

April 01, 2019 | Ratings

Indian Ceramic Tile Industry: Structural Shift with focus on higher value added products

A versatile architectural resource, with multiple inherent benefits like low maintenance, high durability, affordability and an array of options to choose from, ceramic tiles have gained popularity and is slowly dominating the floor tiles segment globally. Now, with the technological advancements, the global ceramic tile industry has not only scaled up but also launched multiple value-added products like glazed vitrified tiles, polished vitrified tiles, large-size slabs, wall ceramic tiles, etc.

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The global ceramic tile consumption reached a volume of 13.27 billion square meters (SQM) in CY17 (refers to the period January 01 to December 31), registering a Compounded Annual Growth Rate (CAGR) of around 4% during CY12-CY17. However, the international ceramic tiles industry exhibited a slower pace of growth in CY17, with both production and consumption growth by just 2.2% y-o-y basis. The import-export flows also reduced during CY17 for the first time in nine years. The growth in consumption during CY17, in particular, was buoyed by the recovery in construction activity across Africa (7.2%), European Union (6.3%) and North America (4%). Asia continued to remain the largest consumer at 8.98 billion SQM, equivalent to 68% of the global consumption. Nevertheless, the results for Asia reveal a slowdown in China (production down by 1.5% and exports down by 11.4%) due to the anti-dumping duty imposed by many countries on Chinese tiles. However, it is partially offset by a fresh growth in India, Iran and Vietnam. The annual production in India has already passed the billion SQM mark, while exports saw a further 23% upturn in CY17 following a growth of 39% in the previous year. (Refer Table 1 for the top 5 Consuming countries in the world)

Going forward, As per CARE Ratings Limited (CARE) estimates, the global ceramic tile industry is envisaged to grow at a CAGR of 3-5% during CY18-22 on account of increasing residential segment in the Asian & Gulf Cooperation Council (GCC), a rising replacement demand and increasing penetration of the ceramic tiles.

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Table 1: Top 5 Ceramic Tile Consuming Countries in the world

Country	2012	2013	2014	2015	2016	2017	(In MSM*)	
							% of world consumption in CY17	
China	4,250	4,556	4,894	4,885	5,475	5,498		41.43
India	681	718	756	763	785	760		5.73
Brazil	803	837	853	816	706	708		5.34
Vietnam	254	251	310	400	412	580		4.37
Indonesia	340	360	407	357	369	336		2.53
Total world	10,964	11,601	12,132	12,280	12,973	13,270		100.00

Source: Ceramic World Review; *MSM: Million Square Meters

In line with a moderate growth in consumption (2.29% growth in CY17 over previous year), the global ceramic tile production during CY17 reported a growth of 2.24% over the previous year at 13.55 billion SQM due to a slowdown in Asia. Despite the slump in China, Asia remained a global leader and constituted 70% of the global ceramic tile production during CY17 due to the growth in India, Vietnam and Iran. Consumption in the Africa and Non-European Union Europe grew by 21.9% (to 0.70 billion SQM) and 7.3% (to 0.62 billion SQM) respectively during CY17. The manufacturing statistics by top 5 countries is as tabulated below.

Table 2: Top 5 Ceramic Tile Manufacturing Countries of the world

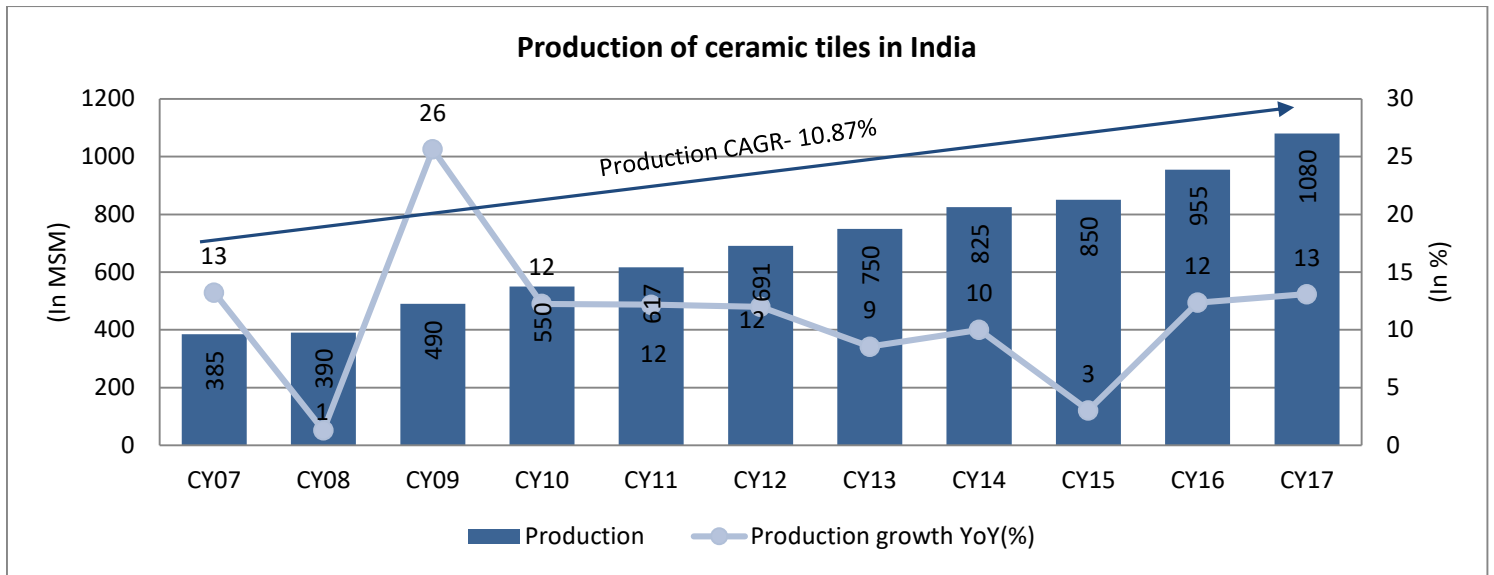
Country	2012	2013	2014	2015	2016	2017	(In MSM)	
							% of world production in CY17	
China	5,200	5,700	6,000	5,970	6,495	6,400		47.23
India	691	750	825	850	955	1,080		7.97
Brazil	866	871	903	899	792	790		5.83
Vietnam	290	300	360	440	485	560		4.13
Spain	404	420	425	440	492	530		3.91
Total world	11,226	11,980	12,428	12,460	13,255	13,552		100.00

Source: Ceramic World Review

The global consumption and production pattern mirrored itself in India too; the consumption of ceramic tiles in India during the period CY07-17 grew by CAGR of 6.71%; higher than the world's consumption growth rate of 5.11%, while the production of ceramic tiles in India, during the same period registered a CAGR of 10.87%, outpacing world's growth rate of 5.09%.

The Indian Ceramic Tile Industry (ICTI) has recorded a phenomenal growth in terms of capacity, technology advancement, product portfolio and its structure during the last decade. The installed capacity has increased substantially on account of inherent advantages like abundance of raw materials from indigenous sources, advanced infrastructure and low labour cost.

