A STUDY OF MEDIUM COST HOUSING - DESIGN ASPECTS-

> Kajian Senibina Perancangan dan Ukur Institiut Teknologi Mara, Shah Alam

It is our pleasure to record a word of special thanks to those involved in guiding and providing us with information in relation to the study.

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### PREFACE

Dissertation is part of the academic requirements for the Advance Diploma in Architecture in ITM.

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For this purpose, the class as a whole, had opted to do a detailed study and analysis on "Medium Cost Housing".

The class was further divided into three groups to undertake the different aspects of medium cost housing, The three aspects are in terms of:

- 1. Cost
- 2. Design
- 3. Social.

This volume deals with the design aspects. References were made from several governing bodies like PKNS, JPN and KL City Hall and also the residents of the schemes studied.

This study is aimed at compiling a record of some of the medium cost housing schemes within the Klang Valley. It also serves as evidence and capabilities of our local architects in meeting the challenge of designing within a given cost constraint.

#### 1.0 INTRODUCTION

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Medium cost houses, as defined by the Dewan Bandaraya falls within the cost of M\$25,000 to M\$60,000. According to the Jabatan Perumahan Negara (JPN), medium cost houses are those within the price range of M\$25,000 to M\$100,000. They are further divided into two price groups; low-medium (M\$25,000 to M\$50,000) and high-medium (M\$50,000 to M\$100,000).

It is important to fix the price range so that we can differentiate and classify the houses according to their prices . i.e. low cost, medium cost and high cost. Once classification is made we can roughly see that each of the three groups of  $\mathbb{R}$ certain characteristics or features that is houses possess different from another group. For an instance /the low cost houses may probably have asbestos roofing and concrete block walls, whilst the medium and high cost houses may have larger spaces with many extras depending on the cost. The more expensive the house, the more elaborate is the design. We can thus see that cost is the main determining factor influencing the design of a house. Cost determines the built-up area, materials used, finishes and also construction. This is clearly seen in the design of low and medium cost housing which has to be very-cost conscious. Once a budget is set, design constraints are also set..

In medium cost houses we find that there is a general standard in the design. This is due to the constraints which are common in any development. The designers when faced with these constraints have to work within the limitations and hence the standard solutions. The developers on the other

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hand are interested in maximising their profits. This is achieved by having a greater density, cheaper materials and more economical mode of construction. The designers have no choice but to work within these constraints.

In our country, government officials and developers have a rigid idea of what really constitutes housing - in particular low cost and medium cost houses, which have been restricted to single and double-storey houses, or walk-up flats. If only these types of residential units continue to be constructed, residential estates will appear uniform and monotonous. In view of this approach, members of the public are conditioned to believe that medium cost houses are restricted to only these two categories. The other reason is that the public tend to equate density level with building forms.

There are many possible innovative approaches to the construction of medium cost housing in Malaysia but constraints exist because of people's misconception about such houses.

A factor which inhibits the implementation of innovative design is that the land is costly and developers had the tendency to cramp too many high-rise buildings on a small plot of land. As an alternative, four-storey and multi-storey buildings which have garden access should be built. Parks and gardens are essential because they provide for family retreats as well as recreation space.

The other factor which inhibits the implementation of innovative designs is that developers are tradition-bound to cutting and totally flattening a piece of land. Instead of employing this method, it is possible to build houses on the terraces of hill-slopes. The only setback, however, is that more complex designs will be brought about, which will take

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