. [✂]

4.10 MCFI which is contemplating to set up a cement factory (clinker grinding) in Mauritius believes that neither fixing the price of cement nor regulating trade in cement in terms of import and export permits is in the interest of consumers, as controlled prices will not reflect market fundamentals. For example, if the world price of cement is on a downward trend a system of price control will deprive local consumers of the resulting benefit of the lower cement price. MCFI noted that in periods of rising world price of cement, fixed price contract is beneficial. Still, it would be better to let market forces operate for an efficient allocation of resources.

Our Assessment on Price Control

4.11 In a competitive market, price control is not warranted and the price of cement should be determined by the forces of demand and supply. However, the concern is the high degree of market concentration and the risk of price collusion between the two players if the prices were liberalized. Cement as an industry is particularly vulnerable to collusion between suppliers and has frequently been investigated for cartel activity by competition authorities worldwide.

4.12 The entry of new players in the industry will certainly reduce market concentration and hence the risk of collusion. If some or all of the new entrants presently considering importing cement or constructing facilities in Mauritius do indeed enter the market, then the prima facie case for price controls seems likely to fall away. Consequently, the Commission might recommend that Government should signal to new entrants that if they do make a commitment to enter the market, it will be into a market with liberalized prices.

4.13 That leaves the question of whether price controls should be lifted now, while there are only two private sector market participants. On the one hand, the history of the cement industry suggests caution, as collusive pricing has frequently been observed in the industry and with only two suppliers the danger is particularly high. On the other hand, the CCM is now in existence to prevent and if necessary penalize any such behavior. Furthermore, price controls might discourage the very entry that is expected to make the market more competitive.

4.14 The Commission should therefore explore in Hearings whether to lift price controls only following significant entry by new suppliers, or in advance of such entry relying on competition law to prevent abuses of the existing highly concentrated market structure.

[11] Commercially sensitive information

STC Intervention in the cement market

4.15 The STC currently imports half of the country's requirement for cement. We understand that the original intention was to ensure that there are no artificial shortages in the market. We also understand that the tenders help to establish a competitive price for cement, to assist in setting the price control at the right level.

4.16 Cement suppliers believe that the STC's intervention in the market for cement for the security of supply reason is no longer necessary. According to Lafarge Mauritius, the existing two cement operators have the capacity to the supply the whole market. With a total storage capacity of 90,000 tonnes, the potential throughput is around 1 million tonnes annually which is much higher than the estimated annual demand of 680,000 tonnes.

4.17 According to Holcim Mauritius, the most competitive process to sell cement to the cement operators in Mauritius is simply to let them import their own sales. It believes that the concept of using the STC to prevent a stock out situation is completely erroneous and has been so since the start of this scheme. The STC does not own any onshore cement storage facility implying that it cannot store or distribute cement. Another argument put forward by Holcim Mauritius is that with very few exceptions over the last years, the STC purchases its cement from either the supplier of Holcim Mauritius or Lafarge Mauritius. In such cases, therefore, if the STC has any problem with its supplier, Holcim Mauritius or Lafarge Mauritius would have the same problem on their direct volume purchase, and therefore the repercussions would be on 75% of the whole import volume.

4.18 [✄]

4.19 According to Holcim Mauritius, the effect of the STC's allocation of imports distorts the market when considered together with import restrictions. It argues that the current system of sharing imports equally would imply that the new entrant (assuming a third player) may automatically be given 33.3% of market share without any effort of its own, and with the STC and Government protection against any competition effort made by an existing operator to increase its market share into the 'reserved portion'.

4.20 Holcim Mauritius told us that the Competition Act 2007, with the internationally acknowledged concept of essential facilities and legislated heavy penalties, remedies and powers given to the Commission and Executive Director, would be a better watchdog to avoid cement shortages and enhance long term competition.

4.21 STC told us that the result of import liberalization, depending on the standards set, may either be the entrance of more suppliers and a price war which may eventually benefit customers or a surplus of cement on the market.

