

## Prospect of Ceramic Products of Bangladesh: A Case Study

NIRMAL CHANDRA BHAKTA<sup>1</sup>  
M D . MOSTAFIZUR RAHMAN SARDER  
M D . SHAHID REZA

### Abstract

*Ceramic industry took a formal start in this country in 1958. Now, there are about 35 ceramic industries in the country. Ceramic Industry manufactures useful and ornamental articles from clay by shaping and hardening it in high temperature. The industry is basically a development of indigenous pottery works. The ceramic industry in Bangladesh has been one of the rapidly growing sectors. In the fiscal year 2004-2005, the country's ceramic tableware export reached US\$ 28.75 million, which was 16% higher than the previous fiscal year. Export from ceramics is expected to triple by 2008. The objective of this paper is to analyze the prospect of Ceramic industry in Bangladesh and its impact on export earning of Bangladesh.*

### Introduction and Rationale

Bangladesh is a least developed country and its economy is essentially agricultural. Although there has been some structural change away from agriculture into manufacturing in the recent years, the contribution of manufacturing to GDP is still much lower than agriculture, which provides the livelihood to about three-fifths of the country's population. Government is, however, committed to promote the dynamic industrial sector, which offers good

<sup>1</sup> Authors are General Manager, Deputy General Manager & Assistant Director of Bangladesh Bank, respectively. Opinions expressed in the paper are their own, and in no way reflect the official position of Bangladesh Bank.

prospects for generating employment and therefore encourages investment in a wide range of industries for a fast growth of the country's industrial sector. Among others, the ceramic industry is one of the promising industries with high potential for generating employment and income.

Ceramics is an inorganic, non-metallic solid prepared by the action of heat and subsequent cooling. Ceramic materials may have a crystalline or partly crystalline structure, or may be amorphous (e.g., a glass). Because most common ceramics are crystalline, the definition of ceramic is often restricted to inorganic crystalline materials, as opposed to the non-crystalline glasses.

The earliest ceramics were pottery objects made from clay, either by itself or mixed with other materials. Ceramics now include domestic, industrial and building products and art objects. In the 20th century, new ceramic materials were developed for use in advanced ceramic engineering, for example, in semiconductors.

The Ceramic industry is labour-intensive and it offers entry-level jobs for unskilled labour in developed as well as developing countries. Job creation in the sector has been strong for women in poor countries, who previously had no income opportunities other than the household. In Bangladesh almost half of the entire labour force were unemployed, and the textile sector has created a huge job opportunity for that population segment. The ceramics industry, too, can be foreseen as a good employment creating activity. Moreover, in ceramic industry, relatively modern technology can be adopted even in poor countries at relatively low investment costs. These technological features of the industry make it ideally suitable for Bangladesh to move ahead in its industrialization efforts.

Bangladesh now has some international standard ceramic industries and their contribution to export earnings is increasing day by day. The demand for Bangladeshi ceramic products is increasing in the international market. Considering these advantages, the present authors conducted a feasibility study on **Prospect Of Ceramic Products In Bangladesh: A Case Study**. This paper is the outcome of that study.

**History of Ceramic industry in Bangladesh:** Tajma Ceramic Industries Ltd. was the first ceramic producing organization in Bangladesh. From its production during 1958 at Bogra, Ceramic industry took a formal start in this country. Tajma is the oldest modern ceramic manufacturing plant in Bangladesh.

In 2004, Bangladesh had nearly fourteen ceramic industry units. Five of them are fairly large and these are Monno Ceramic Industries, Shinepukur Ceramic

Industries, Bengal Fine Ceramic Industries, Standard Ceramic Industries, and Peoples Ceramic Industries.

In 2008 there were about 35 ceramic producing industry operating in the country registering a 250% growth. Most of the industries are export-oriented.

The Peoples Ceramic Industries, located in Tongi Industrial Area, about 20 km north of Dhaka, is one of the oldest and largest ceramic companies in Bangladesh. The factory went into production in 1966. The production capacity of the factory is about 28,000 pieces of assorted tableware per day. The company however, has had little success in the export markets. Recently, the company has developed a new brand 'Super China', which is drawing the attention of foreign buyers.