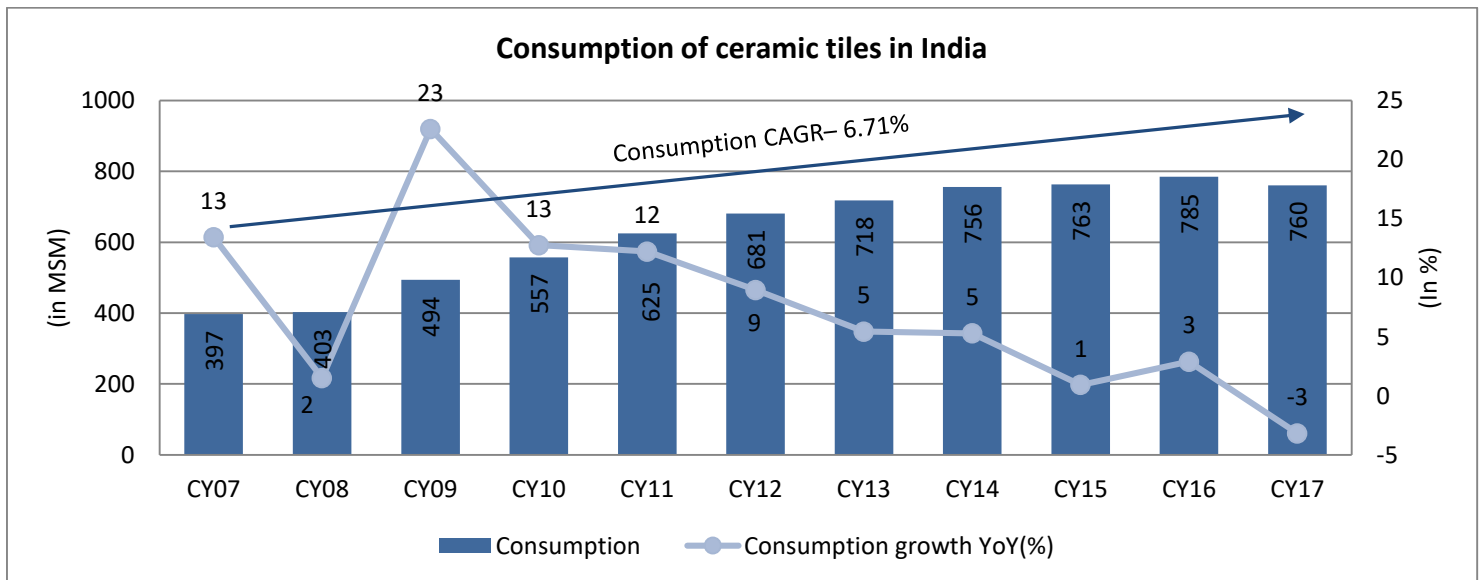
Chart 1: Production and YOY growth of Ceramic Tiles in India



Source: Ceramic World Review & CARE Research

During CY16, India overtook Brazil as world’s second largest country in terms of production and consumption of ceramic tiles and maintained this growth rate in CY17. The ceramic cluster in Morbi, Gujarat, continued to grow and is now the second largest ceramic cluster in the world after Foshan, China. Morbi accounts for over 70% of the total production in India and houses over 600 production units, of which many are export-oriented units.

Chart 2: Consumption and YOY growth of Ceramic Tiles in India



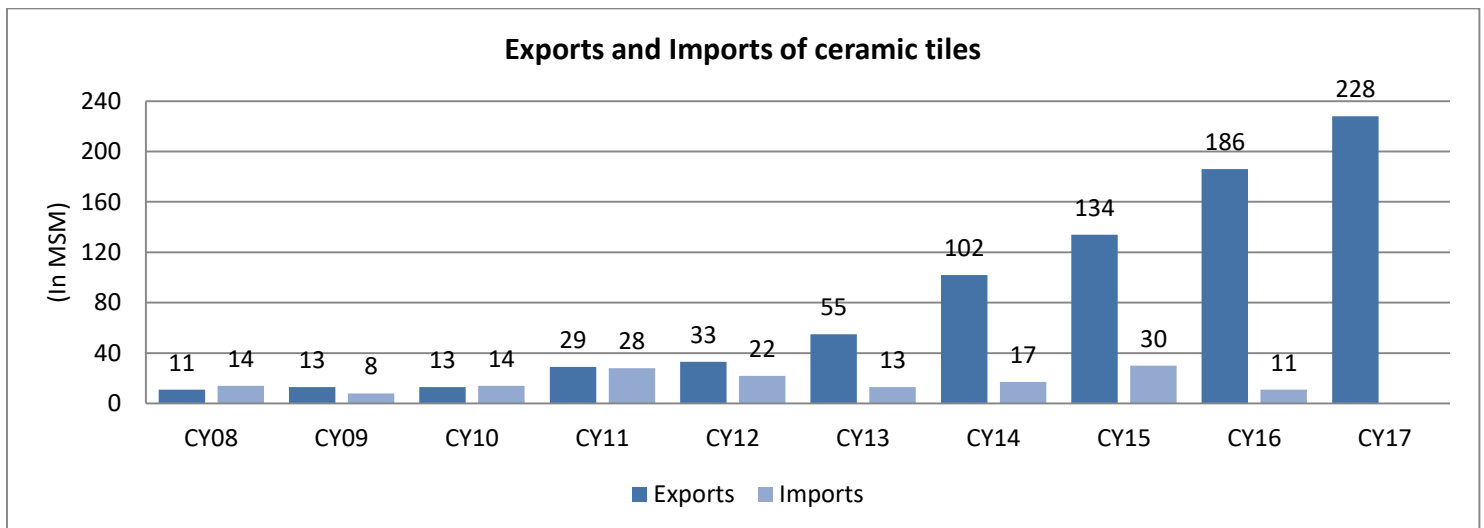
Source: Ceramic World Review & CARE Research

India's Import and Export statistics of tiles

Adoption of latest technology, low labour cost, changes in the global demand supply dynamics (including imposition of anti-dumping duty on products manufactured in China) has strengthened India's position in the global ceramic tile industry. Furthermore, with the new Foreign Trade Policy (FTP), the inclusion of Middle East countries has a huge significance for ICTI. Consequently, despite having one of the lowest sales realisation amongst all exporter countries, India is the fourth largest exporting country in terms of volume.

India's exports of ceramic tiles grew by 23% during CY17 to 228 million SQM. The major export destinations for India are Saudi Arabia, Mexico, Brazil, UAE, Oman and Kuwait which collectively account for about 65% of the total exports from India.

Chart 3: Export and Import of Ceramic Tiles by India



Source: Ceramic World Review and CMIE

The top four export countries comprise 70% of total world exports, out of which China has a largest share of around 40% of the total world exports. While exports have grown substantially during the last three years ending CY17, total imports of ceramic tiles in India, reduced sharply by 64% to 10.84 MSM on account of levy of antidumping duty on soluble salt double charge, porcelain and vitrified tiles from China for 5 years from March 2016.

Out of total import by India, Chinese tiles account for around 80% of the total imports and imposition of anti-dumping duty on Chinese tiles has resulted in a reduction of import by more than 50%.

Structural changes in terms of constitution of the industry and product mix of ICTI

The ICTI has been highly fragmented and dominated by small and mid-sized family owned and operated entities. The industry was fiercely competitive on account of low cost of manufacturing (due to tax arbitrage) and limited product differentiation with a majority of units in the unorganised segment, engaged in the manufacturing of low value-added, floor ceramic tiles.

However, during the last decade, organised players have been able to gain a sizable market share on account of their focus on product innovation, adoption of latest technologies, development of nation-wide distribution channels, aggressive branding campaigns and robust capacity expansion projects.

Chart 4: Major ceramic product clusters in India



The growth of the organised segment is also fuelled by the increasing regulations in the ceramic tile industry, overall growth in consumption of ceramic tiles in India due to the growing middle class population, rising per capita income, urbanisation and a structural shift in customer preference towards branded products, better design portfolio and increasing focus on value-added products.

