

The Faculty of Architecture

A Survey of its evolving strategies to impart skills
appropriate to National Housing Programme

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INTRODUCTION

With the Government's policy of the accelerated development in the country, tremendous growth and change is taking place. **It is up to the local professional to retain the precious heritage of a country side of great variety of outstanding beauty**, conserving a balance between the natural and the man-made, to ensure that this natural beauty is not marred by human artefacts that are indifferent unsightly or down right ugly. It will be their duty to consider the development of the character and image of the country.

This image manifests itself in the physical disposition and treatment of built and unbuilt space, the appearance of towns and villages, in plantations trees and hedges, in all kinds of buildings, roads, bridges, factories, transmission lines, shelters, sign posts etc. etc. in fact in all the fixed and mobile objects that make up the visual world in which we live in. **It is not good enough to copy patterns from abroad.** It is one of the exciting tasks of the professionals of Sri Lanka to evolve new forms of the built environment that are as beautiful as the landscape Sri Lanka has inherited and recognisably Sri Lankan.

Among the professionals that contribute mainly towards the built environment are Architects, Planners, Building Economists, quantity surveyors, Engineers, Urban Developers, urban Designers and Landscape Architects. The two Faculties of the University of Moratuwa presently provides courses for Training in all these fields of study. This University fulfills a double function. It is a centre of academic studies and as well a professional school which serves the community by producing highly skilled personnel with powers of initiative and capacity for adoption and growth and who can deal with new ideas and developments in the context of the whole building industry. This issue presents the development of the Faculty of Architecture in the University of Moratuwa with special emphasis on imparting skills appropriate to the national housing programme.

An acute dearth of qualified Architects, Planners and Building Economists to handle the heavy programme of building proposed by the Government of Sri Lanka and the stringent foreign exchange restrictions which affected the training of such professionals abroad, initially necessitated the training of professionals in Sri Lanka within the shortest possible time.

The first organised professional course of study commenced at the Institute of Practical Technology, Katubedda in July 1961 with about 20 students. Keeping pace with the changing trend of social economic and technological advancements and the consequent necessity to accommodate the varying needs of growing modern population the architectural course at the I.P.T. Katubedda which was in essence an insulated study in Architecture was re-structured to the present perspectives of an integrated study in Built Environment appropriate to several professional disciplines.

In 1968 with the establishment of the University of Ceylon, Colombo the first University Department of Architecture was created under the wing of the Faculty of Natural sciences and the architecture course of the I.P.T., Katubedda was shifted to No. 18, Ward Place, Colombo.

In 1972 subsequent changes in the structure of University Education in Sri Lanka brought about a change in the status of the department from one within the Faculty of Natural Sciences of the University of Ceylon in Colombo to a separate Department within the Faculty of Engineering and architecture in the University of Sri Lanka, Katubedda Campus. During this time the Department began to expand and several significant course developments occurred.

Facilities for Graduate Studies were provided for Architecture and a course leading to a degree of M.Sc. (Architecture) was established in 1974.

In 1973 a new Department of Town and Country Planning was established and a course leading to a degree of M.Sc. in Town and Country Planning was established in 1975.

In 1978 a significant development occurred under the provisions of Universities Act. The Katubedda Campus of the University of Sri Lanka acquired the status of an independent University with the present corporate name "University of Moratuwa, Sri Lanka" with Architecture and Town and Country Planning as a separate Faculty. This has been the dream of the Department of Architecture from its inception.

In 1979 the Department of Town and Country Planning expanded further offering a Post Graduate Diploma in Urban Development and the Department of Architecture also expanded offering a course leading to a M.Sc Degree in Architectural Conservation of Monuments and Sites.

In October 1984, a new Department in Building Economics was established offering a B.Sc. Degree in Quantity Surveying.

The Faculty hopes to establish other courses in Housing Development, Landscape Design, urban Design, Interior Design and Building Economics in the near future.

For contributions made by the three Departments towards the National Housing programme See annexures 1, 2, & 3.