4.22 MOIC told us that there is a risk that without the STC there might be artificial shortages in the cement market created by the two players. For instance, if importation is liberalized and Government maintains price control on them, there will surely be pressure from the two existing cement operators because if they are not happy with price they would play around with the supply to disturb the market.

4.23 The STC argues that it should stay in the cement market not as an importer but rather as a watchdog, ready to intervene anytime when price of cement rises excessively.

Our Assessment on STC's Intervention

4.24 We understand that the main reasons for STC's intervention in importing cement are (a) to obtain a reference price for the purpose of fixing the price of bagged cement and (b) to ensure security of supply. We believe that the MoIC could adopt other instruments or mechanism for the purpose of fixing price of cement, if it were to continue to do so. For instance, constant monitoring of cement price on the spot market for cement and CIF price at which the two companies are buying cement could provide a reference.

4.25 The issue of security of supply is again bound up with that of price controls and competition law. Long-term security of supply is affected only by the physical ability of Mauritius to import or manufacture cement. As the STC plays no role in unloading or manufacturing cement, instead of relying on the private sector suppliers for this, its intervention in the cement market has no effect on long-run supply security. In any case, faced with a long run problem, the STC could re-enter the market. Rather, the STC's annual purchases of wholesale cement are more likely to help to prevent price increases through short-term supply squeezes, by importers with market power.

4.26 As with price controls, the need for this activity is likely to fall away with new entry. As with price controls, the question in the short term is whether competition law is sufficient to prevent or remedy such abuse by cement importers while the market remains so concentrated.

4.27 However, there must be a question as to whether the STC's activity in importing cement could really be effective in preventing existing importers from engineering a supply shortage, as its purchase volume is fixed for the year in advance, so all marginal supplies are provided by the private sector importers. The STC is not buying additional quantities to supplement private sector supply, it is buying fixed quantities and then allowing the private sector to meet demand.

4.28 Again, the Commission may wish to explore the continuing role of the STC in Hearings. However, it is hard to see that the existing approach of buying about half the annual needs of Mauritius on world market and then selling it to the importers necessarily secures supply for Mauritius, or prevents abuse of monopoly, whether in the short or the longer term. Long term security of supply is secured only by physical capacity – of which the STC has none – and shorter-term pricing power is available to those suppliers with the flexibility to meet demand – of which again the STC has none as it buys fixed quantities.

4.29 If price controls continue then there does need to be some market intelligence that the Government uses in order to fix the price. However, buying half of the country's needs through a State agency seems on the face of it to be a disproportionate approach to obtaining that information.

Import/Export controls

4.30 As noted above, in a competitive market it must be possible for suppliers which best meet customers' demands to expand, at the expense of those suppliers which are not so successful in the market. A rigid system of import controls might prevent this, diminishing the incentives to compete (a supplier will not compete to win a customer from a rival if it will not be able to import cement to supply that additional customer).

4.31 We are given to understand by the MoIC that cement being a strategic product with environment risk and hazard, trade in the commodity has to be regulated. In addition, being a vital product for other industries within the construction sector, the security of supply has to be ensured. Import control is also necessary because the STC does not have the required infrastructure to store the commodity and there is no agreement between the STC and the two players that they are going to buy from the STC. The import control has become a tool for the Government to ensure that the two players need to to buy from the STC. They are bound to buy from STC even without the contract.

4.32 Holcim Mauritius believes that an import control is a must in relation to quality control. There needs to be a mechanism to control the quality of cement to be imported into Mauritius for safety and security of end user consumers.

4.33 Holcim Mauritius, however, claims that there is no justification for import quotas, which are a synonym of a cartel. It argues that the law provides for import permits to be given once all information requirements regarding the shipment are provided to the relevant Ministry. [✂]

4.34 According to Holcim Mauritius, liberalizing import of cement will attract new players into the local cement industry. For instance, spot importers (some of them operate already in Mauritius by importing in Madagascar and other Indian Ocean islands) importing from time to time cement at very competitive prices. Spot traders wait for excellent shipment opportunities however they rarely ensure regular supply. Larger users of cement may also buy directly if costs are cheaper abroad. With liberalization, big bag purchase is another option for third party consumers.

