

# Balanced Growth: A Strategic Imperative for Indian Cement Industry

*The domestic cement manufacturing industry is going through a tumultuous phase. While it is battling profitability woes on one hand, it also has to contend with increasing level of environmental activism that is keenly scrutinizing its various actions and their impact on environment and society.*

*Cement industry needs to proactively engage itself in the three dimensions of profitability; environmental consciousness and social obligations that will earn the industry “the right to grow and the license to operate” opine Arindam Chakrabarti, Deepak Nayak & Mainak Bhattacharya of Tata Strategic Management Group.*

Till FY08, Indian cement manufacturing industry was going through a dream run of sorts. New capacities were being planned by major players in a big way. International majors were looking to beef up their presence in India, the second largest cement producer in the world after China. Operating margins of major producers were in the range of 30% + at least in the last 2-3 years. In short, every thing was perfect. The latest economic turmoil in the world and in India has however played a spoil sport. With falling domestic demand and subdued economic activity, cement companies are now facing increasing pressures to maintain top-line & profitability. Companies in India have responded typically to these situations either by reducing planned expansions or by aggressively cutting down on overheads. While these steps may benefit the manufacturers temporarily, it is also likely to stunt the future growth of the industry.

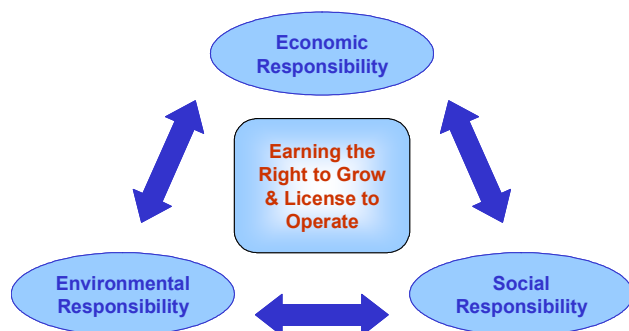
Manufacturers however need to look at a more balanced approach of business that will ensure long term profitable growth while taking into account environment related concerns and other societal obligations over a larger time horizon. They will have to embark upon a set of proactive activities that impacts all three dimensions of balanced growth. Doing so will earn them the right to grow in an increasingly competitive market while giving them the right to operate in an eco-conscious environment & demanding society.

A set of proactive actions that companies may adopt according to their suitability to individual situations are given below.

## Action 1: Look to consolidate

Indian cement industry is highly fragmented with as many as ~ 50 companies with capacity of ~ 200 MTPA operating with varying degree of consolidation. As per our estimate ~ 60% of this capacity belongs to very few large players (higher than 6 MTPA capacity). Medium players (higher than 1 MTPA capacity) have another ~35 % capacity while the balance 15% comprises of small players. Due to obvious scale benefits, large players have traditionally managed better margins compared to their medium sized and smaller sized counterparts. In FY 08 large players on an average had 33% operating margin (OM) vis-à-vis 30% OM for

### 3 Dimensions of Balanced Growth



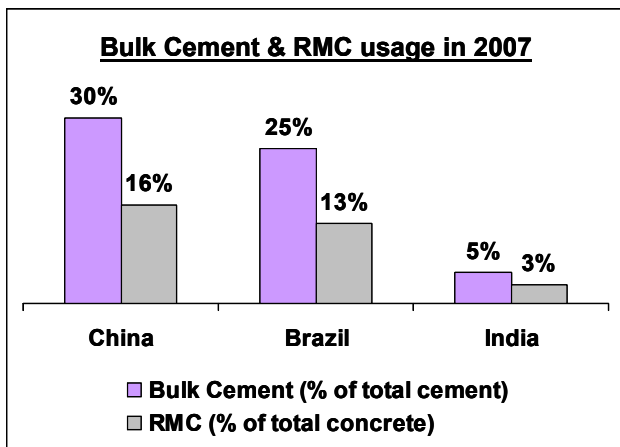
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medium sized players. In H1 08-09 even though overall industry margin was down, large players with average 28% OM fared better than 23% average OM of medium sized companies.

Long term players may hence look to grow their operations either organically or inorganically. In today's tight credit market, companies with attractive debt leverage position may have more than a few opportunities to buyout smaller sized companies and consolidate.

**Action 2: Proactively change product mix**

Ready Mix Concrete (RMC) usage in India is very low. As per a recent estimate RMC usage is ~ 3% of total concrete consumption. Historical growth of this segment is around 14%. RMC usage is however very high in developed countries at around 60%. Its usage is high even in other BRIC nations. RMC usage is primarily driven by growth in large construction projects which are generally undertaken by big institutional players. With large scale infrastructure related expenditure planned in India one can expect a substantial jump in RMC business. Industry expects RMC business to grow at around 25% per annum in near to medium term and reach a level of around 10% of concrete consumption by 2020.



