

Editorial

Protibesh, the Architecture journal of Bangladesh University of Engineering and Technology, is a research journal dedicated to disseminating state-of-the-art design and technical knowledge relevant to the teaching and practice of Architecture. This issue of the journal includes four research papers on varying topics, which the Editorial Board has considered as having the potential to contribute new and innovative knowledge to academic and professional pursuits of Architecture.

The first paper is on gender studies – Gender and Space; Analysis of gender zones of Sethi Havelis, Peshawar – written by Samra M. Khan of Islamabad, Pakistan. The paper explores the hypothesis that forms have the ability to adapt to socio-cultural changes and needs in societies, and bases its discussion on the study of architectural spaces of the Sethi Mohalla, in Peshawar, situated in the North Western side of Pakistan. Beginning with a historic overview discussing women's role in society through the ages, the paper goes on to interview women of a traditional settlement with the aim of understanding the dynamics of their lifestyles and the connection with the spatial characteristics that they inhabit. Through interviews with the female residents of the havelis and direct observation of the spaces on the basis of gender, the author analyses the spatial configuration using the drawings. The analysis is based on criteria like access to women's spaces, integration or segregation of space in context of social contact and their aesthetic qualities. Along with an understanding of the manifestation of the socio-cultural norms of the era, the paper concludes that architecture is indicative of the socio-cultural era it is produced in and can be used as a mechanism to create a secondary role for the female gender.

The second paper is on environmental issues of building materials, their impacts and manufacturing methods titled, Reducing carbon dioxide emission by the adoption of contemporary earth construction in urban Bangladesh, by Mohammad Sharif Zami and Dr. Angela Lee of Salford, UK. Advocating the use of stabilised earth as an alternative building material, which is cheaper than conventional brick and concrete, while also being environmentally sustainable, the paper delves into environmental impacts and sustainability issues. Despite the fact that the use of earth on site as a building material saves manufacturing cost, time, energy, environmental pollution and transportation cost, most developing countries, including Bangladesh have no agenda to promote its use. Beginning with a discussion on Conventional brick manufacturing in Bangladesh and carbon dioxide emission, the paper goes on to present data from recent studies and research on this manufacturing system and ways in which the environment is being harmed by Greenhouse Gas Emissions through the process. Talking about Production methods of contemporary stabilized earth construction, the authors then expound on the advantages of this technology through citing examples in developing countries around the globe. The paper aims to demonstrate the dynamism of this earth material and its suitability for construction in urban Bangladesh, reviewing the examples and arguing for the environmental benefits (less carbon dioxide emission) of using stabilized earth as a building material and associated construction techniques for urban construction in Bangladesh. A critical literature review method was adopted in the paper to investigate how contemporary earth construction produces less carbon dioxide compared to the conventional brick and concrete construction. Among the examples given in the paper are works by Egyptian architect Hassan Fathy, and numerous experimental works in Auroville, India.

The next paper by Dr. Mahbubur Rahman from Universiti Teknologi of Malaysia, is titled Sustainable Housing and Role of the World Bank. Arguing that lack in institutional development, policy implementation, governance, participation etc have so far held back sustainable development of low-income or squatter housing, the paper focuses on relevant issues, discussing efforts by the World Bank in trying to change attitudes towards this group. The World Bank's influence according to the author has been stronger than other organisations in shaping development, due to its ability to dictate policies and strategies in the developing countries through large loans to urban and housing programs. Nevertheless, problems persist in the housing for these deprived populations as the benefits reaped by the policies are not multiplying in the expected proportion. This caused the World Bank to gradually reduce its direct involvement in sites and services projects towards the late-1980s, though its indirect support into social housing programs with self-help components continued through specialised institutions, or through NGOs and CBOs. In the early-1990s the World Bank, recognising housing as a productive item, which multiplies employment and generates income, reformed its housing strategies. The concept of 'enablement', emphasised technical know-how, available resources, inclusive participatory approach among various stakeholders, capacity of the development agencies, and recognising and defining responsibilities of all, particularly relevant to new housing. The paper goes on to discuss the economics of squatter settlements emphasising process cost, tenure security, and sustainability of improvement, concluding with the caution that retention and regeneration of squatter settlement cannot succeed if isolated from other areas of development.

This issue of Protibesh concludes with a paper titled "Spatial and Social Adaptations: A Post-occupancy Evaluation of Multi-storey Social Housing in Dhaka" by Dr. Shayer Ghafur of Bangladesh University of Engineering and Technology. Investigating ways in which low-income households adapt spatially and socially in multi-storey (walk-up six-storied) social housing in Dhaka,

this paper advocates a fit between the physical and social environments in designing and maintaining functional contexts for low-income households in Dhaka where human activities and interactions can be appropriately accommodated and developed. The paper is based on a broad research carried out in March 2001, on socio-spatial adaptation for living and livelihood in multi-storey social housing in Dhaka, which includes, but is not restricted to, post-occupancy evaluation through structured questionnaire, informal interviews and observations. The research employed a multi-method fieldwork to gather relevant data from all the dwelling units of two multi-storey social housing schemes in Dhaka, located at Badda (two six storied buildings with 48 dwelling units) and Islambagh (four six storied buildings with 192 dwelling units). The research investigates housing stress, which is indicated by a difference between household's 'residential situation picture' and 'aspiration picture' – a stress which can be lowered by making these pictures as congruent as possible. Passive and active adaptation towards relieving housing stress is discussed. The paper ends with evaluation of building performance for adaptation and their implications on design assumptions. This paper largely helps understand building performance as it responds to the needs of low-income dwellers by looking at the allocation, organization and use of spaces, and the extent and ways of socialization of household members.

I would like to thank all the Authors who, in keeping with the standard and reputation of **Protibesh, Architecture Journal of BUET**, have had to work hard, to finalise the drafts based on the comments and guidance of the Reviewers and the Editorial Board. I am also extremely grateful to the Reviewers, members of the Editorial Board and the members of the *Protibesh* Committee, for the cooperation and dedication towards quality that they have all extended and demonstrated. The contents of the papers and opinions expressed in them, as they are presented here are however the Authors' own, and the success, intellectual and academic value of their papers, likewise, belongs to them alone. We, the *Protibesh* team, have merely served as instruments in their presentation. In conclusion, I hope that the objective of *Protibesh* to contribute new knowledge to the teaching and practice of Architecture will be achieved through this issue.

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