

TRAINING AND MANPOWER DEVELOPMENT FOR MAINTENANCE
WORK IN KENYA.

7

ABEL G. MUGENDA
Senior Lecturer and Chairman
Department of Building Economics and Management
College of Architecture and Engineering
University of Nairobi.

HARDU LIBRARY COPY
DO NOT REMOVE

Prepared for a National Workshop on Maintenance organized
by the United Nations Centre for Human Settlement (HABITAT),
the Ministry of Lands and Housing and the Ministry of Public Works
at UNCHS headquarters, Gigiri, Nairobi, Kenya
March 6th and 7th 1991.

ABSTRACT

The purpose of this paper is to review the training and manpower development for maintenance work in Kenya. In this paper, the link between the design process and maintenance is first established. Secondly, an overview of training opportunities for professionals in construction industry is given. The emphasis are on including maintenance issues in the curricula of such programmes. Specialized training for maintenance surveyors in Kenya is then discussed. Finally, conclusions and recommendations are presented.

In linking the design process to maintenance, it is observed that future maintenance needs of a building are directly related to the decisions made at the design stage. At the design stage, design decisions are largely based on the manipulation of various design principles. Design principles consequently determine the design parameters such as shape and height of a building, floor areas, window areas, number of storeys, etc. Research has shown that these design parameters are significant determinants of maintenance costs of buildings. It is argued that consideration of maintenance issues together with logical manipulation of the design factors would considerably reduce future maintenance costs of buildings in Kenya.

The training of professionals involved in making decisions at both the design and construction stages is done at Universities, Post Secondary Colleges and other technical schools. It is noted that curriculum for these programmes do not address the maintenance issues adequately. To achieve economically maintainable designs, there is a need to include relevant maintenance courses in these programmes.

Specialized training for maintenance surveyors is currently offered at the University of Nairobi in the departments of Building Economics and Management and Land Development. After graduating, graduates work with public or private institutions to gain experience. They then take a professional examination. Other professionals in the building industry can also qualify as maintenance surveyors if they have the relevant experience, and pass the professional examination.

In conclusion, it is recommended that all programmes for training professionals in the building industry incorporate maintenance courses in their curricula. Contractors, sub-contractors, material manufacturers, users, etc., should also be sensitized to maintenance issues through seminars, journals, newspapers, etc. Qualified maintenance surveyors should be incorporated in the design team. Research on materials and technologies that minimise maintenance problems should be supported and encouraged. Findings from such research should be disseminated through seminars, workshops, newspapers, journals, etc. The paper concludes by suggesting that resources and training opportunities for maintenance works do exist; a workable strategy is what is required.

Introduction

In the early 1970s, Bourne (1981) observes, about seventy three percent of the worlds population lived in the developing countries. However, during the same period developing countries accounted for only forty percent of the newly constructed facilities in the world.

Economists have often emphasized that there is a direct link between development and the level of construction in the economy. Investments in constructed facilities tend to vary systematically with the level of development in any given country (Lakshmanan, Chatterjee and Kröll, 1978).

Therefore, in their quest for economic development, most developing countries realized the need for investment in constructed facilities such as schools, hospitals, office blocks, residential houses, roads etc. During the 1980s, countries like Kenya invested heavily in both private and public buildings and other infrastructural works.

In recent years however, inflation of building prices, unprecedented interest rates, recurrent shortages of mortgage money, currency devaluations and consequences of high population growth rates and associated unemployment problems have meant less investment in the construction sector. To keep the existing stock of constructed facilities functional, maintenance and rehabilitation of these structures should now be viewed as necessities rather than luxuries.

To achieve effective maintenance standards in Kenya, there is a dire need to formulate a well thought out and workable strategy. Such a strategy would include; appropriate maintenance policies and practices, cost control proceduces in maintenance, efficient cost-recovery methods and effective