

# INPUT STRUCTURE OF RESIDENTIAL BUILDINGS—A CASE STUDY

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THIS paper presents the results of a pilot survey on the costs of residential construction in Poona city during 1958, conducted by the Institute. The object of the survey is to analyse the input structure of the residential buildings and secondly to examine the variables that explain the variations in the cost. A stable input structure, stable over a class of buildings, if it exists, would be very helpful in estimating the requirements of the building materials or their costs. If the total cost can be related to some variables like the floor area, cube contents etc. in a definite form the investment in buildings can be better estimated. The costs considered in this paper are exclusive of land value and the costs of electrical installations.

Building industry poses a number of problems both as regards the availability of the data and its analysis. Though residential buildings alone accounted for 13.6 per cent of the total tangible wealth of India in 1960-61 as estimated by the Reserve Bank, practically no statistics are available on the cost aspect. There are only a few studies in the field.

In section I the earlier work on cost analysis of the residential buildings and the problem of defining an output in the building industry are discussed. In section II the magnitude of residential construction in Poona City during the year 1958 and the data and its limitations are presented. Section III analyses the Input Proportions and their variation. The problem of cost variations is discussed in section IV.

## I

The report of the environmental hygiene committee appointed in 1949 gives the percentage expenditure on important materials and labour for a 'conventional building'. These percentages are based on the experience of the members of the committee.<sup>1</sup> In 1950 the Government of India appointed a committee of experts on building works to see what proportion of the cost goes into each item of building materials. They have considered a typical double storey flat in Delhi for the Government employees in the income range

<sup>1</sup> Report of the Environmental Hygiene Committee 1950, Ministry of Health, Government of India, p. 16.