4.35 Lafarge Mauritius told us that it finds the way import control works to be clear. It understands that import permits are issued as a result of negotiation between MoIC and cement operators. The understanding is that Lafarge Mauritius has to buy 50% of cement imported by the STC. Lafarge Mauritius is of the view that liberalization of the cement market would be beneficial for competition in the sector.

Our Assessment on Import/Export Controls

4.36 Given the nature of the product, there seems to be consensus that there is a need to have a mechanism for *quality* control of the cement being imported into the country for safety and security of end users reasons. Import control to that end could be justified and competition does not seem to be impeded as all importers will be subject to the same treatment.

4.37 However, the controls on the *quantity* imported are a different matter. If the primary reason for state intervention in this industry is concern about security of supply and prices, it does seem odd to restrict the quantities that companies (meeting those quality criteria) can import. If import controls 'bite', preventing increases in supply, this is likely to result in reduced security of supply and higher prices.

4.38 Preventing a company from importing more cement, through an import quota, clearly prevents, restricts and distorts competition, because companies will only compete vigorously for one another's customers if they have the ability to supply those customers if successful. Import controls are likely either to restrict supply, thus driving up prices, or at the least to preserve importers' market shares, insulating them to some extent from competition.

4.39 It seems to us that the purpose of restricting the quantity is partly to enable the STC to sell all of the cement it buys. This occurs in two ways: by restricting their own purchased imports, the controls effective force importers to turn to the STC and furthermore it may be that permits are granted conditional upon purchasing from the STC. If import quotas exist primarily to support the role of the STC in this market, then this illustrates the interconnected nature of the regulatory regime in this sector. Import controls represent a significant and possibly harmful intervention by the State in this market. If their principal purpose is to enable the STC to carry out its own function of purchasing cement, then this raises even more clearly the question of whether the STC should indeed be involved in the market.

4.40 Conversely, abandoning import quotas would probably eliminate the role of the STC, as importing companies would presumably prefer to source their own suppliers rather than buy half of their needs from a middleman.

4.41 It is difficult to see that any benefits are derived from restricting the quantity of cement that private companies can import. The import restricitions may help to support the STC's role, but that role itself may no longer be needed. Furthermore, restricting private imports represents a significant intervention in the market that is likely to result in precisely the distortions that the STC's involvement is intended to prevent.

Types of Cement

4.42 Currently only OPC CEM1 (i.e Ordinary Portland Cement Grade 42.5 N) is being supplied on the local market. On one hand, cement operators claim that this situation arise from the current regulatory framework. On the other hand, the MoIC and STC believe that there are restrictions on types of cement that cement operators wish to import.

4.43 According to Holcim Mauritius, regulations restrict the importation of all types of Portland cement and further fix the price of all types of Portland cement. There is no/or a very little and expensive market for composite cements (other cement types than the imported OPC) the reason is that composite cement types can usually be produced locally by blending local additives to the OPC. However for this the cement blender requires a constant cement quality, i.e. cement that is always provided from the same cement plant. In Mauritius this is not feasible since the volumes imported by the STC or by the cement operators are not sourced from the same factory.

4.44 Holcim Mauritius believes that the purpose of importing only Grade 42.5 N i.e. ordinary Portland cement is that it is the standard exported cement type. Other cement types are rarely available for exports and therefore expensive unless produced locally.

4.45 Premix Concrete Ltd (Premix), a ready-mix concrete supplying company with 51% shareholding by Lafarge France and 49% by United Basalts Products Ltd (UBP), believes that there will not be tremendous changes in cement market as long as the price of cement is fixed by the Government. It is however yet to be seen how the market will operate if the price of cement is liberalized.

