ABSTRACT

Construction industry is the key to development of any other sector of the economy. It accounts for nearly 6% of India's GDP. Construction forms an integral and major part of any infrastructural project. Housing is considered as a major sector in the construction industry. In order to combat the practice of cost effective housing, an experiment was launched in 1985 at Kollam district, Kerala to provide shelter to those rendered homeless by natural calamities. This exercise in crisis management was found to be successful and this led to the first Nirmithi Kendra to be set up at Kollam to design and construct houses at affordable cost using the cost effective and environment friendly construction technologies. This success model led to the establishment of a total of 535 centres in our country. However, the initial momentum in this line could not be sustained. Though the technology offered cost reduction up to 30%, the number of projects being executed by Nirmithi Kendras gradually declined and clients especially those from the housing sector became reluctant to go for this technology. It was felt that there is scope for detailed studies and there exists possibility to develop a systematic approach to maintain the momentum of such organisations in the housing sector.

The first phase of the research was survey of different organisations undertaking housing construction namely ISO certified organisations and non certified organisations. The critical factors of TQM identified through literature review and pilot survey were used as the parameters to evaluate these organisations. This included organisations from outside the state. The analysis was done using statistical package SPSS 9.0. Results indicated that non-certified organisations have better HRM (Human Resource Management), better communication and also risk management when compared to certified organisations. A set of performance indicators were then formulated and performance evaluation of these organisations was carried out by collecting feedback from their clients. The analysis was again done using statistical package SPSS 9.0.
The results were then validated for Nirmithi Kendra. Reasons for the low level of customer satisfaction in the case of Nirmithi Kendras were identified. This necessitated that a Housing Quality Assessment Methodology be evolved. A questionnaire was prepared after extensive literature review and validated by conducting pilot survey. Response to this questionnaire was collected from the Middle Income Group of Kerala which forms the major customer base for Nirmithi Kendras. Analysis was done by use of statistical tools and a model was generated.

The results were then used as a benchmark to evaluate the houses constructed by Nirmithi Kendras. The study was also extended to evaluate the extent to which the objectives of Nirmithi Kendras are achieved. Based on this a TQM model for Nirmithi Kendras has been proposed.

The Housing Quality Assessment Methodology developed during this study can be used as a tool for planners/designers to evaluate any target group’s requirements on housing quality. Findings of this research study are expected to offer guidelines in formulating action plan to bring about changes in the functioning of Nirmithi Kendras at the organisational level as well as to enhance customer satisfaction.

The quality indicators and factors influencing them are dependent on the target population. There is room during further research to enrich the list of indicators and corresponding factors so that this methodology can be extended to a population of a heterogeneous nature.