The Department of Architecture having realized that Architects profession is a product of the needs and expectations of a society and knowing there has always been a discrepancy between what architects do and what they should be able to do to assist the community, took the corrective steps quite early so that the product of the department would make it their responsibility to involve themselves in the biggest building problem the world has ever known; the problem of providing a roof over the heads of the world's homeless. As a result of this enlightened policy of the Department, its products are now placed in the helm of affairs assisting the Government of Sri Lanka involved in formulating, implementing and monitoring the housing policy of the Government. It would not be possible therefore anyone to say that the "Department of Architecture has not contributed towards the national housing programme." The Department of Architecture is aware of the skills that ought to be developed and the conditions required if these skills are to be put to use. Although the kind of competence an architect requires may vary from project to project, certain components seem to be common. They are;

- * The knowledge of basic human needs for physical, social and cultural survival and development;
- * The knowledge of realistic technical solutions that satisfy these needs in the environment wherever they occur;
- * Knowledge of house planning and building can be organized and carried through with minimum of resources;
- * The knowledge of how to mobilise and conserve these resources.

The Architects competence must also improve professional integrity and a strong feeling for the ethical rules that should guide day-to-day activities.

The Department strongly believes that the training of architects be pursued in its local context whilst still maintaining a standard which is international.

The very evident change in the architectural face of the country from the colonial/compact/aloof/buildings to that of liner/open/friendlier types coincides with the beginnings of this Department. The Course in Architecture which had its birth in the British system, gradually evolved to addressing itself to local issues and its context. The evolution of the content of subjects such as History, Planning Studies, Undergraduate Essays, Postgraduate Dissertation and Design itself is illustrative of the Department of Architecture gearing it self to take its place in the National Housing programme.

Individual Houses and Housing has become a major concern in Design projects. The house as a Design Project-to innovate and to discover the mechanics of creating such as an extension of "self" has been re-introduced to the Postgraduate Programme. Post-graduate Dissertation has begun to pay an increasing attention to Housing and House Design with several indepth studies into the correlation between various features of House Form and social factors.

Several exercises with outside organisations on Housing, have yielded interesting results. Some of these efforts have been the subject of an NHDA sponsored publication. Many group studies on the impact of built environment on people and their behaviour have conducted over the years and are available for reference.

Very recently postgraduate students of the Department joined forces with a social service organisation to design and build a house for a family of 17 at a cost of Rs. 60,000/- a remarkable exercise in low cost Architecture-where a real life attempt was made to give expression to the needs and aspirations of people through shelter. A feed back study of its success and impact is being conducted now.

The Department is optimistic that the profession of Architecture is able to provide the required inputs to intensify the fight against homelessness. A properly trained and experienced architect can play an important professional role as an interpreter of demands and needs and as an innovator of planning forms and techniques. The architect can also function as support to the builders in their contacts with authorities, financiers and land owners. Contrary to the general belief that housing is a field for generalists and not for professionals, the Department is convinced that an architect has a very prominent role to play.

LAKSHMAN ALWIS
Head of the Department
Department of Architecture,

Since its inception in 1973 the Department of Town and Country Planning of the University of Moratuwa has pursued a multi-disciplinary approach in planning Studies this enabling its graduate students to carry out research in a wide spectrum of subjects connected with town and country planning. Housing has been one of the core areas of study in both the Masters and Post Graduate Diploma programmes of this Department.

