



Editorial

How can the cities and their regions be made more sustainable and inclusive? Is the planning and design of urban and regional space a possible solution?

The present *Bhumi- The Planning Journal* issue focuses on concepts and practices on the above themes at the city and the regional levels. There are daunting threats to world's environmental and social sustainability. The present development patterns demand inter-disciplinary and appropriate planning educational models to ensure that planning profession can respond to these critical contemporary issues. The present journal issue contains four articles from authors within and outside of Sri Lanka. In many respects, the articles here raise more questions than answers, but there is much to debate, critical thinking and need academic rigour on these contemporary issues.

Thinking social sustainability, Anjali Pathak and Sejal Patel investigate land tenure and property rights issues of people living in informal settlements and public housing in contemporary urban areas in India. This study looks at the consequences for urban poor women living in public housing in Lucknow. The research observes how property rights affect women's gender needs. A total of 120 questionnaire surveys were taken up in the four housing schemes to estimate the right to ownership of property and control over it. This study indicates significant improvement in women's gender needs when women's property rights are recognized in housing programs.

Taking the discussion on environmental concerns further, Naduni Wickramaarachchi and P.K.S. Mahanama's paper argues the value of citizen science technologies in disaster management planning. This paper discusses the societal factors that can attribute when implementing open source disaster relief management platforms. Open source software development is frequently used to serve human society, especially in finding solutions for managing and planning disaster situations such as floods, droughts and tsunami incidents. Careful consideration of the technical accuracy as well as social acceptance is essential to guarantee the sustainability of software development. Understanding the interaction between technology and human behaviour is vital in open source software development in terms of minimizing the negativities after the implementation. By using theories of multilevel governance and power relations, this paper focuses on understanding the consequences that may arise when implementing common open source platforms, especially in disaster management sector in developing counties.

Whereas Wickramaarachchi and Mahanama investigate the citizen science tools in disaster management, Chamali Hewawasam, Shamain Saparamadu, Udyā Abesinghe, P.K.S. Mahanama, with the next paper, explores the aspects of sustainable transportation. Sustainability in non-renewable resource management results in more energy saving options. However, it is less evident in a small scale and in energy saving terms. This paper attempts to highlight the importance of sustainable transportation for achieving the goal of promotion of energy saving cities. Objectives of the study are to identify a suitable road network to designate as bicycle and pedestrian priority roads and to identify modifications required to accommodate these non-motorized transport modes in promotion of sustainable transportation. A case study carried out in Rathmalana West area where roads were rehabilitated after a storm water drainage. Logical analysis to the collected information derived a suitable pedestrian/bicycle priority network that connects coastline to main arterial.

Thinking about the environmental sustainable planning, rising urban temperature is a critical global problem. Considering this urban challenge, we conclude this Bhumi issue with an article by R.J.M. Uduporuwa and L. Manawadu that explores the effects of surface features and the level of temperature in Kandy city areas in Sri Lanka. Measuring the change in built-up area, detecting the correspondent change in land surface temperature and identifying the correlation between surface covering materials and land surface temperature in temporal basis are the objectives of this article. The paper utilizes Urban Index (UI), Land Surface Temperature (LST) and simple linear regression technique to achieve the objectives. Landsat satellite images with moderate resolution in 1994, 2003, 2007 and 2015 obtained from the server of United State Geological Survey (USGS) were used. Results evidently illustrate that both surface covering materials and land surface temperature in the city have substantially increased during the last-twenty-year period. Simple linear regression analysis indicates that there is an obvious impact of increase in surface covering materials on the surface temperature rise in Kandy city.

Rangajeewa Ratnayake,

Department of Town and Country Planning,
University of Moratuwa