

**REVIEW OF BUILDINGS CODES
AND
REGULATIONS**

**a manual based on
Kenya's experience**

**HOUSING RESEARCH AND DEVELOPMENT UNIT
UNIVERSITY OF NAIROBI**



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A Manual Bases on
Kenya's Experience

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THE BACKGROUND

Introduction

In order to understand the deficiencies of the building codes and regulations in Kenya one has to recall, even momentarily, what happened in Europe nearly a century ago. Formal building control of housing development was created originally in Europe at the end of the nineteenth century in order to combat the unpleasant odours and sights and, later, public health dangers created by the insanitary living conditions of the overcrowded urban poor as a result of the Industrial Revolution. The manpower needs of the new factories created at the expense of the earlier small scale rural industries, produced an urgent demand for vast quantities of cheap accommodation close to the factories. As a result large numbers of dwellings were quickly constructed at minimum cost and with the minimum of facilities.

The lack of proper sewerage and refuse disposal aggravated by the overcrowded conditions of both buildings and whole areas of the urban centres, created ideal breeding grounds for major outbreaks of diseases. The spread of these diseases to the better accommodated and more educated (and therefore more vociferous) members of the community, together with the emergence of philanthropically minded organisations and individuals created an impetus to find means of providing more sanitary conditions. The simultaneous initial development of local authorities with powers to order and manage the life and development of the urban area, provided the means and the vehicle for the application of these improvements.

Thus the early Public Health Acts were born. Their objectives were to prohibit conditions to arise whereby the health of the public at large would be threatened. Thus water supplies either from wells, standpipes or individual piped supplies had to be uncontaminated; human waste and refuse had to be collected and disposed of in a clean sanitary manner. Subsequently the controls were extended to cover the construction of buildings to ensure structural stability, weather resistance, minimum levels of lighting and ventilation.

Following the heavy influx of settlers into Kenya after the first World War the British colonial authorities introduced public health legislation and building controls for the rapidly growing towns of Nairobi, Mombasa and Kisumu during the period 1929 - 1931. This legislation was naturally based on the British system both with regard to the regulations themselves and their means of application.

The public control of the building process was extended further by the introduction of the Town Planning Act of 1931, and the Nairobi City Council introduced its own Building By-laws (Planning) in 1948.

However the most strictly applied regulations were and are those embodied in the Public Health Act and its by-product the Building Code. Historically the pre-eminence of the Public Health Acts and their creation to protect the public from contagious diseases gave them legal precedence over all other legislation.

Current Issues

Within the urban areas effective development has been impeded in the past by a conflict between standards and needs. Standards protect some groups against the means used to provide needs for others. Realistic minimum standards are essential but if they are set too high they impose needless sacrifices on those in greatest need. Low cost housing in municipalities is a case in point. Over the last plan period only 8 per cent of the low cost units planned were completed and these cost on the average five times the expected cost.

Excessively high and unrealistic standards for building design, occupancy, and municipal services were clearly a major contributing factor. During the planning period, all municipalities will review their housing standards in order to make them appropriate for the settings to which they will be applied and to reduce them to the minimum consistent with the provision of low cost housing at reasonable cost. These standards will be raised as development creates higher and more widespread income.

(Development Plan 1979-1983 Part 1,
Chapter 2, Government of Kenya)

The application of the minimum standards referred to in the above quotation is normally exercised by the local authorities under the powers given them by the following legislation: Public Health Act, 1972, Building Codes Grade 1 & Grade 11 1968, Town Planning Act and local By-laws supplemented by policies approved by the Councils which expand or modify the Building Codes or Planning Legislation. In addition, where the land to be developed is Government land then the Commissioner of Lands can, as a condition of granting a lease, impose his own standards and requirements. Since the late sixties concerted efforts have been made by the Ministry of Housing and Social Services (now the Ministry of Works, Housing and Physical Planning), through the NHC, to implement both site and services and squatter upgrading schemes throughout the country. In addition numerous studies have been undertaken by the HRDU of the University of Nairobi and consultants on behalf of the Ministry to recommend optimum plot sizes, layouts, building designs and alternative forms of treatment and disposal.

In some cases proposals for site and services projects which have been professionally designed to provide housing for the low income population have not been implemented because they do not satisfy the requirements of the existing legislation and regulations governing construction. The principal areas of conflict between the building legislation and the production of low cost housing lie the following areas:

a) Lack of specific requirements: Comments and criticisms came from both developers and local government officials about the lack of specific requirements in the Building Codes and especially the Grade 11 codes which are designed to cater for simple buildings in periurban and rural areas. As a result developers are faced with inconsistent personal interpretations by officials. On the other hand local government officials claim that they are forced to refer to the earlier building regulations (repealed in

1963) for guidance. The powers of the Medical Officer of Health given under the Public Health Act 1972 also appear to cause considerable problems to developers due to:

- i) the amount of personal interpretation involved and
- ii) the legal powers given by the Act for him to overrule the Building Code.

The annoyance caused by arbitrary application and personal interpretation of the vague clauses in the legislation was aggravated by the lack of any authority or provision for appeal by aggrieved applicants. The decision of local authority officials, even if considered incorrect, is final.

b) Lack of unified legislation: This criticism applied to all the legislation and regulations, but is strongest in relation to the various requirements for the provision of infrastructure. The plea often heard was for a unified set of standards in one document.

c) Inappropriate standards: The developers of low cost housing claimed that the local authorities insisted upon building materials far superior to those permitted by the Grade II Building Code. Conversely the house builders were unhappy with some of the materials permitted and considered that only concrete blocks and reinforced columns and beams constituted a "real house"

With regard to the infrastructure requirements it is accepted that the minimum standards demanded raise the overall cost of the project. There appears, however, to be an acceptance that the provision of potable water and collection and treatment of human waste is an absolute necessity. Therefore the conflicts relate to the engineering details and to how these services are provided.

The required standards of construction of access roads seem to be a clear point of conflict, revolving around the high capital cost of building to "adoptive standards" versus the high maintenance costs of murrum (i.e. laterite) roads.