## EXPOSURE VISIT BY BANGLADESH BRICK MANUFACTURING ASSOCIATION MEMBERS ON FAL-G BRICK MAKING AND CONSTRUCTION TECHNOLOGY, VISAKHAPATNAM AND KOLKATA June, 2015

A delegation from the Bangladesh Brick Manufacturers Owners Association (BBMOA) visited Visakhapatnam and Kolkata in June 2015 to seek comprehensive knowledge about Indian Fly Ash brick manufacturing and it use in construction, in order to set up fly ash brick units back home.

A diverse set of personnel from Bangladesh came to Visakhapatnam on June 07 for an elaborate discussion on FAL-G brick technology. This was an immediate outcome of the Dhaka roundatable in May this year, wherein this techinology was shared with government and nongovermental stakeholders. This was an essential milestone towards exploring viable brick technologies that did not use top soil, which is threatening arable land in Bangladesh.



Mr Kalidas, Director, INSWAREB (Institute for Solid Waste Research & Ecological Balance), hosted the 2day exposure visit in Visakhapatnam. The proceedings initiated with an ice-breaking dinner session on June 07, followed the next day by site visits to NTPC (National Thermal Power Corporation) power plant in Simadhri, manufacturing facilities and construction sites. Mr Kalidas also conducted an elaborate classroom session.



The NTPC visit concluded on a positive note with the NTPC Plant Group General Manager AK Samantha actively engaging with the delegation. Samantha committed to support this initiative in areas of knowledge transfer, training, raw material and logistical support. The visit to the various manufacturing facilities elicited great interest from the delegation. The delegation visited various construction sites and were impressed with the form factor of the bricks and the look of

the building structure made out of FAL G Bricks. A visit to the laboratory at INSWAREB provided an opportunity to learn about the equipment used to measure and assess brick strength, quality and material composition. Mr Kalidas recommended that the Bangladesh association also invest in a centralised laboratory under the scrutiny of the government for standardised brick quality right from the pilot stage.

June, 2015

The classroom session provided inputs on the economics (industry and market dynamics, supply and demand side management) and financial viability of setting up a manufacturing unit, calliberated as per different capacity and demand. The visit concluded with an interction with the media.



Next on the agenda was a visit to Kolkata.

The scale of operations is higher here with promising commercial potential. The delegation was impressed to see the marketability and commercial scale of this technology, and this reinstated their confidence in the marketaility of the bricks.

The challenges perceived by the delegation was the need for government regulation over bricks and an appropriate building code.

The use of fly ash in brick making is not new, but Fal-G of Fly ash Limestone-Gypsum technology has the potential to completely eliminate carbon emissions from India's large brickmaking industry, since no coal is required. It does not use topsoil, but uses fly ash, an unwanted residue from coal-fired power plants.

Bricks can be produced in a variety of strengths and sizes and for various types of infrastructure projects. To encourage its adoption, inventors of FaL-G, Mr Kalidas and Dr. N. Bhanumathidas, hav not patented the technology. Entrepreneurs who choose this technology are provided assistance with production techniques, training for workers, and advice on the marketing of bricks.

Government of India supports the manufacture and use of fly ash bricks through policy support. Identified action points included (a) Policy dialogue between the Department of Energy, Government of Bangladesh and Indian policy counterparts (b) Supportive stakeholder group that includes the Department of BBMoA (Bangladesh Brick Energy, Manufactures and Owners Association), BUET (Bangladesh University of Engineering and Technology) (for technical advisory) and IDCOL (Infrastructure Development Company Limited) (for financial support) and (c) Piloting the technology.



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