

# Preface

Smart cities are intelligent and hi-tech cities with problem-solving capabilities. Cities are reflection of development and opportunities in a nation. Therefore, on the one hand they increase prospects and on other hand pose challenges. Poverty, unemployment, slums, environmental degradation and resource crunch are some major challenges of any urban area. The people need to look towards well worked out solutions to tackle such problems in cities. Smart cities are expected to provide sustainable living to its people. This book “Sustainable Smart Cities of India” is a sincere attempt to assemble research papers related to challenges and opportunities for sustainable smart cities in India. The book highlights various important and peculiar issues related to different cities of India. It also tries to provide solutions through smart use of technology, remote sensing and Geographic Information System (GIS).

This book aims to put forth the development potentials and management options in the today’s cities of India. While editing and compiling the papers, the editors endeavoured that a wider spatial coverage of cities from different parts of India is ensured. The vast exposure of cities in the book gives an extensive scope to academicians, researchers and planners to go through the challenges in urban India and work out the most applicable and appropriate solutions for management.

Besides the wide spatial coverage of cities, the scope of the book is extensive as well. The book highlights water problem of Bangalore, Kanpur and Varanasi; landuse–landcover change of Delhi; disaster management issues in Shimla; transport potential and challenges in Jodhpur, Tinsukiya and non-tribal belts of Himachal Pradesh. It also discusses the need of technology, especially remote sensing and GIS for identifying the urban growth, civic amenities and sustainable urban management options. Cities in India have rich cultural heritage and have great tourism potential. The book also includes papers on tourism potentials in Nainital. Housing is a prominent problem in almost all the urban areas of India which is also discussed. It also has some interesting papers on green buildings and



green cement concept. The book discusses energy challenges and the need for renewable energy options to manage the upsurge of energy demand in cities.

The book has an introductory chapter followed by four prominent theme-based sections succeeding with summary and outlook of the entire perspective running through the manuscript. Part I deals with “Smart Cities Development Potential and Challenges”. This includes papers on the concept of smart cities, various challenges in building smart cities and their sustainability issues. Part II of the book is about the theme “Smart City Development and Role of ICT, Remote Sensing and Geographical Information System”, and it contains various papers on role of technology, mobile phones, facility management system and GIS to assess, monitor and manage various issues in Indian cities. Part III focuses on “Environment, Energy, Disaster Management and Sustainable Development of Cities”, and it includes papers related to energy issues and alternatives, environmental problems in Indian cities and evolution and role of green buildings. Part IV of the book addresses the “Multifarious Management for Smart Cities”. This part contains papers on various management issues such as water, transport, health, distance learning, tourism potentials, role of social networks and governance issues.

The contributions are the intellectual research work by research scholars, professors, academicians, planners and scientists from various universities and institutions of India, such as University of Delhi, Jamia Millia Islamia, School of Planning and Architecture, National Institute of Urban Affairs, JSS Academy of Technical Education, Jodhpur Development Authority, IIT Kharagpur, IGNOU (Delhi), Jadavpur University, University of Karnataka, Centre for Advanced Management and Power Studies, Central University of Banaras Hindu University, University of Rajasthan, University of Assam, Giri Institute of Development Studies, Lucknow, University of Jammu, Aligarh Muslim University and many more. The papers are thoroughly peer reviewed and care has been taken to present them in their original form. The editors have taken sincere care in compiling the papers in the most justifiable and rational way. The book is unpretentious effort to highlight and justify its theme and objective.

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