CASE STUDIES OF THREE BUILDING PROJECTS IN NAIROBI.
with special reference to manpower and employment generation.

Author: Peter A. Erkelens, M.Sc. (Civil Eng.)
Research Fellow
Date: August, 1980.

Housing Research and Development Unit, HRDU
Director - T.S. Chana
P.O. Box 30197, Nairobi, Kenya. Tel. 27441 Ext. 212.
ACKNOWLEDGEMENTS

The author gratefully acknowledges the help received from the Ministry of Urban Development & Housing (previously known as Ministry of Housing and Social Services), in particular Mr. A.J. Marshall and Mr. G.J. Verbeek for their initial work on this survey. The co-operation of Messrs. D. Droge, Panesar and G.S. Virdi Clerks of works at the three projects, who filled in the questionnaires on a daily basis, is very much appreciated. The colleagues at the Housing Research and Development Unit are thanked for their co-operation with this project.

Edited by Rita I. Morris Ph.D.
Typing is by Lucy M. Wangugi.
Drawings by George Juma, research assistant.

Copyright:
The contents of this report may be quoted or reproduced without further permission. Due acknowledgement is requested.

ABSTRACT:

Daily records on three different building sites in Nairobi: An office building, a multi-storey residential building and a maisonettes housing estate were made between 1973 to 1976. This survey report shows the manpower needs per trade during the project and discusses employment generation by project, labour costs, building costs per square metre plinth area and cubic metre building and makes comparisons between the three projects.

68 pages, 15 illustrations and photographs.
1.0. INTRODUCTION

In many countries much research has already been done on manpower in the building industry. However, little of that is of use for Kenya because of its specific type of building industry. In Kenya one finds several Asian contractors employing African workers; African contractors employing Asian supervisors; and European contractors with a whole mixture of staff.

Until now limited information has been available on the structure and nature of the process of building construction from an employment point of view.

In 1972 the then Ministry of Housing and Social Services decided to make daily records on the building sites of three different types of building projects. The aim was to obtain information on the daily numbers of different skills employed during construction and to find out the generation of employment on the building site measured in terms of a contract sum of K.Sh. 1 million, and whether differences existed between the projects.

It was later realized that this survey had its limitations. The Ministry preferred to obtain this data from as many projects as possible; however, this was not feasible due to the lack of finance and other constraints. The survey was carried out on three building projects in Nairobi.

2.0. SUMMARY AND RECOMMENDATIONS

2.1. SUMMARY

Between March 1973 and February 1976, the Ministry of Housing and Social Services did a manpower survey on three different building projects: (i) a multi-storey office building (offices) (ii) a multi-storey building for residential flats (flats) (iii) a maisonette type housing estate (maisonettes).

The clerk of works made daily counts on the number of specific artisans and other related subjects for each of these projects.

With this information, it was possible to analyse the required manpower for the various trades and different project types. The focus was on unskilled labourers, masons, carpenters, steel/iron workers, plumbers, electricians and foremen.

This report analyses the generated amount of manyears per trade per contract sum of K.Sh. 1 million for the three projects in 1976.

For the three different projects an estimate has been made of the percentage of labour costs compared with the total contract sum and data has been given from which production figures could be derived.