4.46 As regards cement types, Premix told us that international standards for concrete cannot be respected because of multi-sourcing of cement in the country. The 42.5 N cement grade has different chemical properties when manufactured in different countries and that 42.5 N is the measurement of the strength of concrete at 28 days. Premix informed us that according to the international standard for cement - EN197-1 - the cement strength should be between 42.5 MPA and 62.5 MPA and [✄].

4.47 MoIC told us that OPC Grade 42.5 is a strong type of cement and this cement can be used to produce differentiated products. The industry is not being hampered from growing or developing new varieties but on the contrary the specification of grade guarantees the quality the cement that we have in the country. Government has granted permission for both companies to set up blending plants so that they can produce new grades of cement. These companies can compete on these new grades. The MoIC, however, told us that it is concerned that this could be merely a device to escape the price control by producing a differentiated product which is not subject to maximum price control.

4.48 According to [✄], a major construction company, only OPC CEM1 is imported in the country and the same cement distributed by both Holcim and La Farge in bag or bulk. However, there is a good market for different types (strength) of cement depending on its purpose. For instance, lower grade cement is used for decorative, for housing and for industrial purposes. For building houses, inferior grade cement; Grade 30 would have served the purpose and the latter cost around 15% less than the Grade 42.5 N which is available on the local market.

4.49 [✂] believes that Holcim Mauritius with Kolos plus; cement with added chemical additives but it is no longer being imported by Holicm Mauritius, was meant to be used for bonding purposes and as such users would have saved on in terms the cost incurred on products like Polybond.

4.50 STC's response is that the two cement operators have always requested for OPC CEM1. If they need other types of cement, the STC may readily accede to their request. It has never been imposed on the operators to import this cement grade; it is their requirement.

Our Assessment on Types of Cement

4.51 We understand that there is no concern over OPC Grade 42.5 as being the main type of cement to be imported into the country. However, for producing lower strength cement (e.g. Grade 32.5) cement operators need cement of a constant quality of OPC. The STC importing 50% of the cement requirement appears to be the major hindrance.

New Entrants

4.52 We are not going to assess or in any way comment upon any environmental issues or the possible control of new entry on environmental grounds, as these matters are outside the scope of the Competition Commission.

4.53 However, it will be important for us to consider how any new entrants are likely to be affected by the current conditions of competition of the local cement market. In other words, we would like to assess the potential barriers to entry. We would also like to assess how any new entrants are likely to affect the conditions of competition of the local cement market.

Regulatory Barriers

4.54 Holcim Mauritius has submitted that the existing system of price controls, the STC purchases and import controls are not consistent with an environment in which significant entry is possible. These conditions distort the market by providing obligatory market slots for any operator, and such other practices are completely opposite to competition principles.

4.55 As discussed earlier, price regulation could be justified in a highly concentrated market and high barriers to entry, as the risk collusion is high. In our local cement market, price control has been existent since 1998. This has not prevented Holcim from entering the local market in the year 2000. New players, including Binani Cement (Mauritius) Ltd, Oriental Cement (Mauritius) Ltd and MCFI have publicly expressed their interests to enter the cement market. In fact, Binani and Oriental Cement (Mauritius) Ltd have already been incorporated and obtained their Environemental Impact Assessment permits. This in itself could explain that price regulation in itself is not a barrier to entry.

4.56 Import control also does not appear to be a barrier to entry; it is can be viewed as a quality control mechanism instead. The issue is more with the intervention of the STC in allocating import quotas and import permits being conditional on cement importers buying specified quality from the STC.

4.57 The current framework creates uncertainties for new players as to what part of the market is contestable. This can potentially create a barrier to entry, as the feasibility of any project depends on the projected sales. The question is whether the STC is going to allocate market share to new players or they would have to compete for the residual demand. We are given to understand that Binani has projected 40% of its production or 400,000 tonnes of cement for local consumption. Currently, the annual demand for cement is around 630,000 tonnes, of which 300,000 tonnes is imported by the STC and the remaining 330,000 tonnes or so by Lafarge and Holcim. There is no clear policy as to what will the role of the STC be with the coming of the new operators.