Consequently, growth in volumes of organised players continues to outperform the unorganised segment as well as industry average. The organised segment now comprises a whopping 51% (in terms of value) of the total tiles market in India while the remaining comes from the unorganised sector. Within the organised sector, the top 5 players- Kajaria Ceramics Limited, Prism Johnson Limited (TBK Division) (Formerly Prism Cement Limited), Somany Ceramics Limited, Nitco Limited and Asian Granito India Limited control more than 70% of the total organised segment.

Source: CARE Research

Along with a growth in industry size and the organised segment, this industry has also moved from being dominated with floor tiles to adding to its repertoire, value-added products like glazed vitrified tiles (GVT), polished vitrified tiles (PVT) and ceramic tiles (CT). The volume growth of value added products is tabulated below:

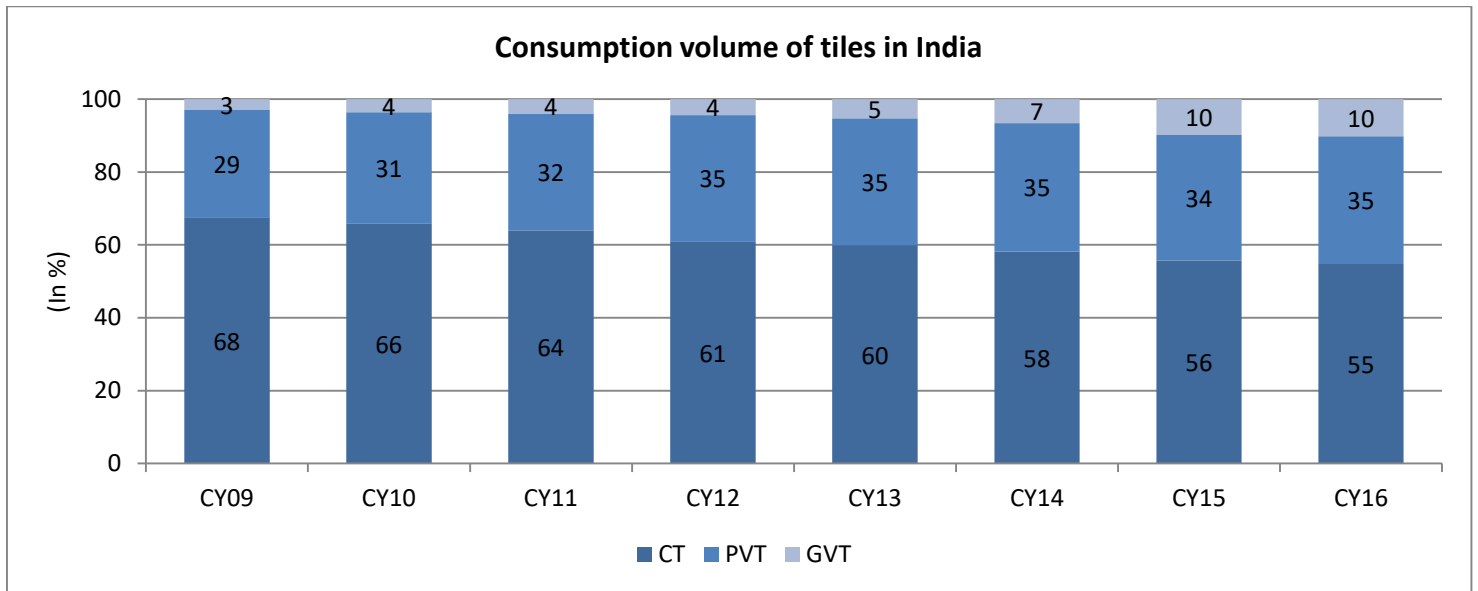
Table 3: Volume wise breakup of tiles consumption in India (In MSM):

Year	CY09	CY10	CY11	CY12	CY13	CY14	CY15	CY16
CT	334	367	400	415	430	440	425	430
PVT	145	170	200	236	250	266	263	275
GVT	15	20	25	30	38	50	75	80
Total	494	557	625	681	718	756	763	785

Source: Company annual reports, investor presentations and CARE Research

The value-added products have an edge over the traditional tiles in term of design, strength and porosity among others. The GVT has witnessed a strong growth over the last five years while PVT grew at steady pace during the same period. The entities in the organised segment have launched new sizes and designs in line with global trends, which, has not only reduced reliance on imports but also provided a wide array of choices to the customers, in line with their specific requirements.

Chart 5: Volume wise breakup of tiles consumption in India (In %)



Source: Company annual reports, investor presentations and CARE Research

Over the last three years, there is a surge in the production of large and very large ceramic tiles with size ranging from 1000*3000 mm to 1600*4800 mm and beyond and in thickness of between 3mm to 30mm. Large format tiles are making a gradual but an impactful entry into the Indian market, as the market is witnessing a huge demand for large format tiles.

Setting up a dedicated ceramic cluster in Andhra Pradesh (AP)

Southern India is growing at a faster pace as compared to the national growth rate on account of a large number of real-estate projects under execution. Furthermore, the Southern region is the second highest consumer of ceramic tiles, while production is largely concentrated in the western region. Transportation of tiles from the manufacturing hub to Southern India is expensive, considering high transportation cost and handling expenditure.

The key reasons for setting up a ceramic tile cluster in the Southern India are mentioned below:

- Southern region is the second highest consumer of vitrified tiles, after western region due to a high emphasis on health and hygiene.
- Imports from China through ports of Vizag, Chennai and Vishakhapatnam are expensive after the levy of anti-dumping duty on ceramic tiles.
- Ceramic tile are fragile, yet heavy and hence requires higher handling efficiency. Transportation and handling cost is high for manufacturers since manufacturing units are concentrated in Morbi, Gujarat.
- Higher demand from Tier II and Tier III cities.
- Low penetration of organised sector in the region.

Considering the above factors and availability of natural resources & clay (primary raw material) in abundance in the Godavari district, the AP government has established a dedicated ceramic cluster at Thatiparthi in Thottambedu mandal of Chittoor district. Located in the Southern peninsula, AP has a well-developed industrial and port infrastructure.

The state government has created provisions for uninterrupted supply of power, fuel & water and has allotted land for setting up ceramic units in the cluster. During the last two years, multiple entities in the organised segment have announced capacity expansion plans by setting up a manufacturing unit in this ceramic cluster. Refer table 4 for key projects in AP.

Table 4: Key projects under various stages in Andhra Pradesh:

Company Name	Segment	Status	Installed Capacity
Lixil India Sanitarywares	Sanitaryware	Completed	1 million units
Aparna Enterprises Limited	Ceramic tile	Completed	5.47 MSM
Cera Sanitaryware Limited*	Ceramic tile	Completed	3.65 MSM
Sudha Somany Ceramics Private Limited^	Glazed Vitrified Tile	Under Implementation	3.50 MSM
Kajaria Floera Ceramics Limited	Glazed Vitrified Tile	Under Implementation	5.00 MSM
Asian Granito Limited	Glazed Vitrified Tile	Announced	3.65 MSM

