

Preface

Throughout history, anthropic activities have resulted in deep modifications in land use and territory occupation. In fact, most of the world's original landscapes have experienced substantial transformations by anthropic actions. This issue results from a combination of factors such as demographic growth and economic structure changes from the primary sector to the industrial and services sector. As the world's cities have grown, the relevance of urban green spaces has become more apparent, considering all the benefits they can provide to improve our urban living standards.

This book, which contains nine chapters in two sections, is a powerful scientific contribution to help us plan our cities and the associated urban green spaces as well as our common future.

In this regard, the book starts with an introductory chapter (Chapter 1), where a brief description of the benefits that urban green spaces could deliver us and, at the same time, the obstacles the urban planners face to create the newest solutions for incorporating these green areas within urban territories.

Chapter 2 by Sangwan et al. analyzes the structural nature of urban green spaces and their benefits from an Indian perspective, proposing strategic measures for urban planners.

Chapter 3 by Rao et al. examines how integrating green areas in educational centers contributes to improving mental health and cognitive development, for both students and employees at these centers.

Chapter 4 by Barbosa et al. applies remote sensing techniques to a South American city to analyze its urban expansion, evidencing a disconnection and disarticulation between public spaces and green areas, with a total absence of green corridors.

Despite the spectacular nature of large parks, small green spaces play a fundamental role in the well-being of humans in high-density cities. Chapter 5 by Thilakaratne discusses this premise in the context of Hong Kong, delving into the parameters necessary to design these mini green areas.

Chapter 6 by Başak Kılıç Taşeli analyzes stormwater management in urban areas and the problems caused by inefficient management systems, proposing the application of green infrastructures to preserve runoff water quality.

Chapter 7 by Batista et al. examines the adoption of nature-based solutions for "green" building coverings to improve the resilience of public buildings using native vegetation.

Chapter 8 by Santos et al. studies green roofs and their effect on rainwater, analyzing their effects on water retention and the quality of their properties.

✿ Finally, Chapter 9 by Cristina Santos and Dr. Cristina M. Monteiro tells us how nature-based solutions through the use of new solutions could improve urban sustainability as well as support stormwater management.

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