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An interesting piece of legislation in China has resulted in very healthy growth of RMC business. As per Chinese government decree # 341, on-site concrete preparation is banned in 200 cities across

China. This was done to prevent construction related pollution. Even though the chance of similar legislation coming in force in India looks slim at this moment, it remains a possibility that can alter the business landscape significantly. With profitability from RMC business on higher side, cement companies must look at consolidating / entering RMC business on a large scale.

**Action 3: Develop logistics models to support changing product mix**

Demand from large institutional players as well as higher RMC requirement in future will mean higher requirement of bulk cement. Movement of bulk cement requires specialized bulkers. The bulkers enable handling of bulk cement with the help of pneumatic loading and discharge mechanisms. Currently movement of bulk cement is primarily being done on Road. Rail mode has not been used even though it is half as costly. This is mainly due to unavailability of special purpose bulker tank wagons with Indian Railways. In this case manufacturers will have to either procure these wagons under Liberalized Wagon Investment Scheme (LWIS) or rent from Wagon Lessors. With high cost of a rake at ~ INR 20 crores & unavailability of lessors in current situation it becomes a difficult proposition for the manufacturers. However this opens up new business opportunities for a 3<sup>rd</sup> party service provider who can maintain sufficient quantity of railway rakes to service a host of manufacturers spread across India. It can also transport fly ash using the same wagons. Large cement producers can co-operate with dominant competitors in other geographies to develop such 3<sup>rd</sup> party service providers.

**Action 4: Look for alternate fuel sources**

Power & fuel cost is second most important element of operations cost after raw material cost. Accordingly lot of efforts are being made worldwide to reduce this cost. One major direction in this regard has been usage of alternate fuel sources to fire the kilns in a cement plant. This approach not only helps to reduce operating cost by using cheaper

alternative fuel source, it also helps to reduce the carbon footprint of the industry significantly. Amongst various sources tried, use of Tyre Derived Fuel (TDF) is gaining ground globally. Here scrap tyres are generally used in place of coal in clinker making kilns. It has its advantages. As per some studies done abroad, using TDF ensures that there is no negative impact to the environment due to emissions while it saves fossil fuel like coal. It also has positive commercial connotation for a company as scrap tyres is expected to be cheaper source of energy. An industry estimate puts 56% usage of scrap tyres as TDF in US alone.

Indian companies must look at alternate fuel sources like TDF, Rice husk, Sugercane bagasse etc. closely. However putting in place a supply chain to make these alternate fuel available in sufficient quantity to cement plants is a big challenge.

#### **Action 5: Optimally utilize Limestone Quarries**

Limestone is the most important ingredient in manufacturing of clinkers. With limestone resources depleting fast due to its usage, availability might be

constrained in future. So cement companies must look at ways to ensure that maximum possible limestones are extracted from their existing quarries. This will save precious resources.

Also spent limestone quarries can be put to commercial use by using some innovative methods. A spent quarry in Kenya was converted into a wildlife park !!

#### **Action 6: Undertake a continuing dialog with affected community**

Cement industry is considered a "dirty" industry due to the pollution it causes and its impact on the environment. While mining activities in limestone mines displaces many people, it also leads to depletion of forest cover. Dust from coal / cement handling, emission from its power plants / kilns causes air pollution there by affecting the community living around the plant / quarry sites. In order to create a community friendly image across the society as a whole, a proactive & meaningful dialog must be sustained with them. This has positive rub offs on the organization and the brand.

Lafarge, the world leader in cement manufacturing with presence across multiple geographies has adopted multiple approaches that help the organization to cut its operational costs while simultaneously bringing in social / environmental benefits.

- In Uganda it uses Pozzolan, an alternative to Limestone which has same blending qualities but emits less CO<sup>2</sup> than limestone.
- In Uganda it uses coffee husk & rice husk to fire kilns, there by cutting use of fossil fuel by 30%.
- TDF is used in European countries to reduce dependence on fossil fuel by 19%.
- In Kenya, it plants trees on lands set aside for limestone quarrying. These plants are a source of livelihood for local residents who are likely to be displaced.

Actions suggested above in some way or the other, impact the three dimensions of profitability, environmental concern and societal awareness. Indian companies will have to look at suitability of some of these proposed actions in their present context and chartout a meaningful action plan. This will help them in gaining advantage over their competitors and will equip them to take advantage of the next upturn.

Tata Strategic Management Group is a leading management consulting firm in South Asia. Set up in 1991, Tata Strategic has completed over 500 engagements with more than 100 Clients across countries and industry sectors, addressing the business concerns of the top management. We enhance client value by providing creative strategy advice, developing innovative solutions and partnering effective implementation.