**in JV with Anjani Tiles Limited; ^Subsidiary of Somany Ceramics Limited*

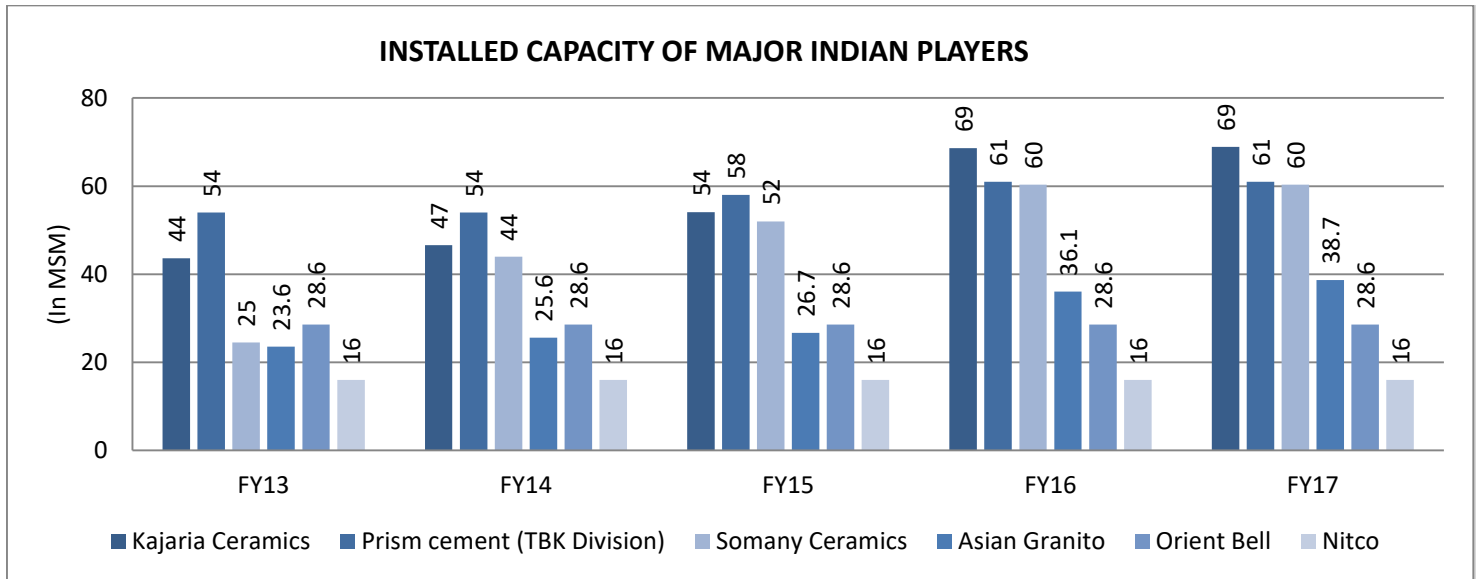
Source: CMIE & CARE Research

The AP ceramic cluster will help the organised sector to achieve the twin objectives of improving its logistical efficiency (reduce the logistics cost and control damage to the goods during transport) and exercise greater control over the quality of vitrified tiles. Out of the total new projects announced, around 70% are located in the state of Andhra Pradesh. Considering a significant share is dominated by the unorganised segment, the AP cluster is also envisaged to witness mushrooming of multiple small and medium scale units in the near term.

Capacity expansion plans by most of the entities in the organised segment, albeit a slowdown during FY17 and FY18

A thriving housing sector due to government policies and a continuous increase in the demand of value-added products in the retail segment resulted in a substantial investment by the entities in the organised segment to increase their installed capacity, via either organic or inorganic mode (Refer Chart 6 for installed capacity of leading players).

Chart 6: Installed capacity of major Indian Players

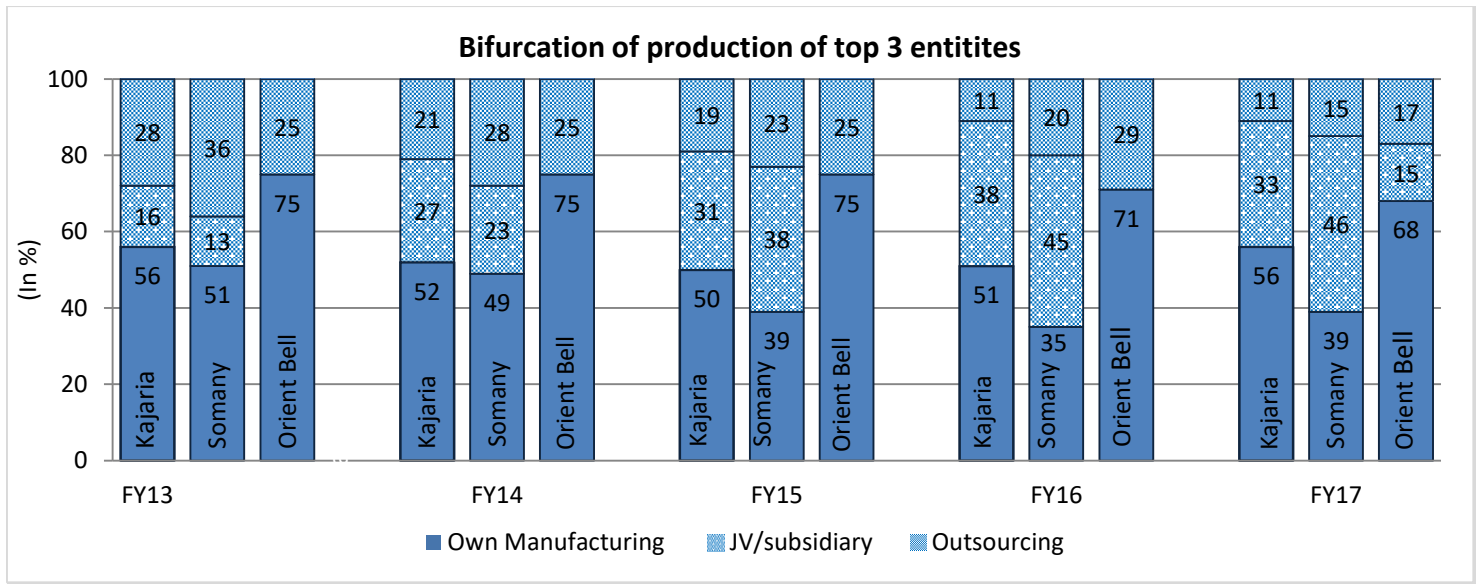


Source: Company annual reports, investor presentations and CARE Research

While a few greenfield expansion projects have been undertaken by the manufacturers, majority of the capacity addition has been through Joint Venture (JV) agreements with small and medium scale players or the outright acquisition of existing operational units. While greenfield expansions are expensive (considering the rising property prices) with a longer gestation period, the inorganic mode allow leading manufacturers to leverage on the existing surplus capacity available in the unorganised segment, which still comprises about 49% of the total tile market in India.

Most of the top industry players, including international ones, are adopting an asset light model by entering into JV's with the unorganised players. The model enables entities to generate higher cash flows from incremental sales volume as well as de-leverage their balance sheet.

Chart 7: Production of top 3 ceramic entities through different modes



Source: Company annual reports, investor presentations and CARE Research

Unorganised and small players, too, stand to gain from such partnerships as they are assisted by larger entities in streamlining their manufacturing operations, generate economies of scale, expand geographical reach through use of well-established marketing channels of organised players and ensure compliance of stringent pollution control norms of the State and Central Government Pollution Control Boards.

Financial performance of the entities

Continuous growth in the scale of operations backed by expansion of product portfolio and geographical reach

The ICTI has reported a continuous growth in the last few years on account of growth in consumption in the domestic market and increase in exports. The ICTI has also grown on account of portfolio diversity; with an increasing share of value-added products (like GVT and PVT), development of marketing and distribution channels by the players in the organised sector in Indian and international markets. The Total Operating Income (TOI) of 75 CARE rated entities and other listed entities grew at a CAGR of approximately 7.88% during the last five years ending FY18 (refers to the period April 01 to March 31). The growth rate of the entities in the investment grade was higher at a CAGR of 8.21%.

