

# Community Management of Urban Open Spaces in Developing Economies



**Dr. Bharati Mohapatra**



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# Preface

**H**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	Unstandardized 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	Kilometer
m	Mean Value
MMA	Madras Metropolitan Area
MIG	Middle Income Group
mt	Meter
N	Number of Respondents

<b>ORSAC</b>	Orissa Remote Sensing Centre
<i>p</i>	Probability of Obtaining a Test Statistic
<b>PEB</b>	Pro-Environmental Behavior
$R^2$	Squared Multiple Correlation
<b>RWA</b>	Residential Welfare Association
<b>TCPO</b>	Town and Country Planning Organisation
<b>UDPFI</b>	Urban Development Plan Formulation and Implementation
<b>ULB</b>	Urban Local Bodies
<b>WFD</b>	Water Framework Directives



## 1

## Introduction

## 1.1. Overview

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Natural environment has been contributing to the community, to enhance its physical and sociocultural value, promoting long-term economic benefits and well-being. Urban Open Space or urban nature builds social capital, and it is seen as the foundation on which social stability and a community's ability to help itself is built, and its absence is thought to be a key factor in the decline of neighborhood (Middleton, Murie, & Groves, 2005). Recently, there is an increasing talk about the importance of rediscovering a sense of community, that we somehow lost when we gave up social habits and stopped frequenting the common meeting places in our neighborhoods. Neighborhood Parks are such "Places" of importance, that is, a public realm and scenic relief, which enable social and cultural interaction and sustains the natural environment.

Public Parks and Open Spaces are inherently multifunctional, and their management must acknowledge this characteristic. Each of these functions implies an accompanying set of management issues and goals, all of which must be addressed holistically for the Open Space to achieve its fullest potential. Unless the Open Space is planned and managed effectively, it is unlikely that it will serve its intended function properly.

The introductory chapter gives a brief insight into the research background, states the problem by highlighting different issues related to planning, management, and research on Open Spaces, presents the conceptual perspective of the research, points out the significance and objective of the study, and briefs about the research methods, by concluding with the chapter outline.

## 1.2. Research Background

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Smaller Indian cities are developing at a rapid pace, and the urbanization process often acquires urban growth with uncontrolled transformations in sociospatial structure. Although the cities are experiencing economic growth with the improvement in the living standard and expectation for better quality of life, yet there is no remarkable reformation in city planning guidelines and policy with respect to social infrastructure, particularly Urban Open Space.

Cities have adopted development approaches centered mostly on government action, through private sector effort in certain cases, or public participation (in a few areas) for the environmental improvement of the city, which includes development and maintenance of parks. However, there are a few positive changes in the functioning mechanism of the Urban Local Bodies (ULB) in providing community facilities, such as Parks and Playgrounds. When both the people and planners are beginning to realize the benefits of Open Space, its development and more importantly its management is being considered as a shared responsibility both of the providers and that of the community.

This collective effort can be effectively achieved when the Open Space promotes recreational use that is specific to the place and encourages social interaction among individuals with diverse interests, opinions, and perspectives. At this juncture, it is imperative to point out that a well-maintained Open Space fosters and supports civic engagement and community spirit. If citizens feel alienated or not attached to their Public Spaces, they are less likely to participate formally or informally in the governance of their communities (Pretty, Chiquer, & Bramston, 2003). Link between levels of participation and good governance reflects that increase in social networks cause increase in well-being (Brownill, 2009). So, in recent years, the interdependence between spatial and social processes (Azócar et al., 2007) has become progressively more important for integrating social aspects in studies related to the Urban Open Space.

## 1.3. Statement of the Problem

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### 1.3.1. PLANNING ISSUES

1. Planners face tough decisions about where they stand on protecting the Open Spaces in the city, promoting the economically growing city, and advocating social justice. In the face of such complex situation, the intimate interaction between communities and place cannot be replicated or sustained solely by

- government intervention, but must rely on continued community input, more importantly in public place management activities.
2. As observed in the land-use guidelines in the Master Plans for Bhubaneswar, although provision has been made for Open Space, it does not proportionately match up with the residential land use, partly due to development needs and partly because of lack of financial resource and manpower, and hence, less significance is attached to public Open Space and community life.
  3. The provision of Open Space in India is dictated by city master plans that allocate Open Space only in quantitative terms as land use, which is part of the proposal for the larger physical structure of the city, and planning of Open Space by the ULB quite often ignores the needs of people and what makes them connected with the place.
  4. The land use guidelines are issued only for the amount of Open Space that should be provided in the city within any new development. These guidelines do not extend to the design or character of an Open Space, and there are no specific guidelines for the provision of neighborhood Parks.

An appropriate methodological foundation is required for planners to handle Open Space Planning comprehensively.

### 1.3.2. MANAGEMENT ISSUES

1. Two views have been identified regarding the development and management of Open Space.
  - One is the extra concern for the development of the city level Parks that through a wide variety of development and policy processes have received priority from the public departments for economic benefits.
  - The other is the under-management of the neighborhood Open Spaces, found mostly in densely populated areas, and low income neighborhoods, lying as vacant dump yards.
2. Many of the Open Spaces in the city of Bhubaneswar are increasingly subjected to damaging influences from
  - Overuse (many people mostly visit a few developed Parks that are available in the core areas of the city).
  - Inappropriate use (some undeveloped Open Spaces have been converted to waste dump yards, occupied by make shift commercial sheds or squatters, or subjected to speculation of land conversion) due to development pressure, operational difficulties, and insufficient resources to develop it.
3. It is observed that the Open Space available for recreation varies across different neighborhoods; for example, Parks in higher