

Urbanization, mobility, energy and sustainability: opportunities and challenges — note from the Editor

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<http://dx.doi.org/10.18063/JSUPP.2016.01.007>.

Welcome to the first issue of the *Journal of Sustainable Urbanization, Planning and Progress* (JSUPP). This new journal's mission is to provide leadership in research in the areas of urbanization and planning around the world and progress made in Asia in particular.

Urbanization is a process by which there is increase in the number of people moving to urban areas or cities in search of jobs, education, and better quality of life, leading to transformation of land use for residential, commercial and industrial purposes. In recent years, there has been greater increase in the rate of urbanization all around the world. This sudden increase in urban population in the world had several unplanned consequences such as the increase in slums, air pollution, urban sprawl and traffic demand, and environmental degradation along with demand for rising income and more comfort. Population explosion in urban areas has led to many ill-effects and it has become difficult for governments in most countries to handle overcrowding, traffic congestion, slums and air and water pollution. In addition, the classical problems arising out of an unmanaged and sudden unintended population increase are unemployment, change in family and social structures and increase in crime rates. Rapid urbanization often leaves no time for governments to plan for service delivery to the residents in cities. Under these scenarios, it is inevitable that cities, which are not prepared for this kind of onslaught, are facing a crisis. All of these have detrimental effects on the quality of life of the citizens and in particular, their health status. While the challenges are in terms of negative impacts to the environment, high cost of living and overcrowded neighborhoods,

there are opportunities in that it brings competencies in urban centers and offers conveniences not available in rural areas. Planning for urbanization and better management of cities is important for the quality of life of those living in cities and towns, and also for a better economic and environmental climate as a whole for the country. For sustainable planning in these overcrowded cities, one needs to look closely at the available resources and understand the relationship between urbanization, mobility, energy and sustainability.

The form of urbanization has great influence on transport patterns and energy supply and in turn on the spatial development of cities. Today's urban performance indicators depend on a city's physical infrastructure or "physical capital" and its knowledge, communication, and social infrastructure in the cities, or "social and intellectual capital". The availability and quality of social and intellectual capital along with physical capital plays a decisive role in urban competitiveness. This journal attempts to showcase research which helps in understanding the dynamics of the relationship between the urbanization process and the available intellectual, social and physical capital of cities and in turn evaluate the urban performance of these areas. The topics covered in this journal are highly multidisciplinary advocating excellence in sustainable planning and processes in an urban setup. The journal also covers case studies of the progress made in different cities around the world and in particular Asia.

This inaugural issue addresses urbanization, mobility, energy and sustainability issues and brings out the opportunities and challenges in planning and progress

made in some of these attempts in cities or urban areas. Six papers are presented in this inaugural issue. The issue brings out urbanization issues like planning process, energy, health care, transport and mobility in contrasting geographies — cities in developing countries such as India and developed countries such as Australia, Japan and Germany.

In the first invited paper, Prof. Peter Newman discusses the four stages of planning and progress for sustainable urbanization and talks about the modernism as the guide for infrastructure planning in most modern cities since the 1940's. The paper highlights that the new era will hopefully fulfill the desires set out for the sustainable urbanization. The author brings forth the concept of “fit-for-purpose solutions” for the 21st century which will enable our cities to adjust to these big challenges.

The second paper by Minh-Chau Tran reviews walkability as a component of health-promoting urban planning process. The paper attempts to reconnect urban planning to public health. The article aims to position this issue in a wider interdisciplinary context and to focus on the effects of the built environment on health in order to sort out the relevant features of the built environment on different spatial scales.

The third paper by T. G. Sitharam and Jaya Dhindaw highlights the urbanization process in India and discusses the causes of urbanization and the present status. The authors have identified the impediments of the urbanization process along with advantages and opportunities. The paper in particular focuses on energy and India's dependence on coal and highlights transportation as a key stakeholder in the energy sector. The paper highlights the benefits and challenges of

urbanization and the need for low carbon energy in India.

The fourth paper, from Sekhar Somenahalli *et al.*, highlights the accessible transportation and mobility issues in the ageing society of Australia. The paper highlights the important policies and laws prevailing in Japan. This paper is based on a recent survey of older South Australians and a series of in-depth discussions conducted with key stakeholders, both in Australia and Japan, by the author. The paper summarizes findings that provide answers and new approaches to the challenges from a policy and legislative perspective.

The fifth paper, presented by Deepak Baidur and Pooja Rao, talks about equity in public transport in India. This paper investigates internal and external factors that led to the steep and recurrent fare increases in the Bangalore city bus services, which are operated by Bangalore Metropolitan Transport Corporation, in the period from 2012–2014. Based on available data, the paper provides insights into transport pricing and associated equity issues. The key findings from this study are that the low-income bus users have adapted to reduce their travel costs through changes in travel behavior, travel pattern and modal shifts.

The sixth and the last paper, from Satya Sai Kumar Jillela and Peter Newman, brings out the innovative value capture for rail transit financing. The authors explain the different methods of value capture (VC) practiced around the world and in India and how it is applied in different projects. This topic is very relevant to financing massive public infrastructure projects such as railways and roadways in developing countries.