Table 5: Rating Band wise Growth in TOI (Y-O-Y growth)

Particulars	FY15	FY16	FY17	FY18	CAGR
Investment Grade (IG)	19.02	8.89	0.22	5.57	8.21
AA	20.96	11.22	4.77	5.95	10.54
A	17.12	5.70	-8.94	3.19	3.85
BBB	18.22	14.49	29.47	15.05	19.16
Below Investment Grade (BIG)	35.09	-6.21	-7.38	-1.43	3.71
Overall	20.26	7.58	-0.35	5.07	7.88

Source: Ace Equity, company annual reports & CARE Research

The industry reported de-growth during FY17 on account of demonetisation, which severely impacted the liquidity of the industry. Payments of daily wages to labourers as well as transporters were delayed impacting the overall production levels. The growth rate remained low during FY18 on account of implementation of Goods & Service Tax (GST) on July 01, 2017. Initially, the ceramic sector was taxed at the highest rate of 28% under GST, considering it as a luxury item till October 2017. It resulted in increase in prices of tiles, higher inventory levels and lower sales.

The scale of operations grew in Q4FY18 post revision in GST rate from 28 % to 18% in November 2017. Higher growth rate in the BBB band rated segment was primarily on account of two entities which reported exceptional growth on account of expansion of manufacturing facility to launch high value product segment. The entities in the BIG segment, has declined consistently represents a small segment (7.50% of total TOI of all the entities) of the total sample. Overall, the movement in the growth rate mirrored the consumption pattern in India.

Table 6: Rating Band wise Cost of Raw Material consumed (as a % of total cost of sales)

Particulars	FY14	FY15	FY16	FY17	FY18
Investment Grade (IG)	56.33	53.73	53.43	53.21	49.64
Below Investment Grade (BIG)	39.96	39.15	44.71	45.74	47.84

Source: Ace Equity, company annual reports & CARE Research

Rajasthan is the main source of raw materials for the ceramic cluster in Morbi. Prices of key raw materials for manufacturing of ceramic tiles (Clay, Feldspar, Slicia, kaolin, carbonates etc.) are largely market driven. The cost of raw

material consumed (as a % of total cost of sales) reflects a declining trend in case of IG segment, primarily on account of adoption of latest technology, best practices and economies of scale.

Fluctuation in the prices of key materials increases the working capital investment of the entities. Furthermore, sudden price fluctuations impact the profitability too since it cannot be passed on to the end users without a time lag.

Table 7: Rating Band wise Power and fuel cost (as a % of total cost of sales)

Particulars	FY14	FY15	FY16	FY17	FY18
Investment Grade (IG)	19.34	20.46	18.31	16.38	18.26
Below Investment Grade (BIG)	32.80	34.51	30.23	28.17	25.96

Source: Ace Equity, company annual reports & CARE Research

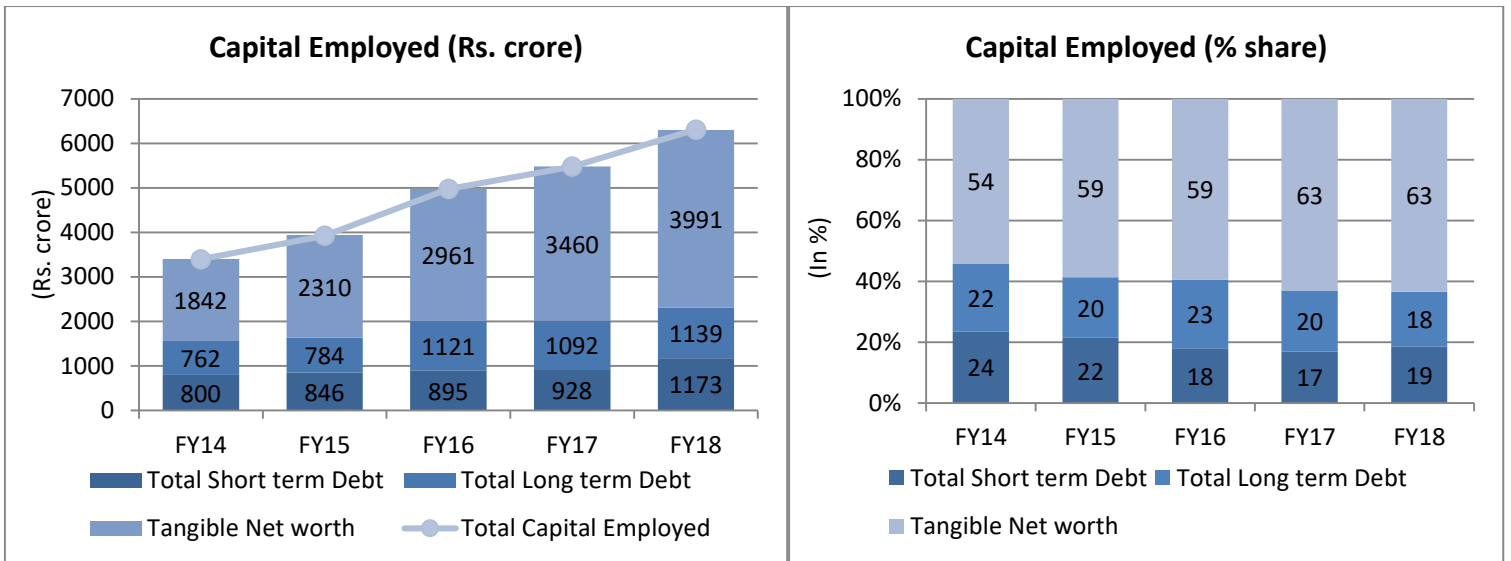
Another major cost component in tile manufacturing industry apart from raw material is the fuel cost. As the power and fuel cost comprises around 15%-30% of total cost of sales, any adverse movement in natural gas prices impact the profitability of the players. The natural gas prices are volatile in nature due to its close linkages with the international demand-supply dynamics. The power and fuel cost (as a % of total cost of sales) is lower in case of IG segment than in BIG segment because of Minimum Guaranteed Off-take (MGO) agreement by large players at discounted rates. MGO agreement assures continues supply and savings in power and fuel cost.

Major players in IG segment have streamlined their manufacturing process which allows them to reuse the heat generated from kiln in press dryers and air blowers. Reuse of heat leads to lower wastage and in turn savings in overall power and fuel cost.

Trends in capital structure and debt coverage indicators

The ICTI is under an expansion mode either through new units being set up or existing units increasing their installed capacity through in-house brownfield or greenfield expansions or by acquiring stake in smaller companies. However, during the last four years, a continuous growth in the scale of operations & PAT of the entities and infusion of equity has reduced the reliance on external debt for capex or incremental working capital requirements. The growth in the net worth base has resulted in a substantial de-leveraging of the balance sheet and a stable interest cost.

