## Community Management of Urban Open Spaces in Developing Economies

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Ву

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### **Preface**

uman beings need to make contact with nature in the course of their daily lives, and no special effort or journey ought to be required for experiencing it. Neighborhood Open Spaces can provide this immediate retreat amidst built environment. With both government policy and science emphasizing the critical necessity of Open Spaces within urban social-ecological systems, a focus on people-place interactions is essential to address issues of Open Space planning and management. Neighborhood Parks are multifunctional, and create the opportunity for shared use and activity, meeting and exchange, and imbibe a sense of attachment to the place, and their design, planning and management must acknowledge these characteristics. Each of these functions and the required spatial quality should be addressed holistically to create prospects for community participation, and enhance the usability and better management of Open Space in cities.

The intimate interaction between communities and neighborhood Open Space cannot be replicated or sustained solely by government intervention, but community involvement is necessary for its effective and sustainable management. Moreover, Indian cities are reeling under development pressure, social and technological change, and insufficient resources to care for social amenities like the Open Spaces. Open Spaces in Indian cities are allocated as a land use in a broad quantitative term in city Master Plans; for example, the proposal for Open Space in the Master Plan-2015 for Bangalore city is 6.72%; Master Plan-2026 for Chennai city is 5.68%; Comprehensive Development Plan (CDP-2010) for Bhubaneswar planning area is 8.74%. The mechanism for the provision and management of public Open Space has been slowly changing during the last decade, away from complete government involvement, and toward a larger role for the community sectors.

The objective of this study is to examine the social, functional, physical, and emotional aspects of neighborhood Open Space and the attitude of people for community participation in managing the Open Space, and to develop a framework for community participation by integrating the social, psychological, and spatial attributes. Hence, the key interlinked parameters for promoting Open Space

planning and management taken in the present study are: Place Use (Functional content), Place Quality (Spatial content), Place Attachment (Emotional content), Place Management (Environmental Behavior), and Levels of Participation.

These parameters are derived based on the review of literature and the context of the study. The study was carried out in the context of six neighborhood Parks in different areas of the city of Bhubaneswar. Household survey was conducted using a structured questionnaire for the interview to collect the residents' response to the Place parameters.

This empirical research has adopted qualitative and quantitative methods to evaluate the status of the Open Space in the city, and the community perception and attitude toward neighborhood Open Space respectively. Statistical analysis of the Place parameters is done at two stages: Overall and neighborhood wise. At both the stages, descriptive and comparative analyses are done to evaluate the social and spatial aspects of the Open Space, and identify the linkages among the parameters.

The study brought out the conceptual findings on the usage pattern, spatial quality, and emotional attachment to the neighborhood Park, and the residents' interest for participation in management, and key relationships among these parameters were identified. These conceptual outcomes are found to have a practical implication in the planning and community based management of Urban Open Space. The integrated framework is tested, based on which community management strategies can be formulated, and location-specific issues and complexities in the people-park relationship can be addressed. Consequently, effective community participation can be facilitated for sustainable management of the neighborhood Open Space.

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## List of Symbols and Abbreviations

₹ Rupee

ac Acre

ANOVA Analysis of Variance

B Unstandarized Regression Coefficient
 BCUC Bhubaneswar Cuttack Urban Complex
 Beta Standardized Regression Coefficient
 BDA Bhubaneswar Development Authority
 BDPA Bhubaneswar Development Planning Area

BMC Bhubaneswar Municipal Corporation

CBM Community-Based Management
CDP Comprehensive Development Plan
EMP Environmental Management Plan
EPA Environmental Planning Agency

F Ratio of the Explained Variance to the Unexplained

Variance

GA General Administration
GFI Goodness of Fit Index

ha Hectare

HIG Higher Income Group

JNNURM Jawaharlal Nehru National Urban Renewal Mission

km Kilometerm Mean Value

MMA Madras Metropolitan AreaMIG Middle Income Group

Wildle meome o

mt Meter

N Number of Respondents

#### xxiv LIST OF SYMBOLS AND ABBREVIATIONS

ORSAC Orissa Remote Sensing Centre

p Probability of Obtaining a Test Statistic

PEB Pro-Environmental Behavior

R<sup>2</sup> Squared Multiple Correlation

RWA Residential Welfare Association

TCPO Town and Country Planning Organisation

UDPFI Urban Development Plan Formulation and Implementation

ULB Urban Local Bodies

WFD Water Framework Directives