Focus Area 4 : Shelter

Introduction

Access to shelter at a level adequate for family health and well-being was declared as one of the basic human rights by Article 25 of the Universal Declaration of Human Rights proclaimed by the United Nations General Assembly in Paris on 10th December 1948. However, even today, more than six decades later, access to shelter for all is far from being universally realized. Its complex nature is rarely understood by scientists even in the most technically advanced industrialized countries. Shelter is often seen as a mere 'product', which is an inadequate vision that needs to change if progress is seriously sought. Shelter is in fact multi-dimensional where it is as much a 'process' as it is a 'product' which also needs to be spatially defined. In Sri Lanka this latter spatial dimension calls for a broad geographic differentiation of shelter. The location of dwellings whether they are in rural or urban settings, coastal or hilly locations, in agricultural or plantation areas and also whether they are within the wet zone or dry zone make a considerable difference. Furthermore, shelter must also be seen as being an essential component of human settlement systems in which social and physical infrastructure and services are an integral part. The nature and types of these systems should ideally vary according to their geographic settings. While the shelter sector in totality should cover the needs of the upper, middle and lower income categories of our people, the focus here will be on the last, that being the most difficult and urgent. The ultimate objective of the strategy will be to enhance the health, wellbeing and productivity of the people at large, increase GDP and thereby provide strong support to the national development effort of the government.

Sri Lanka has a long history in attempts to define affordable housing strategies and technologies. Unfortunately, there has been a fragmentation of institutions dealing with shelter almost with each political regime change. The consequence has been that it has adversely affected institutional memory and continuity of policies. Presently, information on past experiences is not readily available. There is therefore the need for a comprehensive bibliography of relevant literature especially in the context of the need to identify and develop research programs. The process of shelter provision for the poor, in all its detail, is often managed by an agency, usually of the State or sometime by an NGO. Alternatively, the participation of the target communities could be sought in varying degrees. Housing programs will not be successful without having the participation of people particularly in the case of shelter for low income groups. Effective mechanisms should therefore be sought for the participation of people based on studies of past experiences. Although many cost effective technologies and materials have already been developed locally, these techniques and materials are not adequately popularized.

Sub Areas, Issues and Relevant Interventions

Table 1: Sub Areas and Justifications

Sub Areas	Justifications
1) Shelter as a process	Access to shelter was declared a basic human right by Article 25 of the Universal Declaration of Human Rights proclaimed by the UN General Assembly in Paris in 1948. Large proportions of Sri Lanka's rural and urban populations live in substandard and under-served settlements. Therefore, it is mandatory to have a shelter even for poor by using Community Architecture
2) Housing projects	Documentation material of housing projects needed consequent to the loss of institutional memory resulting from the fragmentation of institutions. Documentation material needed to establish Community Architecture, teaching and research of housing projects programs in Sri Lanka
3) Shelter as an integral part of human settlement systems.	Inaccessibility of material on dry zone settlement systems consequent to the stalling (due to the war) of the Mahaweli System B development areas in the 1980s, the closing down of institutions such as the Mahaweli Development Board (MDB) and the River Valleys Development Board (RVDB).
4) Shelter as a product	Available construction materials are often wasteful in energy consumption in the manufacturing stage (e.g. common clay bricks and roofing tiles) and too costly for low income families (e.g. roofing components). Several useful building materials and innovative techniques developed in the Public Sector are very poorly marketed to those segments of the population that are in need.

Table 2: Issues/Problems and R&D Needs and Relevant Interventions

Sub Areas	Issues/Problems	Research and Development Needs	Relevant Interventions
1) Shelter as a process	I) Documented material needed consequent to the loss of institutional memory resulting from the fragmentation of institutions. II) Teaching material needed in the absence of Community Architecture teaching programs in Sri Lanka	i) Preparation of literature surveys, bibliographies and precedent studies of the Sri Lankan experience with programs where community participation has been prominent. ii) Access to foreign research and teaching experience on the design of syllabi for Community Architecture.	**Policy Studies** Develop a policy document to support a research center with knowledge management platform a central point of contact for R&D **Pure and Applied Research** Include subjects to post-graduate degree studies and its research relevant to the Community Architecture
2) Housing projects	I) Community mobilization for design & construction. Teaching material and curricula are needed in the absence of well-established Community Architecture research and teaching programs in Sri Lanka II) Community adaptation to multistory apartment buildings including community management of public amenities. III) Ethnic and social relations in housing schemes.	i) Literature survey and study into specific foreign research and teaching experience and the design of syllabi for Community Architecture. ii) Sociological survey research into appropriate local projects along with the studies of experience in other Third World Countries. iii) Sociological survey research into appropriate local projects	**Capacity Building** Design post-graduate degree studies and its research relevant to the Community Architecture **Pure and Applied Research** Promote post-graduate research on community adaptation to multistory apartment buildings including community management of public amenities
3) Shelter as an integral part of human settlement systems	I) Inaccessibility of documented material on dry zone settlement systems consequent to the stalling (due to the war) of the Mahaweli development areas eg System B in the 1980s, the closing down of institutions such as the MDB and the RVDB.	i) Preparation of literature surveys, bibliographies, and precedent studies of Sri Lankan experience with dry zone settlement programs and projects.	**Capacity Building** Design post-graduate degree studies and its research relevant to dry zone settlement programs and projects

Sub Areas	Issues/Problems	Research and Development Needs	Relevant Interventions
4) **Shelter as a product-Building materials and systems**	I) Available building materials are generally wasteful in energy use in the manufacturing stages (e.g. common bricks and clay tiles) and often too costly for low income families (e.g. roofing components). II) Several useful materials and innovative techniques developed in the Public Sector are very poorly marketed to those segments of the population that are in need. III) Variable and sometimes sub-standard quality materials and components.	i) Research into developing low cost, energy efficient and easy-to-use building materials and components; and, new construction methods and techniques. ii) Energy efficient ('green') architectural design and research into marketing methods and appropriate institutional arrangements for the marketing of new products developed in the Public Sector. iii) Establishing quality standards appropriate for low income shelter.	**Pure and Applied Research** Include subjects to post-graduate degree studies and its research relevant to low cost, energy efficient and easy-to-use building materials and components; and, new construction methods and techniques **Testing, Standardization & Accreditation** Develop quality standards for shelter for low income families

*Table 3: Interventions and Key Performance Indicators

Sub Areas and Issues/ Problems	Interventions/ Activities									
	Policy Studies	Pure and Applied Research	Innovation	Information and Communication Technologies	Nanotechnology	Biotechnology	Indigenous Knowledge & Intellectual Property Rights(IPR)	Testing, Standardization & Accreditation	Capacity Building	Popularization
Shelter as a process-Shelter provision for poor										
Develop a policy document to support a research center with knowledge management flat from a central point of contact for R&D	PC/HS	PGR								
Time Frame(TF)	24 m	04 semesters								
KPIs	Policy Report									
Lead Institute (LI)		PGD[1] FARU,D/T&CP (UoM)								

**Please note that this is only a sample page*

---

[1] PC/SH-Presidential Commission on Human Settlements; FARU-Faculty of Architecture Research Unit; PGD-post-graduate degree