Chart 8: Total Capital Employed in Ceramic Tile Industry of 75 CARE rated and other listed entities



Source: Ace Equity, Company annual reports and CARE Research

Key growth drivers

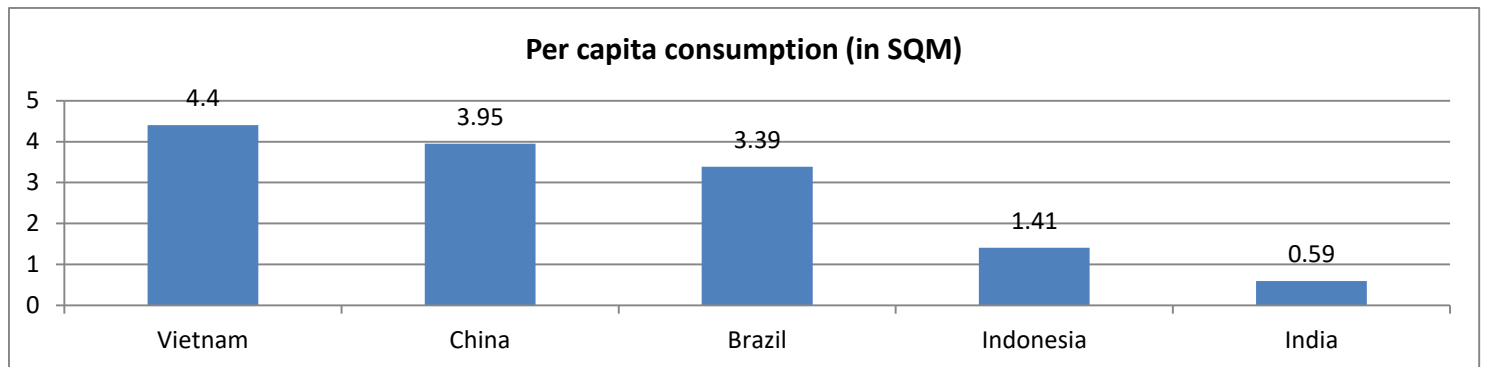
The ICTI enjoys a unique advantage of being largely indigenous with abundance of raw materials, labour, technical skills and infrastructural facilities. It is estimated that the ICTI employs around 5,50,000 people; out of which, 50,000 are directly employed and the rest are indirect associations in varying degrees.

Factors such as the low per capita consumption of tiles in India, growth in pace of construction of houses & a stable replacement demand, changing demography & customer preferences, largely untapped rural market and many macro initiatives by the government are envisaged to augur well for the ICTI.

Low per capita consumption of tiles among the developing countries

Though the ICTI has reported a substantial growth in terms of production and consumption in the last decade, the per capita consumption of ceramic tiles in India lags behind that of other developing nations like Indonesia, Brazil, Egypt, Iran and China. (Refer Chart 9 for the per capital consumption by top 10 countries). India's per capita consumption stood at 0.59 SQM compared to the world average per capita consumption of 1.50 SQM. Low per capita consumption along with demographic changes, provides tremendous scope for future penetration.

Chart 9: Per capital consumption of tile:



Source: CARE Research

Tiles form a small component of flooring material; paves path for substantial growth from untapped geographies

Ceramic tiles have a unique advantage in terms of low porosity, durability, high dirt & stain resistance, colour permanence and hygiene over other conventional modes. However, according to the Indian Census data, 2011, only 11% of total households in India lived in a house with floor tiles; 88% households had either a Mud or cement flooring. The penetration of ceramic tiles in rural areas is very insignificant, as only 4% of households have tile flooring. Urban areas, however, have fared well at 26% due to ease of availability and awareness, created by branding exercises by most of the organised players. Low penetration levels, especially in the rural areas, provide substantial opportunity for the ceramic tile manufacturers.

Table 8: Types of flooring used in India and its percentage

Particulars	India		Rural		Urban	
	2001	2011	2001	2011	2001	2011
Mud	57	47	72	63	18	12
Stone	6	8	5	6	9	12
Cement	27	31	18	24	48	46
Mosaic/Floor Tiles	7	11	2	4	21	26
Others	3	4	3	3	4	4

Source: Ministry of Home Affairs (Office of the Registrar General & Census Commissioner, India)

Levy of anti-dumping duty on imports from China

Chinese imports accounted for around 80% followed by Italy, Spain and UAE, to the total imports by India in FY17. China, the world's largest manufacturer of ceramic tiles, has a unique advantage; that, of access to cheaper mode of transport (through sea) to southern India. However, on the basis of trade data of imports of ceramic tiles after the withdrawal of anti-dumping duty in May 2013 and other findings, the government found that the ceramic tiles that were exported to India were below normal value and the ICTI has been impacted on account of this dumping from China. Consequently, the Government of India imposed an anti-dumping duty on soluble salt double charge, GVT and PVT, porcelain and vitrified tile from China, for 5 years from March 2016, to a tune of USD 1.87 per SQM, depending on the exporting company. Post imposition, the import of ceramic tiles reduced from 30 MSM in CY15 to 11 MSM in CY16. In May 2018, the GoI also levied an anti-dumping duty on ceramic rollers i.e. ceramic pipes or tubes imported from China, to a tune of USD 782.25 per tonne, for five years.

Huge export potential

To curb the impact of dumping by Chinese manufacturers, countries like, the European Union countries (EU), Brazil, Taiwan, Chile, Vietnam and Korea imposed anti-dumping duty on the import of ceramic tiles from China. European Union, in November 2017, after reviewing the impact of this dumping of ceramic tiles by China, extended the anti-dumping duty imposition for another period of 5 years (between 13.9% and 69.7%) depending on the exporting company. The deficit was tapped by Indian manufacturers and India was the fourth largest exporter of ceramic tile in CY17 as compared to eleventh in CY13. Exports accounted for about 20% of the total production of ceramic tiles in India during CY17.

Furthermore, during the last five years, the ICTI has continuously invested in expansion-cum-modernisation of its manufacturing facilities. India manufactures high-grade tiles using the latest technology and has the lowest cost of production amongst all the exporting countries. Exports are envisaged to grow further owing to expansion of geographical reach and product innovations.

Favourable demographic profile along with increase in disposable income

India is expected to be the most populous country by 2022, with a majority of the population in the working age group. India is also expected to be one of the fastest growing economies in the next decade. The rising disposable income levels among the working class, increasing trend of nuclear families and increasing demand for aesthetic flooring are expected to augur well for the ICTI.

Increasing urbanisation

According to the Indian Census data, 2011, around 31% of the country's population are urban dwellers rising from the 28% in the 2001 census data. The rapid movement of population from towns/villages to cities for jobs/livelihood along with a growth in income is expected to create more demand for housing as well as discretionary urban products (value-added ceramic tiles).

Table 9: Population distribution (as per Indian Census Data 2011)

Particulars	Population In Millions			In %		
	1991	2001	2011	1991	2001	2011
Urban	217	286	377	26	28	31
Rural	629	743	833	74	72	69
Total	847	1029	1210	100	100	100

Source: Ministry of Home Affairs (Office of the Registrar General & Census Commissioner, India)

The urbanization rate is envisaged to increase further during the next decade resulting in higher demand for housing units and discretionary products from Tier-II and Tier-III cities.

Recent regulatory developments in the industry and its impact on the ICTI

Demonetisation and Goods & Service Tax (GST)

With almost 50% of the industry comprising of the unorganised segment with a high dependence on the real estate sector, GST and demonetisation severely impacted the performance of the ICTI. Ceramic tiles were taxed at the highest rate of 28 % under GST until October 2017. In Gujarat, Madhya Pradesh, Chhattisgarh, tax rate was lower in the range of 17-19% owing to lower Value Added Tax. Consequently, the prices of tiles sold by organised dealers showed a rise of 5-10 % in these states, while the statistics remained largely unchanged in the rest of the country. Furthermore, replacement of the old tax structure and a lack of clarity on the new indirect tax reform resulted in an inventory build-up and impacted overall operations of the units.