Strategic Barriers

4.58 One major barrier to entry in the cement market is access to infrastructure at the port. Lafarge and Holcim already have their own cement discharging pipes, silos for storing cement and bagging plants.

4.59 Binani Cement (Mauritius) Ltd has already obtained land on lease from the Mauritius Port Authority land for its project. The land allotted to Binani is also strategically located in term of easy access for loading and unloading of cement and clinker. MCFI also has a strategic positioning within the port area.

4.60 Any other new players will need to put up all these facilities for which land is needed within the port area. We are given to understand that lands within the port area are either under occupation or have already been earmarked for various projects underway. Access to land within the port area and infrastructure can potentially act as a barrier to entry.

4.61 Cement can either be imported on pneumatic self discharging vessels or conventional vessels which requires the on-shore unloading equipment. Currently only Holcim Mauritius with Kovako shore-unloader provides this facility. We are given to understand that there are possible efficiency gains resulting from freight negotiations on conventional vessels, in particular for backhauling vessels. New entrants, unless they acquire their own shore-unloader could potentially face a situation whereby they would be requiring the services of Holcim Mauritius which would be in direct competition with them.

Minimum Efficient Scale

4.62 The market for cement seems to be saturated at around 630,000 tonnes per year, of which 300,000 tonnes is currently being imported by the STC. Any new players in the market would need a minimum scale to cover the operating cost. This could potentially create a barrier to entry. For instance General Construction Company Ltd, a major construction company, believes that the emergence of new cement suppliers would promote competition. However, the company believes that there may not be a place for a third player given that the trend of cement consumption in Mauritius has been stable for the last five years.

Vertical Integration

4.63 We understand that both Lafarge and Holcim are vertically integrated in the bulk cement market. Gamma with its own ready mix concrete plant holds 49% shares in Holcim Mauritius. Lafarge Mauritius has also controlling interest in another ready mix concrete provider, Premix. The bulk market for cement represents around 40% of the total cement market. Both Gamma and Premix are larger buyers within the bulk cement market. New entrants may also view this as a barrier to entry.

5. Options for Reform

Introduction

5.1 There are four interlocking elements of State intervention in the cement sector:

(i) Price controls on bagged cement;

(ii) The STC acting as a 'virtual importer', purchasing cement wholesale on the world market and selling it to the existing private sector importers;

(iii) Import controls, of which the control of quantities imported is of interest here; and

(iv) Specification of a single grade of cement for all uses.

5.2 These four interventions are interlinked:

(i) The STC's involvement is intended to underpin price controls, by providing information on world wholesale prices and perhaps by ensuring supply to prevent price rises resulting from shortages (although it is not clear that its intervention helps achieve this second purpose, as it purchases fixed quantities).

(ii) Controls on the quantity that private suppliers can import appear mainly to have the purpose of supporting the STC's role, to ensure that it is able to sell the cement it buys (both by restricting other supply sources and perhaps by making import permits conditional on buying from the STC).

(iii) The specification of a single grade of cement allows the STC to conduct a single large tender and makes the process of setting price controls simpler.

5.3 Thus, to some extent the Government involvement in this sector needs to be looked at as a *system*. Some regulatory interventions are in place solely to support other interventions, and it is necessary to consider whether the system as a whole is the right one today – and whether it will be the right one in the future, if new suppliers enter the market.

5.4 However, within this overall system there are *two* broad areas of possible deregulation:

(i) Removing price controls; and

(ii) Removing import quotas.

Price Liberalization

5.5 The current system of pricing builds on STC's tender price. We discussed earlier that price regulation is limiting the different varieties of cement being imported into country. We also noted that within OPC Grade 42.5N, product differentiation exist on account of the length of processing. Also, STC's ability in getting the most competitive price is limited given volume restriction per shipment as well as the possibility of backhauling.