Bengal Fine Ceramics Ltd. is the first industry in the country to make soft porcelain, which is known as 'stoneware'. This is an off-white product manufactured by using local Mymensingh clay. The factory went into production in 1986. It produces about 24,000 pieces (6 tons) of stoneware per day. From the very beginning, the company concentrated its trading activities in the international market and has been quite successful in its endeavor. Recently, the company has established a sister concern, Standard Ceramic Industries Ltd., near Gazipur, about 30 km north of Dhaka.

Shinepukur Ceramics Ltd was incorporated in 1997 with the aim of establishing a world-class bone china and porcelain tableware industry. The company is located at Beximco Industrial Park, Gazipur. It started its porcelain and bone china units in April 1999 and November 1999, respectively. Since the beginning of its commercial operations in 1999, the company has distinguished itself as the fastest growing concern in the sector. It has captured about 60% of the domestic market share and is doing well in the global ceramic tableware markets.

### **Production Scenario of Ceramic Products in Bangladesh**

At present, Bangladesh is exporting its ceramic products to over 50 countries all over the world. According to the Bangladesh Ceramic Manufacturers Association (BCMA), the ceramic sector in the country has every potential to grow and may become a big foreign exchange earner in the coming years.

Among the 35 ceramic industries operating in Bangladesh now, Monno Ceramic is the biggest. It began producing porcelain tableware for the Bangladesh home market in 1985, and secured its first export order the following year. Monno Ceramic soon earned an enviable reputation for both quality and value.

The ceramic industries in the country produce mainly four types of products. These are:

**Structural:** (bricks, pipes, floor and roof tiles); **Refractory:** (kiln linings, gas fire radiant's, steel and glass making crucibles); **White wares:** (tableware, wall tiles, pottery products, and sanitary ware), and **Technical:** (Engineering, Advanced, Special, and Fine Ceramics). These items include tiles used in the Space Shuttle program, gas burner nozzles, ballistic protection, nuclear fuel uranium oxide pellets, bio-medical implants, jet engine turbine blades, and missile nose cones. Frequently the raw materials do not include clays.

### **Export Potential of Bangladesh Ceramic Industry**

According to the Export Promotion Bureau (EPB) statistics Bangladesh exported only \$1.0 million worth of ceramic wares in 1991. In 2006-07, the total value of exported ceramic products from the 21 Bangladeshi manufacturers was \$38.33 million, up by 28 per cent from the previous year. The EPB expects to earn \$100 million from ceramic exports by 2012.

Of the products, ceramic tableware is being exported to about 50 countries, including the US and Canada, tiles to India, Nepal and Bhutan, and sanitary wares to the Middle East, especially the UAE. The industry sells ceramic products worth about Tk. 8.0 billion in the domestic market and pays taxes close to Tk 3.0 billion.

If the government ensures energy supply and can ensure quick refund of the import duties under the Duty Drawback Facility, Bangladesh may become one of the three largest global ceramic exporters by the next decade. Local industry is using the most advanced 'bone China' technology and the labour costs here are relatively much low compared with the developed nations. Also, as an LDC (least developed country), Bangladesh enjoys duty free access facilities in the developed country markets. Since domestic value addition to the ceramic sector is significantly high, ceramic exports may lead to a significant increase in net exports.

Ceramic has a vast area of use. It can find its use in car engines, in oil and gas industry, in electronics industry and so on. But Bangladesh has only specialized in tableware. If the Ceramic Industry of Bangladesh can develop an infrastructure for other ceramic goods, the industry will be able to earn more foreign currency from this sector.

The foreign investors acknowledged that there are a number of advantages of investing in Bangladesh, specifically the favourable investment rules and

regulations such as tax holiday, the facilities at the Export Processing Zones (EPZ), the low cost of Natural gas, and the cheap labour. The investors of UK wants to invest more than \$2 billion in Bangladesh and more investment is in the pipeline. Already, Asia Energy has proposed an investment of \$ 1.5 billion to develop the ceramic industry. It believes UK's investment in Bangladesh may be doubled within the next couple of years, if the economic environment remains favorable.

### **Impediments to growth of Ceramic Industry**

The local raw material used in ceramic industry is procured from larger Mymensingh region. The government put an embargo on cutting hills in 2007 through a public notification, which stopped ceramic manufacturers from procuring raw materials from the Mymensingh hills. The Mymensingh clay could be used for producing tiles but, for tablewares, Bangladesh needs to import superior quality clay from India and China. The government may take steps to find deposits of superior quality clay for ceramic in the coalmine from the region of north Bengal.