However, with revision in the GST rates, from 28 % to 18 % in November 2017, the indirect tax rate is largely in line with the rates prevalent during the earlier tax structure. GST has created a level playing field as a nationwide levy and has helped the unorganised sector, which was facing issues due to a slowdown in the real estate industry. The implementation of GST is a welcome change for organised sector too, as it will lay the path for formalisation of the sector which in turn will increase the share of organised sector in the total market.

Real- Estate (Regulation & Development) Act, 2016 (RERA)

The real estate sector has benefitted by RERA, which was implemented from May 01, 2017, despite it being subdued for a few months as developers put their operations on hold, to understand and comply with all the regulations. In the long run, RERA makes the real estate sector more transparent and process driven. RERA has a direct implication on the ceramic sector as well. In a medium time frame, RERA is expected to bode well for the organised real estate sector as well as the ICTI.

Government thrust for infrastructure development

The government's thrust on pushing infrastructure development continues by ensuring increasing funds for core schemes such as 'Smart Cities', 'Housing for All by 2022', 'Swachh Bharat Abhiyan', 'Atal Mission for Rejuvenation and Urban Transformation (AMRUT)', which will bolster the construction industry and in turn paves a growth path for the ICTI.

Key schemes launched by GoI which are expected to drive the demand for ceramic products:

Housing for All	Swachh Bharat Abhiyan	AMRUT	Smart Cities
<ul style="list-style-type: none"> •Cover 4041 towns with initial focus on 500 Class I cities. To be implemented in three phases. 44.54 lakh houses were constructed in CY17. Construction of more than 51 lakh houses is already sanctioned. •Allocated Rs.27,505 crore in the Union Budget 2018-19. 	<ul style="list-style-type: none"> •Targets to build toilets across the country and make India Open Defecation Free (ODF). •More than 9 crore toilets have been built •Allocated Rs.17,843 crore in the Union Budget 2018-19. 	<ul style="list-style-type: none"> •Providing basic services like water supply, sewerage management, transport facilities and build amenities in cities. •Allocation of Rs.6000 crore in the Union Budget 2018-19. 	<ul style="list-style-type: none"> •Development of 100 smart cities as satellite towns of larger cities •Accelerate urbanisation, improve the quality of life through development of infrastructure •Allocated Rs.6,169 crore in the Union Budget 2018-19.

Source: Ministry of Housing & Urban Affairs (MoHUA), Ministry of Urban Development

Relaxation in norms for the gas sale agreement by Gujarat Gas Limited (GGL)

Morbi is the highest contributor for industrial sales of GGL. The ceramic cluster contributes more than 55% of total industrial sales of GGL and the later has almost 100% market share in the cluster. However, on account of poor implementation of the pollution control norms, gasification plants are still operational and it remains a major source of fuel supply. To increase the penetration of gas, GGL has relaxed norms for gas supply agreements w.e.f. November 01, 2018.

The key changes are:

- In case of gas supply agreements with minimum guaranteed off take, excess drawing of gas will now be calculated on a monthly basis as against the current practice of daily calculation. The move will provide greater flexibility to units in production planning and reduce costs, which was not possible under the earlier practice.
- Interest on delayed payments has been reduced from 24% to 18%.
- Reduction in the notice period; from 30 days to 7 days, when undertaking maintenance of the manufacturing facility.

Key Constraints

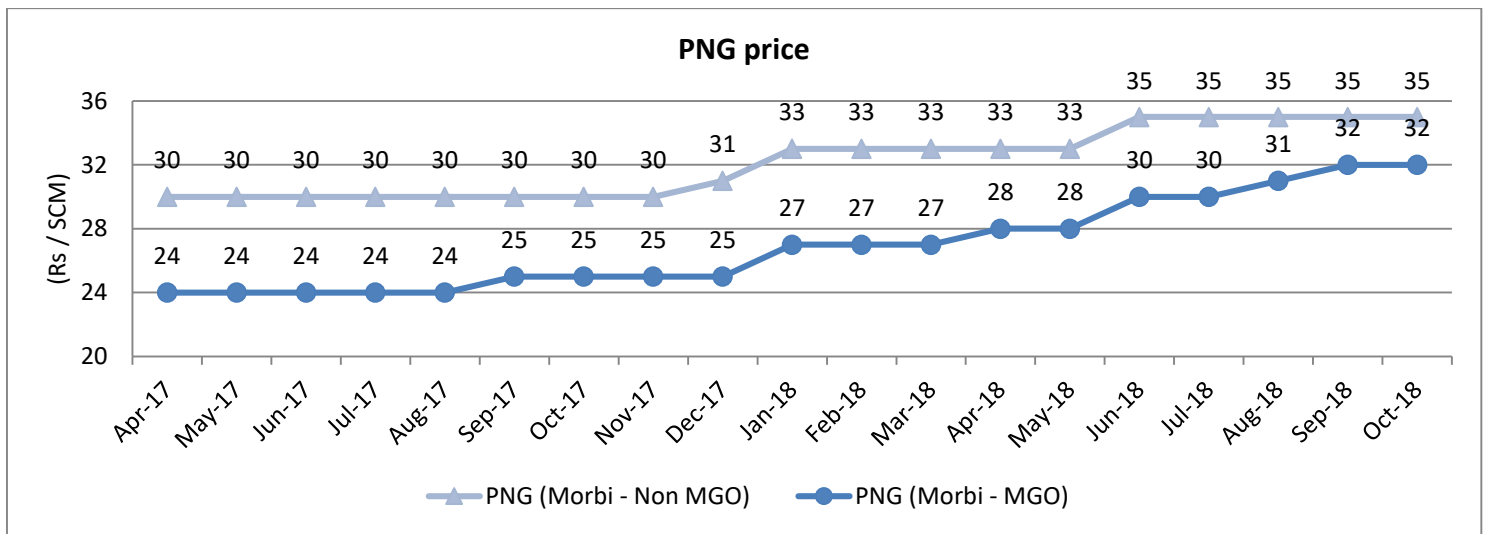
The key bottleneck for the sector is the volatile natural gas price that accounts for around 15-30% of total cost and basic infrastructure.

Volatility in fuel prices and high transportation cost

Ceramics is a power-intensive industry; the manufacturing process requires natural gas to fire the kiln and after raw materials, electricity and fuel cost is the second largest cost element in the total cost of production. The ceramic tile units in the Morbi cluster use either natural gas or gasification plants (which burn coal to generate gas) or bio waste as a source of gas. Although, usage of natural gas has inherent advantages like no transit wastage, higher fuel efficiency, cleanliness and pollution free, it is still not a preferred option considering severe fluctuation in the gas prices.

Gujarat Gas Limited is the sole supplier of PNG in the ceramic cluster of Morbi, which consumes about three million SCM a day. Frequent changes with immediate effect, affects the profitability of the entities since they cannot pass on the increase in production cost immediately.

Chart 10: Movement of PNG price in Morbi:



Source: Company reports & CARE Research

Consequently, despite a ban, gasification plants are still operational in Morbi cluster, considering the ease of availability of coal at a lower cost. However, with NGT’s order in March 2019 to discontinue usage of all type of coal gasifiers considering its adverse impact on the environment. All the units will mandatorily have to switch to PNG for their fuel requirements. The switch to PNG as a fuel is expected to increase the cost of production and impact profitability of the entities in the short term.

Although the shift to natural gas is beneficial to the industry in the long run, availability of gas at reasonable rates will be extremely important for the growth of ICTI. Few players in the organised segment have entered into a minimum guaranteed off take agreement, for supply at a discounted rate to reduce the total cost of production to a certain extent.

