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
table of 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, pro-
fessors, academicians, planners and scientists from various universities and insti-
tutions 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.

New Delhi, India

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Sustainable Smart Cities in India
Challenges and Future Perspectives
Sharma, P.; Rajput, S. (Eds.)
2017, XVIII, 809 p. 262 illus., 210 illus. in color.,
Hardcover
ISBN: 978-3-319-47144-0