Ceramic manufacturers also urged the government to reduce tariff on gas, used in the ceramic factories. It will help them compete in the international market. Presently, average gas tariff is Tk 2/cubic metre for fertiliser factories, Tk 5.13/cubic metre for ceramics factories, and Tk 3.5/cubic metre for gas-based power plants. The government is urged to lower the import duty on ceramic raw materials to 5.0 per cent from the existing 7.5-15 percent.

The ceramic industry needs uninterrupted power and gas supply round the clock to maintain the required 380-degree temperature in a ceramic tableware factory. When power voltage or gas pressure is low, the temperature falls, and when the temperature falls it takes at least 12 hours to bring it back to the required level, causing a huge loss. A low heat in any plant causes fault to colour and quality. Irregular power and gas supply will result in low quality products, and the country may lose its export market to its competitors like Sri Lanka, Malaysia and Thailand.

The ceramic industry in Bangladesh faces some other impediments as well. These are the lack of high level technology support, absence of an international standard laboratory, high import duty on specific raw materials (15-30%), and high rate of VAT (15%) on produced goods. These problems will need to be taken care of to ensure a smooth growth of the sector.

### **Opportunities for Foreign exporters and investors**

- **Raw materials:** In Bangladesh, there is a shortage of raw materials for the ceramic industry. Foreign exporters could consider supplying raw materials such as bone ash, china clay, refractory materials, plaster of Paris and limestone to the Bangladeshi companies engaged in producing ceramic products.
- **Machinery:** Supplying industrial process machinery (such a kilns) to Bangladesh could be immensely profitable to foreign exporters as Bangladeshi companies look for cutting edge technology in ceramic production to maintain their competitiveness.
- **Laboratory:** As stated earlier, Bangladesh has no international standard laboratory (for research) in the country. Foreign companies may seek opportunities in this field to expand their operations in Bangladesh.
- **Labor:** In Bangladesh cost of labor is very low, which may encourage foreign investors to come and set up their factory in Bangladesh.

### **Opportunity for Bangladesh**

Bangladesh is an enormously populous country. There are 150 million people in the country living in a small area of 55 thousand square kilometers. About 40% of the people are living in poverty, which makes labor so cheap in Bangladesh. Foreign investors will consider the availability of cheap labor as an advantage and will set up their industry in this country.

As mentioned earlier, ceramic products have high export potentials, but besides earning foreign exchange, the ceramic factories cater to the growing domestic demand for the products – the size of which has grown to Taka 700 crore in 2008-2009 financial year.

Bangladesh exported only US\$ 1 million worth of ceramic wares in 1991 before recording a staggering 695 per cent growth in about a decade, investing nearly Taka 2,000 crore and employing some one lakh people in the industry. As a least developed country, Bangladesh gets ‘tax exemption’ in the European Union countries.

As expected by Ceramic Ware Manufacturers, the sector would earn \$100 million annually from the beginning of the next decade provided the international market has not been affected by the lingering effects of the global economic meltdown. They want the government to promote the sector with various ‘incentives’ as the value addition of the ceramic sector is almost 65 per cent. At a recent meeting with the finance minister, the industry leaders submitted a 10-point demand for bank

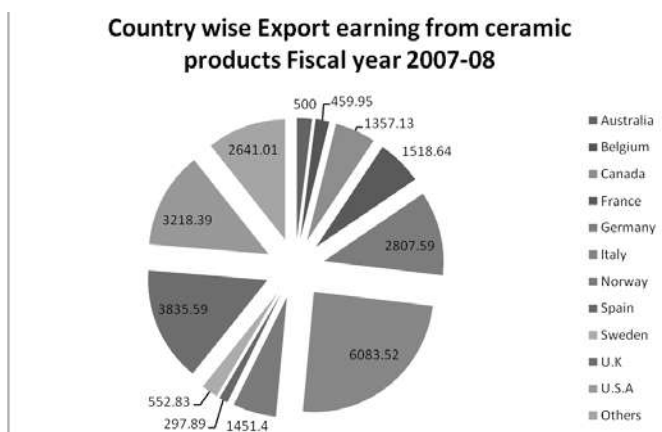
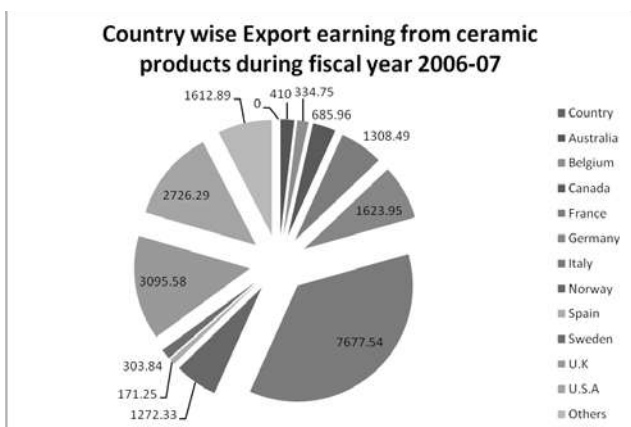
loan at low interest rates and inclusion of the ceramic sector in the government’s stimulus package announced in the budget.