Housing is introduced to students of planning in the Department as the first project in these respective Courses of Study, as an exercise in problem solving in a complex situation. Initially the students are introduced to housing concepts, social survey methods, housing indicators, design principles, housing, finance, performance standards, residential lay-out planning and the several areas connected with and incidental to housing. Subsequently the students carry out field surveys in selected locations with a view to assess the situation in terms of the magnitude of the problem and its socio-economic, physical and environmental characteristics. This gives the necessary back ground to the students to carry out in-depth research into different aspects of housing as one of the options for their final dissertations. **Thus over the years 20% of the total number of dissertations have been submitted on the subject of housing and comprise a very substantial amount of research material on housing in Sri Lanka.** Research conducted by graduate students under the guidance of the staff of the Department of Town and Country Planning have very substantially influenced the shaping of Government policy on major issues concerning housing, particularly in recent years. In this connection research findings on the locational aspects of housing, aims and aspirations of low income communities, design aspects, values and priorities particularly of low income communities, mobilization ability to pay for housing, employment potential in the housing sector, resources and skills development and training etc. have greatly enriched the information base for decision making. The dissertations in housing undertaken by the graduate students can be broadly classified under the following :

- (a) Housing policies and legislation
- (b) Housing strategies
- (c) Housing finance
- (d) Housing and land use
- (e) Infrastructure facilities for housing
- (f) Area specific housing studies

It would be observed from the above that these dissertation studies comprise a very substantial volume of literature on the subject of housing. Additionally there are quite a few studies which have examined housing legislation, planning and building regulations and their impact on housing, design and layout; and the case for special planning and building regulations for low income communities.

The Department recognised the man-power training needs for housing in the mid-1970s and incorporated the proposal for the establishment of a Post-Graduate Diploma Course in Housing Development in the Corporate Plan of the Department.

A Steering committee comprising members representing all the implementing agencies were set up and on the basis of its recommendations a Course was designed to suit the requirement of the country. All administrative requirements have been accomplished and the by laws of the Course have been passed by the relevant academic bodies of the University and the approval to conduct the Course has been obtained from the University Grants Commission. Although it was the intention of the Vice-Chancellor to inaugurate the Course during the International Year of Shelter for the Homeless delays in funding the Course has regrettably caused its inevitable postponement. It is the endeavour of the Department to get this Course off the ground this year (1988) thus providing the skills required to the implementing agencies to accomplish the National Housing Strategy.

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Building Economics is concerned with two main objectives :—

- (a) to ensure the efficient use of available resources ;
- and
- (b) to seek to increase the rate of growth of construction work in the most efficient manner.

In order to achieve these objectives the Building Economist "will need to develop understandings and techniques of a kind that will deal, not just with the items that go into the accountancy of a particular building, but with the forces, economic and others, which have determined the nature and relationship of building costs, and which determine the trends they show. He will need to know the effects of private and public investment policies and aesthetic and planning factors, all of which play some part in determining the whole system of economic forces which lie behind the building process."

To ensure that available resources are used to the best advantage is the main aim of cost control. In these days of ever increasing costs all projects are designed and executed to give maximum value for money. When this is efficiently done the volume of construction work will increase and the money available from reduced costs will permit more construction work.

In housing too, construction cost control had assumed a key role, because the maximum use had to be made of the meagre resources available for housing. The growing demand for housing has made cost control and financial management of its construction much more important than most other activities because even a saving of a few rupees could help to construct more houses.

Hence, Quantity Surveyors (Building Economists) are employed to an increasing extent both during the design stage, as well as the construction stage of a project, to advise consultants on the probable cost implications of their decisions, so that costs are reduced to the minimum possible and the maximum use is made of the available resources.

Unfortunately, for Sri Lanka this was not possible, as we have only four professionally qualified Quantity Surveyors. The present Course in the Faculty of Architecture of the University of Moratuwa. was inaugurated in 1985 to correct this deficiency.

It is a Four Year Honours Degree Course leading to a Graduate Degree of B.Sc. in Quantity Surveying. It provides a sound foundation in the principles of Quantity Surveying which will equip these students for analysis of the inter relationships of design and cost in construction projects necessary for initial cost advice and subsequent control, contract documentation and the financial administration of construction contracts.

The housing construction programme will benefit from these graduates, because when they pass out they will be working in design organisations engaged in housing design and also construction organisations constructing houses in the Million Houses Programme.

They will also work on their own and will be advising prospective house builders and home builders on the economics of construction so that they get the maximum benefits from their money spent on housing.

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