

PREFACE

Brick manufacturing industry is unorganized and traditional in nature. It is generally concentrated in the rural areas at the vicinity of urban centres. The manufacturing of bricks follows both traditional as well as modern technologies. The making of clay bricks in the present study area are generally done manually and firing of green bricks is performed by fixed Chimney Bull's Trench Kiln (FCBTK).

The agglomeration of brick kilns in the study area took root due to the availability of loamy clay soil and Assam coal, cheap labour supply etc. The profit that generates through the manufacturing of bricks mainly goes to the owner. However, the sector generates seasonal job opportunities in the various forms for the local as well as for the migrant workers who generally come from the nearby villages of Tufanganj-1 block. Some skilled workers are hired from other states like Bihar & Jharkhand.

The working and living conditions as well as socio- economic status of the workers in the study area are worst in most of the cases. The labourers both male and females are compelled to come to work in brick kiln industry for their economic upliftment. The education of the children who come to the kiln sites or left in the home with other family members is hampered or in most of the cases pre-terminated. Due to illiteracy and ignorance the workers are not aware about their basic rights which are violated in every step of their working processes. The minimum wage laws, maternity-leave, contribution to PF to the workers are also violated.

The brick sector consumes a large amount of fertile top soil and coal which lead to serious environmental issues. The agricultural land has become degraded and unfertile in the study area. The environment is becoming deteriorated day by day. The productivity of crops has diminished.

The burning of clay bricks by FCBTK requires coal and wood combustion which produce greenhouse gases like CO₂, CO, SO_x and NO_x and various pollutants like BC, HC, SPM, PAHs etc. This emission deteriorates environmental quality. Besides emission the combustion of coal and wood generates a huge amount of wastes in the study area. The solid wastes from broken bricks and rubbish also create serious problems. The excessive and

rampant quarrying of agricultural land causes temporary and permanent water logging in the study area.

This in depth study was undertaken by the researcher in Tufanganj-I block of Koch Bihar district not only for academic interest but also with a hope to elicit some policy orientation regarding use of environment friendly technology as well as improving of the living, working, and socio- economic conditions of the workers in the brick kilns.

While the study was under process the research has incurred a lot of debts to many persons and institutions. First and foremost, he expresses his deep sense of gratitude and heartfelt thanks to his teacher and supervisor of the research Dr. Ranjan Roy, Professor, Department of Geography & Applied Geography, University of North Bengal for his valuable guidance, advice, suggestions, necessary corrections, and constant inspiration in completing the work.

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