In Volume 10, Issue 02, FARU Journal delves into the theme of 'Empower Communities', continuing the journey from our previous release in June 2023 (Volume 10, Issue 01). Issue 02 of this volume showcases eleven outstanding papers, specially selected from submissions presented at the ‘16th International Research Conference of Faculty of Architecture Research Unit (FARU - 2023). These chosen papers underwent a meticulous selection process based on reviewer recommendations, academic merit, field contributions, and presentation quality. We firmly believe that referencing works from the FARU journal will elevate the recognition and reach of local research, transcending geographical boundaries to foster broader acknowledgment.

The papers in this volume explore various themes, including construction technology and built environment, urban planning and spaces, community and social dynamics, sustainable development and environmental impact, and data-driven analysis and urban infrastructure. The papers included in this volume employ a variety of research methods to investigate their respective topics. These methods include case studies, field surveys, literature-based analysis, questionnaire surveys, image processing, Delphi technique and participatory methodology.

The first paper by Apinayan et al. explores how Building Information Modelling (BIM) can enhance detailed cost estimation in Sri Lanka’s construction projects. Through qualitative research involving Delphi interviews with 14 experts, the study confirms BIM’s potential to significantly improve accuracy and efficiency in cost estimation for better project outcomes, emphasising the need for collaborative efforts between application developers and industry leaders to enhance BIM’s practical implementation. The second paper by Fonseka and Coorey investigates how specific attributes of Urban Blue Spaces (UBS) in Colombo, Sri Lanka, foster solitude among urban dwellers. Through a mixed-method approach involving observations, questionnaires, and interviews, the research identifies water-related and spatial attributes such as fluidity, sound, extent, and site conditions that significantly contribute to promoting solitude, aiming to improve UBS design and management in the future. The third paper by Harithra and Rajapaksha investigates how the thermal performance of existing public office buildings in Trincomalee, Sri Lanka, impacts their energy efficiency. Through typology analysis and computational simulations, it identifies the contribution of building typologies to inefficient thermal performance and proposes sustainable retrofitting strategies to reduce cooling energy consumption, aiming to inform design guidelines for both new and existing buildings.

The fourth paper by Hasan and Jayasinghe explores how community engagement influences the advancement of sustainability efforts within urban settings, employing participatory methods to model urbanisation. By integrating stakeholder-based knowledge into urban growth modeling through various computational approaches, the study underscores the significance of bottom-up strategies, highlighting that empowered stakeholders are pivotal in advocating for and supporting long-term sustainability initiatives. The fifth paper by Jayanetti et al. addresses the lack of a consolidated definition for Lean Construction Maturity Models (LCMMs) by conducting a systematic literature review, identifying key themes, and proposing a comprehensive definition. The resulting definition not only contributes theoretically by filling a literature gap but also provides practical value to construction practitioners and policymakers, enabling them to assess lean maturity, pinpoint improvement areas, and strategically plan for lean transformation, ultimately promoting efficiency and sustainability in the construction industry. The sixth paper by Kalhara and Rajapaksha evaluates coastal scenery along the Unawatuna-Rumassala coastline in Sri Lanka using the Coastal Scenic Evaluation System (CSES). It identifies the impact of built environment factors on scenic degradation, particularly noting how strategic planning and development restrictions can enhance coastal scenery to promote sustainable tourism in the region.

The seventh paper by Lilackshani investigates the effectiveness of disaster risk transfer (DRT) mechanisms in Batticaloa, Sri Lanka, revealing challenges such as limited awareness, high costs, and diverging perspectives among stakeholders. The findings stress the need for improved accessibility, affordability, and government involvement to enhance DRT options and better manage disaster risks in the region. The eighth paper by Nimashi and Dharmasena explores open spaces in urban low-income settlements in Wekanda, Colombo, using Ray Oldenburg’s Third Place Theory. It highlights the significance of informal gathering spaces like alleyways and vacant lots as essential third places, fostering a homely atmosphere and social ties, while suggesting a need for designed spaces to better align with user expectations for community interaction. The ninth paper by Nissanka and Jayasinghe proposes a comprehensive framework to measure walkability in city centers by considering factors like street conditions, urban morphology, and proximity to services. It develops a quantitative approach, ranking ten Sri Lankan towns, providing valuable insights for urban planners to enhance walkability by identifying areas for improvement in development plans.

The tenth paper by Podder and Shahidullah examines how dwelling environments influence the lives and societal perception of the third gender, particularly the Hijra community, in a context lacking social acceptance and support. It investigates their household structures, spatial organisation, and urban settings, aiming to inform policymaking on creating positive identities and implementing spatial interventions for the marginalised Hijra population. The eleventh paper by Wickramasinghe and Jayasinghe introduces a framework using deep learning algorithms to assess street visual quality through street view images, achieving high accuracy in measuring visual quality. The framework
provides a valuable tool for urban planners and designers to quantitatively evaluate and map street aesthetics, aiding in assessing proposed developments’ impact and enhancing the effectiveness of new designs.

I would like to offer my heartfelt congratulations to all the authors whose contributions have enriched the diverse range of manuscripts in this Volume. A special note of appreciation goes out to the dedicated reviewers for their invaluable support in maintaining the high publication standards. I extend my gratitude to my colleagues in the FARU team for their unwavering commitment to upholding the journal’s professionalism. I want to express my sincere thanks to Dr. Sumanthri Samarawickrama, Editor-in-Chief of FARU Journal, for entrusting me with the role of guest editor for Volume 10. Lastly, I acknowledge the collaboration with Sri Lanka Journals Online for their support in publishing the FARU journal within their database.

Dr. Pournima Sridarran
Guest Editor, FARU Journal,
Vol. 10 (Issue 02)