

Contents

1	Perspectives of Smart Cities: Introduction and Overview	1
	Poonam Sharma and Swati Rajput	
Part I Smart Cities Development Potentials and Challenges		
2	Can the Smart City Allure Meet the Challenges of Indian Urbanization?	17
	Ashok Kumar	
3	Methodological Issues in Studying Urban Influence	41
	Surya Tewari and H. Ramachandran	
4	Implementation Challenges for Establishing Smart Urban Information and Knowledge Management System	59
	Sandeep Kumar Raut and Papiya Bandyopadhyay Raut	
5	Spatial Distribution of Startup Cities of India	73
	Daljit Singh	
6	Re-imagining Post-industrial Cities: Exploring Newer Identities in Faridabad, Haryana	85
	Anjan Sen and Anuja Yadav	
7	Problems and Prospects of Development in Guwahati, Assam.	109
	Pratisha Padmasri Deka and Meena Kumari Devi	
8	Exploring Potentials and Challenges in Making Smart Cities in India: A Case Study of Allahabad City, Uttar Pradesh	123
	Arun Pratap Mishra, Anjan Sen and Ashok Kumar	

Part II Smart City Development and Role of ICT, Remote Sensing and Geographical Information System

- 9 Assessing Pattern of Spatio-temporal Change in NCT of Delhi and its Peri-urban Areas using Geospatial Techniques** 145
Dipanwita Dutta and Atiqur Rahman
- 10 Monitoring Urban Expansion of Thoubal, Manipur.** 161
L. Mirana Devi, S.K. Bandooni, V.S. Negi and Masood A. Siddiqui
- 11 Optimising Green Spaces for Sustainable Urban Planning: A Case of Jaipur, Rajasthan** 175
Amrita Bajaj and Ajay Kumar
- 12 The Strategic Role of Green Spaces: A Case Study of Kalaburagi, Karnataka** 185
Ramesh Anguluri, Priya Narayanan and Krishna Udnoor
- 13 Assessing the Rainwater Harvesting Potential of Pallavpuram Area in Meerut, Uttar Pradesh** 199
Satya Raj
- 14 Facility Management System: A Case Study of University Campus** 213
Arifa Begum and Ashis K. Saha
- 15 Impact of Urbanisation on Land Surface Temperature in Nagpur, Maharashtra** 227
Manish Kumar, Dinesh Kumar Tripathi, Vinay Maitri and Vivekananda Biswas
- 16 3D City Models for Extracting Urban Environmental Quality Indicators in Greater Hyderabad, Telangana** 243
Tirunagari Mounika and Ramesh Anguluri

Part III Environment, Energy, Disaster Management and Sustainable Development of Cities

- 17 Alternatives for Energy Stressed Cities** 259
Punita Verma, Sakshi Patwal, Kavita Kumari, Vernika Mehta, Ritu Vyaghrambare and Tulika Sharma
- 18 Social Acceptability of Energy-Efficient Lighting** 275
Soma Sengupta
- 19 Energy Management by Using “Noise and Pressure” in Generating Electricity** 295
Pratibha Singh, Praveen Kumar Maurya and Roli Verma

20	The Energy Scenario of India: An Assessment	321
	Ankur Srivastava, Poonam Sharma and Ajay Kumar	
21	Urban Dynamics and Resource Consumption: A Case Study of NCT of Delhi	333
	Bindhy Wasini Pandey, Abhay S. Prasad, Himanshu Mishra and Sakshi Godara	
22	Sustainable City around Indian Alpine Wetland: A Case of Mirik Lake, West Bengal	353
	Malabika Biswas Roy, Pankaj Kumar Roy, Mrinmoy Majumder and Arunkanti Biswas	
23	Analytical Study of Green Spaces and Carbon Footprints	369
	Swati Rajput and Kavita Arora	
24	Issues and Challenges of Sustainable Tourism in Nainital, Uttarakhand	383
	Kalpana Bhakuni	
25	An Evaluation of Disaster Vulnerability in the Shimla Himalaya, Himachal Pradesh	399
	Roshani Devi	
26	Green Buildings: Eco-friendly Technique for Modern Cities	415
	Ashima Srivastava, Pratibha Singh, N.N. Janhavi and Avinash Singh	
27	Awareness and Sensitivity of Mobile Phone Consumers on Electronic Waste in Delhi-NCR Region	433
	Geeta Bhatt, Manoj Khanna, Balaram Pani and Renu Baweja	
Part IV Multifarious Management for Smart Cities		
28	An Assessment of Domestic Water Use Practices in Delhi	445
	S.C. Rai and Jyoti Nagpal	
29	An Issue of Governance in Urban Water Supply: A Study of Varanasi, Uttar Pradesh	459
	Arun K. Singh	
30	Assessment of Water Consumption at Urban Household Level: A Case Study of Pune, Maharashtra	475
	Samruddhi Patwardhan and Veena Vishwanath	
31	An Appraisal of Water Sustainability in Bangalore, Karnataka . . .	493
	Pooja Chowdhary Mehtani	
32	Accessibility of Water for Houseless Population: A Case for Kanpur City, Uttar Pradesh	515
	Shamshad	

33	Socio-economic Determinants and Reproductive Healthcare System in Patna, Bihar	533
	Rachna Mathur	
34	Urbanization and Status of Health in Western Uttar Pradesh	551
	Nafisa Banu and Surendra Kaur Rawal	
35	Accessibility to Transport Facility: A Case Study of Jodhpur, Rajasthan	577
	Ansuya Tater	
36	Spatial Variations of Transport Infrastructure and Urban Development, Himachal Pradesh	603
	Ram Lal and B.R. Thakur	
37	Urban Mobility and Economic Development of Tinsukia, Assam	619
	Michiki Baruah and Bhuban Gogoi	
38	Sustainable Urban Development Through Ghats: A Case Study of Varanasi, Uttar Pradesh	637
	Rajan Maurya, Bindhy Wasini Pandey and V.S. Negi	
39	Urbanisation Level of Uttar Pradesh: A District-Wise Analysis . . .	655
	Arti Sharma and Tejbir Singh Rana	
40	Measurement of Sustainable Urban Development of Varanasi, Uttar Pradesh	667
	Vijay Pandey and Lalita Rana	
41	Levels of Air Pollution in Lucknow, Uttar Pradesh	681
	Ruchi Tiwari	
42	Problems and Development of Slums: A Study of Delhi and Mumbai	699
	S.K. Sinha and Ravi Shekhar	
43	Modernization in Distance Learning Education System Through BOOC's	721
	Gurpreet Singh Tuteja	
44	Geographical Perspective of Crime in Delhi	731
	MoniKa Vij	
45	Social Network as a Survival Strategy for Migrant Women Construction Workers in Delhi	755
	Chandrakanta	

46	Management of Civic Amenities System in Jammu, Jammu and Kashmir	767
	Sarita Nagari	
Part V Summary		
47	Summary and Outlook	781
	Poonam Sharma and Swati Rajput	
	Index	789

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