Transition pathway of traditional brick sector towards non fired technology

Abstract:

Bricks is the most important material in the construction industry, which has been growing at about 5.6 percent annually, leading to an estimated growth rate of 2–3 percent for the brick sector. Bangladesh's brick sector consists of 7,859 operating kilns as of 30 June, 2018, which contribute one percent of the country's gross domestic product (GDP) and employ one million people. It is the fourth largest producer and consumer of bricks in Asia after China, India, Pakistan and Vietnam, according to various industry studies. Although the traditional brick sector contributes about 1 per cent of the country's GDP, it is characterized by low energy efficiency due to outdated technology, prevalence of small-scale kilns with limited financial capacity, dominance/overuse/dependence on a single raw material (clay). Therefore, developmental transformation is urgently needed in the brick industry by gradually shifting it towards cleaner processes, efficient technology and better product portfolio.

Rationale of the research:

Considering all the drawbacks of traditional brick sector the Government of Bangladesh issued an order (24 November, 2019) that by 2024-25 all types of govt. construction, maintenance work, building wall and boundary wall, herring bon and bond road will have to use the non-fired environment - friendly blocks 100% (except base and sub-base construction and maintenance works of Roads and Highway).

The goals of the action plan are stated as follows:

Fiscal year	Goals of using block
2019-2020	10%
2020-2021	20%
2021-2022	30%
2022-2023	60%
2023-2024	80%
2024-2025	100%

So, it is high time we can say that this non fired technology have the required potential to become the next phenomenon in the brick sector of Bangladesh.

Objectives:

- To Identify and analyze barriers of the transformation of traditional brick sector towards non fired technology.
- Financial/ Technical policy suggestion for the transformation of traditional brick sector towards non fired technology.

Site selection & survey pictures:

To get a primary idea about how to design the transition process of traditional brick sector towards non fired technology we are conducting questionnaire survey on the traditional brick producer of divisional level. We are conducting the survey mainly on the cluster areas of traditional brick fields where maximum brick fields are situated. We are conducting our survey on Dhaka, Chittagong, Rajshahi, Khulna, Mymensingh, Sylhet and Barisal division.

Field survey picture-1

Field survey picture-2

Field survey picture-3

Meeting with the members of Bangladesh brick manufacture owners association (BBMOA)

Research Team:

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