5.6 Price deregulation can bring considerable benefits, including, *inter alia*:

(i) Consumers would have wider choice (different varieties of cement);
(ii) Incentives for new suppliers to enter the market and existing suppliers to meet any increases in demand;
(iii) Encourage innovation.

5.7 The main disadvantage with price liberalization is the risk of cartelization in view of the highly concentrated market. The cement market is always fairly vulnerable to such abuse, perhaps because of the near-identical nature of the product sold by different competitors, and cement has been one of the industries most frequently found to have engaged in price-fixing world-wide. However, now that Mauritius has a competition law, penalties are in place for such behavior, along with an expert body to enforce the law in the Competition Commission. In the absence of evidence of collusion on prices, price controls to prevent such collusion may not be justified.

5.8 As noted earlier, if new entry does occur, the case for lifting price controls is strong. Until such entry, there is more of a case for retaining price controls, but the Commission should consider whether competition law can be relied upon to prevent abuse, and also whether the presence of price controls might perversely act to deter such entry. One possibility is for the Government to commit to removing price controls once a specified quantity of cement is being produced or imported by a third player, to provide such an entrant with certainty without risking harm to consumers in the short term.

5.9 We note that the benefits of price liberalization may be undermined by the existing import quotas, as companies will only compete on price if they have the capacity to supply any additional customers they win through competition. Removing price controls without removing this constraint on private companies' ability to compete would almost certainly be counter-productive, as companies with market shares essentially fixed by their import quotas would have little reason to reduce prices and compete for one another's business.

Trade (Import/Export) Liberalization

5.10 With trade liberalization, cement operators will have the freedom to import quantities as per their requirement. The main advantage of such liberalization is that it frees suppliers to compete, in that a supplier with a better offer can readily capture increased market share and supply it with cement sourced from the lowest cost source. Cement purchase costs might fall, for example through increased economies of scale and a better mix of vessels, when suppliers face no constraints on their ability to import. With trade liberalization, new entry is more likely to occur.

5.11 However, there is a continuing need to regulate the quality of cement being imported into the country and the conditions under which it is imported. Also, import liberalization almost certainly implies that the STC can no longer operate as a virtual importer, as it has no end-customers and therefore may not be able to sell any cement it buys on the world market.

Conclusion

5.12 Complete deregulation would involve liberalization both of prices and imports. It is possible to liberalise one but not the other, but we note that:

(i) Liberalisation of prices *without* removing import controls is unlikely to result in benefits for consumers, as importers will have little incentive to compete for one another's customers if they are constrained in their ability to source cement.

(ii) Liberalisation of imports without removing price controls is more feasible, but the price controls might deter new entry, and an alternative approach to assessing world market prices must be found, as the STC could no longer purchase cement.

5.13 We recommend that the Commission considers these options, and also considers whether to recommend that liberalization occurs immediately, or only following significant entry by new players.

6. Next Steps

6.1 This is a report from the Executive Director of the CCM to the Commission. The content of the report is exclusively the opinion and findings of the Executive Director of the CCM.

6.2 Pursuant to section 19 of the Act, the Commission may advise the Minister[12] on any action taken or proposed to be taken by the State or any public body that may affect competition in the supply of goods and services. In this case, the Commission (i.e. Commissioners) may use this power to advise (make recommendations) to the Minister on how to address the competition issues in the cement market.

6.3 Prior to making any such recommendations to the Government, the Commission may consult the various stakeholders about their views on the report and more generally on competition in the cement market. It is expected that this consultation will take place through open Hearings.

6.4 Following the consultation process, the Commission will submit its recommendations to the Government, if it decides to do so. Alternatively, if considerable new information has been obtained during the course of Hearings, the Commission could request a revised version of this report.

6.5 We welcome written comments on this report.

[12] As per the Act 'Minister' means Minister to whom the responsibility for Commerce has been assigned but now with the CCM falling under the purview of the Prime Minister's Office, it will be the Prime Minister.

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