**Scenario of future growth**

Inspired by increased overseas demand and local capacity expansion, Bangladeshi ceramic manufacturers look forward to an annual \$100 million export earnings by 2012, a mammoth jump from the current yearly income of \$30 million.

The export of tableware products has been witnessing over six percent yearly growth for the last ten years carving a significant niche in US and European markets.

As overseas demand is going up, local big players of ceramic market — Monno,



Shinepukur and Bengal Fine, RAK ceramic, Peoples ceramic — now completely focus on export market, channeling over 80 percent output into international market.

Starting production in 1980s to feed the local consumers, ceramic tableware industry made a slow but steady progress to approach the foreign market.

After consistent growth in the last ten years, the ceramic export is now in a good position to achieve the \$ 100 million target in 2012. Quality of products has earned Bangladesh a niche market in the developed world and the recent trend shows that the market will grow and grow further.

### **Findings**

The overall growth performance of modern ceramic industry is very encouraging and lucrative for the investor. Modern ceramic industry has developed in a systematic manner and investors are interested to invest in this sector. In spite of some limitations such as availability of raw materials, ignorance of the investor, low inflow of foreign investment etc., this sector is developing gradually and will be able to earn a huge foreign currency for the country.

### **Conclusion and Recommendation**

The art of pottery is perhaps as old as human civilization. Initially, it started with clay and then passed through various media like wood, stone, shell, and metal before reaching the age of ceramic and porcelain. Bangladesh can proudly claim to have passed through all these stages to land successfully in the ceramic age.

Till the other day export market of ceramic tableware was exclusively the domain of china, Japan and South Korea in the East and France, Germany, Italy and the UK in the West. But those days are gone and the old suppliers have started yielding to the new ones through the process of competition. That is how Bangladesh has emerged as one of the successful manufacturing and exporting countries of quality ceramic products.

With the traditional skill and craftsmanship handed down from generation to generation and the favorable environment created for investment and export, Bangladesh has now reached such a stage of development that it is second to none in respect of manufacturing and exporting ceramic tableware. The secret of this success is quality. Bangladeshi ceramic tableware is rated as one the best in the world. Almost all the producing units have succeeded in establishing their brand names in the international ceramic tableware market.



To ensure proper quality and goodwill, the ceramic tableware-producing units should use high quality raw materials. The machinery and equipment should be also modern and conform to the latest technology and standard. Each of the units should have its own in-house laboratory facility and quality control and testing mechanism. All these arrangements will help to contribute to the production of world-class ceramic tableware in Bangladesh. The types of products presently being marketed from Bangladesh are: dinner sets, tea sets coffee sets, soup sets, fruit sets, plates, bowls, flower vases, mugs and various types of souvenir items. Most of the ceramic products are ovenproof, chill-proof and dishwasher-proof and free from any chemical hazards. This enables the user to rely on ceramic tablewares from Bangladesh with confidence.

At present, Bangladesh is exporting ceramic tablewares to more than 50 countries, the most important of which are the USA, the UK, Italy, Spain, France, New Zealand, the Netherlands, Australia and Sweden. The exporters of ceramic should still find newer markets for their product so that the industry may become stronger and stronger in the future.

***Bibliography***

1. Exports receipts 2007-2008 published by Bangladesh Bank.
2. Economic Trends June, 2009 published by Bangladesh Bank.
3. Balance of payments published by Bangladesh Bank.
4. Banglapedia.
5. Internet.