

I am pleased to present Volume 12, Issue 01 of the FARU Journal. This special issue brings together six outstanding papers selected following the FARU 2024 Annual Conference. The overarching theme that connects these diverse studies is "Evidence-Based Resilience: Human-Centric Design in Practice."

In an era defined by rapid urbanization, climate challenges, and a growing focus on human well-being, the built environment professions face a critical task of creating spaces that are not only efficient and sustainable, but also restorative and resilient. The papers in this volume move beyond theoretical discussions to provide practical, evidence-based evaluations of how design impacts human experience and ecological health.

The six papers featured in this issue were selected for their significant contributions and methodological rigor. Each paper underwent an extensive double-blind peer review process to ensure the highest quality, reflecting the significance of practice-based research in the built environment domain.

This issue of FARU Journal begins its exploration at the street level. The paper by Dharmasena, Nimashi, and Saubhagya, "Evaluating the Quality of Walkability in Pedestrian Environments in Tsukuba, Japan Using the Pedestrian Environmental Quality Index (PEQI)," provides a critical assessment of urban mobility. The paper describes that, despite Tsukuba City's innovative planning it faces increased car dependency. Using the PEQI, the study conducts a comprehensive, evidence-based evaluation of Tsukuba City's pedestrian environment. It is evident that this research offers a granular look at the gaps between design intent and lived reality, revealing that most intersections and segments assessed offer reasonable conditions, though there is substantial room for improvement.

Moving from the physical to the sensory, Silva's research, "Soundmarks and Urban Placemaking: A Spatial Analysis of Soundscapes in Public Space Design," investigates an often-overlooked dimension of public space. The research explores how soundscapes can mitigate monotony in urban public spaces, identifies existing soundmarks, analyses their spatial arrangement, and develops guidelines for integrating soundmarks into landscape design. Through a qualitative study in Colombo's public spaces, it shows how soundmarks serve as distinctive auditory landmarks that hold cultural, historical, social, or locational significance. This work challenges designers to move beyond visual quality and to design more holistic, multi-sensory urban environments.

The focus on sensory experience and well-being continues in the paper by Rathnasinghe and Hettiarachchi, "Perceived Psychological Well-being Through Viewing Vistas Among Healthcare Professionals in the Hill Country, Sri Lanka". This research explores the impact of natural vistas on the psychological well-being of healthcare professionals given the demanding and stressful nature of their roles. Grounded in the Attention Restoration Theory and Stress Reduction Theory, the study compares two government hospitals. The findings highlight a clear link: staff in hospitals with expansive natural vistas report enhancing psychological well-being. This highlights the importance of restorative landscape design as a sustainable approach.

The paper by Kariyawasam and Samarasinghe, "Thermal Comfort in LEED-Certified Workspaces: Enhancing Job Satisfaction and Workplace Resilience in Sri Lanka," takes the reader inside the workplace. This study examines the impact of thermal comfort on employee job satisfaction and workplace resilience using a LEED Platinum-certified apparel manufacturing factory as a case study. While LEED certification is a benchmark for sustainability, this research uses a mixed-methods approach to test its real-world effectiveness. The study finds moderate positive correlation between thermal comfort satisfaction and job satisfaction. However, the study also identifies persistent challenges, such as temperature fluctuations and a lack of personal control, offering valuable insights for improving green building design in tropical climates.

That same focus on thermal comfort is taken outdoors in the study on "Urban Blue-Green Infrastructure for Climate Resilience." This research investigates the critical role of blue-green spaces in Jaffna, a city in a Warm-Dry climate zone facing intense urban heat. Using case studies like the Aariyakulam Lake Trail and the Pannai Coastal Promenade, the research uses a sophisticated mix of on-site measurements and simulations to assess how these landscape interventions mitigate thermal discomfort. More importantly, it connects this climate data directly to social equity, demonstrating how well-planned BGI is a multi-functional strategy that fosters not only environmental resilience but also social inclusion. The findings provide a framework for creating fair, climate-responsive public spaces.

Finally, the paper by Uresha and Ranasinghe, "Eco-Innovative Product Design Solution for Enhancing Mangrove Habitat and System Restoration in Sri Lanka," expands the theme to include ecological resilience through material innovation. This study presents the design and preliminary evaluation of Aqua Nest, an eco-innovative and biodegradable mangrove seedling protector developed from recycled porcelain bisque waste. The research applies a Design-for-Environment (DfE) framework to address high seedling mortality in Sri Lanka's coastal restoration projects. This is a powerful example of a circular design model linking material innovation with ecological resilience and community-based sustainability.

Together, these six papers emphasize the multidisciplinary nature of resilience. From the walkability of a Japanese city and the soundscape of Colombo, to the restorative power of a window view in Haputale, the thermal comfort of a green factory, and the material innovation protecting our coastlines, these studies demonstrate a shared commitment. They champion an evidence-based approach that places human and ecological well-being at the centre of the design process. I believe they provide valuable, practical insights for academics and practitioners alike.

I extend my sincere congratulations to all the authors for their invaluable contributions. I also express my deepest gratitude to the dedicated reviewers for their thorough assessments, which were instrumental in maintaining the journal's high standards. My thanks also go to the entire FARU editorial team for their effort in producing this special issue.

Dr. Himal Suranga Jayasena

Guest Editor

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