Influx of regional players

Even though the organised segment has captured a majority of the market, the unorganised segment comprising of small and regional players will always play a pivotal role. As the industry is fragmented, coupled with low entry barriers, low capital requirements and easy availability of raw material many regional and small players are attracted to it.

Fragmented industry and Low entry barrier

The Morbi ceramic cluster houses more than 600 units and a cumulative industrial investment of over Rs.8,000 crore; it provides employment to more than 5 lakh people, either directly or indirectly. The ICTI has been growing continuously, backed by increase in consumption and demand from the international markets. Nevertheless, the ICTI is highly fragmented with a sizeable number of small and mid-size entities primarily due to:

- Low entry barriers
- Low fixed capital investment requirement
- Shorter gestation period
- Easy availability of raw materials and technology
- Proximity to ports (Mundra and Kandla)
- Laxity in regulatory and compliance norms

Consequently, the unorganised segment has dominated the industry in the past and still accounts for almost 50% of the total production, primarily manufacturing low value-added floor ceramic tiles.

Proposed imposition of antidumping duty by The Cooperation Council for the Arab States of the Gulf (CCASG)

CCASG also known as Gulf Cooperation Council (GCC) may impose a 15% antidumping duty on ceramic tiles manufactured in India on a temporary basis, for a period of six months starting January 05, 2019. The move comes after the ceramic tile manufacturing units in Saudi Arabia complained to the CCASG committee regarding heavily subsidized exports from India. The proposal, if implemented, is expected to impede the export growth considering approximately >25% of tiles exported from India is to Gulf region. (CCASG includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates).

Outlook

The ICTI has faced a challenging environment in the last two financial years ending FY18 on account of multiple policy changes and reforms by the government, like demonetisation, implementation of RERA and GST.

In the near term, the vitrified tile segment is envisaged to face further pricing pressure on account of excess production capacity in the Morbi cluster. The installed capacity has increased significantly on account of commissioning of more than 100 new vitrified tiles manufacturing units in the Morbi cluster during last two financial years ending March 2018. Consequently, the growth in production capacity has exceeded the growth in demand resulting in pricing pressure not only in Morbi cluster but also in other ceramic tile manufacturing hubs in India.

Moreover, on March 06, 2019, NGT ordered ceramic units in Morbi to switch to PNG for their fuel requirement and discontinue usage of coal gasifiers to control air and water pollution in the region.

CARE expects the shift to PNG will increase the production cost of the entities and exert pressure on profitability since the ceramic entities will not be able to pass on the increase in cost without a time lag. Along with pressure on profitability, working capital intensity of the entities will also increase in the near term due to reduction in credit period on PNG and increase in procurement cost.

However, the long-term prospects for the industry seem to be favourable on account of:

- Rising urbanisation, increase in disposable income and increasing trend of nuclear families.
- Revision in the GST rate from 28 % to 18 % in November 2017.
- Movement in the real estate sector in terms of new project launches post compliance with RERA norms, albeit with a time lag.
- Impetus of the government, on infrastructure projects (SBA) and Housing for All.
- Healthy export demand due to continuance of anti-dumping duty on Chinese vitrified tiles by European Union, Brazil, Taiwan, Chile, Vietnam and Korea.

In terms of geography, while the domestic demand from the urban sector is more inclined towards high-end value-added tiles, a major volume growth is expected to be generated from Tier II & Tier III cities and government initiated schemes. In the domestic market, South India is growing at a faster rate as compared to the national average on account of a greater number of projects under execution.

In terms of market segment, the entities in the organised sector are likely to register better growth rates than the industry average on account of extensive product portfolio and established marketing & distribution channels. Adoption of the outsourcing model has helped organised players to ramp up production with minimal capital investment. The trend is

envisaged to continue on the back of proposed and on-going capex plans, by leading tile manufacturers in Morbi and Andhra Pradesh who intend to capitalize on the inherent manufacturing advantages in India and the foreseen growth in the domestic demand for ceramic tiles.

In terms of product segment, the premium range of ceramic products is growing on the back of technological innovations and limited competition. Major organised players, including multinational companies, are envisaged to expand their premium product portfolio to cater to the growing demand from international markets and urban consumers in the domestic market. However, the demand for entry-to-medium product segment (polished vitrified tiles) is expected to be higher on the back of products such as polished vitrified tiles (PVT) and ceramic tiles.

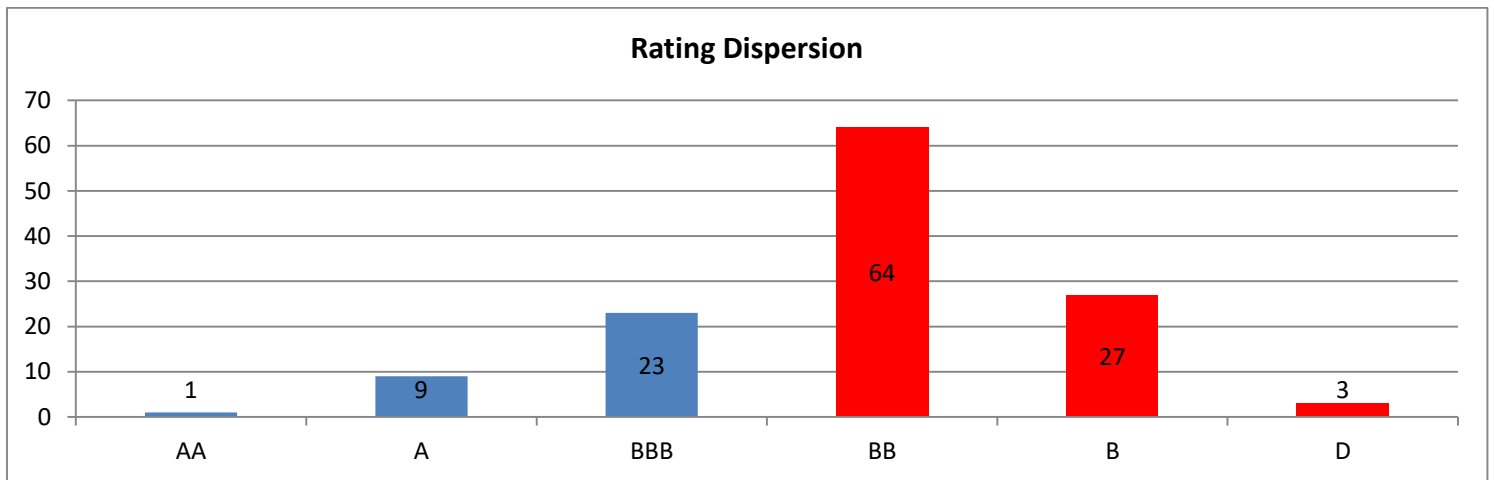
Investment plan: The ceramic cluster at Morbi and the upcoming ceramic cluster in Andhra Pradesh are set to witness high industrial investment in the near future. Approximately more than 60 units are envisaged to be operational in the medium term with an industrial investment of around Rs.2,000 crore.

The installed capacity for manufacturing of vitrified segment has already been ramped up and a situation of overproduction exists. However, the penetration of wall tiles in the domestic market is increasing and is envisaged to continue in the near term. The outlook of the industry remains stable and is expected to grow in the range of 7-8.5% in FY19-20.

Rating dispersion

CARE has an outstanding credit rating (as on December 4, 2018) on 127 ceramic tile units. Majority of the entities are in non-investment grade rating category on account of inherent weakness of moderate scale of operations, intensive competition, cyclical industry, volatile raw material prices leads to thin profitability margins and high working capital intensity of operations.

Chart 11: Rating dispersion of the ceramic tile entities rated by CARE:



Source: CARE Research