

SECTION C: ENGINEERING, ARCHITECTURE AND SURVEYING

C1

HANDMADE BRICK INDUSTRY IN SRI LANKA

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The manufacture of handmade bricks has over the years gained the status of an indigenous small-scale industry in Sri Lanka. This rural semi-formal manufacturing has not received a systematic investigation of its inherent characteristics of technologies of manufacture and socio-economic aspects of production. This, to a great extent has hampered the upgrading of the industry with concurrent degradation of the quality of the product.

A systematic investigation of the technology of manufacture of handmade bricks embracing raw materials, winning and processing of clay, moulding of bricks, drying of moulded bricks, firing of green bricks, productivity and efficiency of manufacture, organization of unit including infrastructure, layout, skill requirements, capital investment and economics of production, marketability of the product and also quality assessment, testing of bricks, current status of quality and strength requirements have been carried out by an islandwide survey of the bricks fields. An emphasis has been placed on the techniques of firing with in-depth studies on the existing designs of kilns, schedules of firing, efficiency of firing, consumption of fuel and the economy of firing. The technical and economic data has been gathered with respect to a randomly sampled cross-section of brick-making units representing the major bricks fields, by a series of field visits and interviews. A number of organizations concerned with the manufacture, development and standardisation of clay bricks have also been contacted to supplement the data on the study of the state-of-the-art of the industry. Analysis of clays and quality assessment of bricks, representative of major brick fields, have been carried out to investigate the variation of quality of bricks with that of clay.