DESIGN AND PLANNING CONSIDERATIONS IN BUILDING MATERIALS RESEARCH

Written Thesis
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Scope and Limitations

Several factors influence the design and planning of any research institution. Site conditions of terrain and characteristics of the land, sun movement, servicing, response to the context are some of the many factors that influence planning and design.

In this study, the functions to be housed in the research institution has been given the main thrust, as a full discussion of all the factors at play is beyond the scope of the study.

Again, the field of building materials is so vast that only a few materials have been selected for study. Building materials research in this country is still at it's embryonic stages and the study has tried to piece together the vital information which could be gathered from the few ongoing research programs. This has been supplemented by experiences of other countries from journals and books.
Methodology

The first part of the research concentrated on review of literature in the fields of:

(i) problems associated with production of building materials in developing countries,

(ii) general laboratories design and planning.

The research processes to be employed in the laboratories must be tuned to the level of technological development of the country, hence the need to investigate the relevant modes of production.

Part two consists of a study of the research processes of various materials and this information is integrated with the case studies. Each of the research process of each material are described under the case study from which that material is under research. In this way it is possible to compare and come up with an architectural interpretation of the research processes in terms of spatial needs, materials, etc.