

Editorial

The FARU journal focus has been shifted from Built Environment to Spaces, mainly to accommodate the multidisciplinary and interdisciplinary research in the major context of sustainable built environment. FARU interprets 'space' as 'research space' that supports a wide range of original research on methodological and technical approaches including experimental, observational, monitoring and management studies and, policy analysis related to the environmental performance of the built environment ranging from cities, communities, buildings, building systems, building science, urban physics, and human interaction. *Space* is also defined as the professional space within the construction industry and, its contribution towards the built environment and sustainability. We are delighted to publish this Vol.8 (Issue 01) of FARU journal on the theme of Beyond Sustainability: Reflection across spaces. This theme of FARU Journal and FARU Conference laid a platform to encourage authors to submit papers from variety of spaces that one can reflect upon and beyond sustainability. Hence this journal encouraged multidisciplinary approach across academic communities in the fields of Architecture, Built Environment, Building Economics, Town and Country planning, and Design.

This volume consists of seven highly commended papers out of thirty-seven that were submitted and presented at the 'Faculty of Architecture Research Unit (FARU) 14th International Research Conference (2021)'. The selection of the papers were based on the reviewer recommendation, its academic standing, contribution to the field of study and presentation. All the research papers contributed to the fields from local context. We strongly believe that citing the work from FARU journal will help the authors to be recognised and outreach beyond the local boundaries.

The papers presented in this Volume provide insights to the umbrella theme of sustainability by contributing from different disciplinary perspectives. The methodology used by the authors range from quantitative to qualitative analysis. The first two papers (papers 1-2) are based on urban planning related issues where the focus was given on urban sprawl and vegetation land fragmentation. Another paper (paper 3) talks about sustaining the image of the city. The resilience to COVID-19 using lean construction is thereafter presented (paper 4). 3 other papers (papers 5-7) analysed dimensions of building sustainability in terms of vegetation cover, lifecycle costing, and daylight performance.

The first paper by Manesha & Jayasinghe analyses the relationship between urban sprawl, which is a multi-dimensional phenomenon, and its driving factors. The authors have used Expansion Intensity Index, Shannon's Entropy value and Landscape Metrics to conduct this research through a case study strategy, where 10 small and medium towns were selected as the case study areas. The study suggests that quantifying urban sprawl will be effective when utilizing the various methods while capturing multidimensions. As such this paper will benefit the planners, policy makers and academics and researchers who are more concerned with urban sprawl. The second paper by Ranaweera et al., focused on spatial distribution of the level of vegetation land fragmentation in Western province. Authors claim that Sri Lanka has not been given sufficient attention to investigate land fragmentation, hence this research would address this gap by providing an important initiation for land fragmentation studies and for urban planners to demonstrate land fragmentation in urban areas. The study quantified the level of vegetation land fragmentation (LVLFF), which was further analysed to understand the spatial distribution and the patterns of vegetation land fragmentation. Accordingly, the study concludes that suburban areas are highly vulnerable to vegetation land fragmentation than urban area. The next paper by Rathnasekara & Munasinghe investigated the image of the city of Colombo, which is a prime city of Sri Lanka that has experienced a fast growth. This research adopted a survey strategy which involved 150 participants from different age and user categories, to investigate the way the transforming-built environment has been impacting the shift in the image of the city of Colombo, especially with the emerging high-rise buildings and modern developments. The study highlights the importance of the users' experience at the observable or ground level of a built environment that critically contributes to the image of that environment compared to the high-rise developments. Thus, the findings will provide the necessary insights to planners and urban designers. The fourth paper by Parameswaran and Ranadewa aims at the alarming issue of impact of COVID-19 on the construction and evaluated the ability of lean construction to resilient COVID-19. A systematic literature review was adopted as the methodology, which contributed to develop a conceptual framework for the resilience of COVID-19 through lean construction. The authors revealed 67 impacts under several categories and identified 22 benefits of implementing lean construction. These findings were

fed into the conceptual framework which provides the basis to conduct future research. The fifth paper by Weerakoon and Perera is all about thermal comfort of high-rise developments due to the effect of vegetation cover. This research intends to ascertain the optimum level of vegetation cover to achieve outdoor thermal comfort around high-rise developments. A single case study on one of the key projects in Colombo has been selected where the authors have used simulation study by utilising ENVI-met simulation software to model the impacts of vegetation cover changes as five simulation cases. The implications for design highlight the need for the extensive exploration of morphological studies, while encompassing key amelioration strategies, for the high-rise building development typology, in particular. The authors further emphasise that the significance of having clear policy and planning decisions with climate sensitive strategies is key for long-term sustainability. The next paper authored by Samaranayake et al., carried out a study to identify the significant factors affecting lifecycle costing (LCC) elements of buildings. 10 out of 24 factors were filtered as significant which were primarily analysed used a survey strategy that involved 34 experts selected through purposive sampling technique. The study revealed 13 factors as highly affect the LCC of a building. The research finding will assist the cost practitioners to make informed decisions through LCC planning. The final paper by Wijesundara and Gamage analysed daylighting performance of learning spaces in local government sector school. The research carried out an in-depth lighting integration analysis in three typical classrooms. A field study comprised of a questionnaire-based survey and measurement of illuminance was combined with daylight simulation using Autodesk Ecotect 2011 & Autodesk Revit were adopted. The study reveals that lack of awareness in integration of natural light with the design can either result in increasing the negative effects of excessive daylight exposure or lack of adequate daylighting. The paper also suggested to define a set of design guidelines in the aim of optimising the use of natural lighting and visual comfort in school buildings.

The above overview clearly demonstrates the multi-disciplinary nature of the journal manuscripts in this Volume. I would like to congratulate all authors who made scholarly contributions to this publication and specially for identifying research needs that are most needed to the society and country. I would like to thank all the reviewers, who contributed immensely by offering constructive comments and assisting us to maintain journal quality standards.

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