

PONT ATLAS - Unveiling the Aquatic Tapestry of Kozhikode City

Step into the aquatic core of Kozhikode!

Urban water bodies, especially ponds, emerge as integral components that mold the identity of contemporary cities. Ponds transcend mere aesthetics, evolving into dynamic ecosystems with profound implications for urban environments. This inquiry intricately uncovers the diverse essence of ponds within urban landscapes, emphasizing their central role in advancing environmental sustainability, safeguarding public health, and augmenting the overall quality of city living.

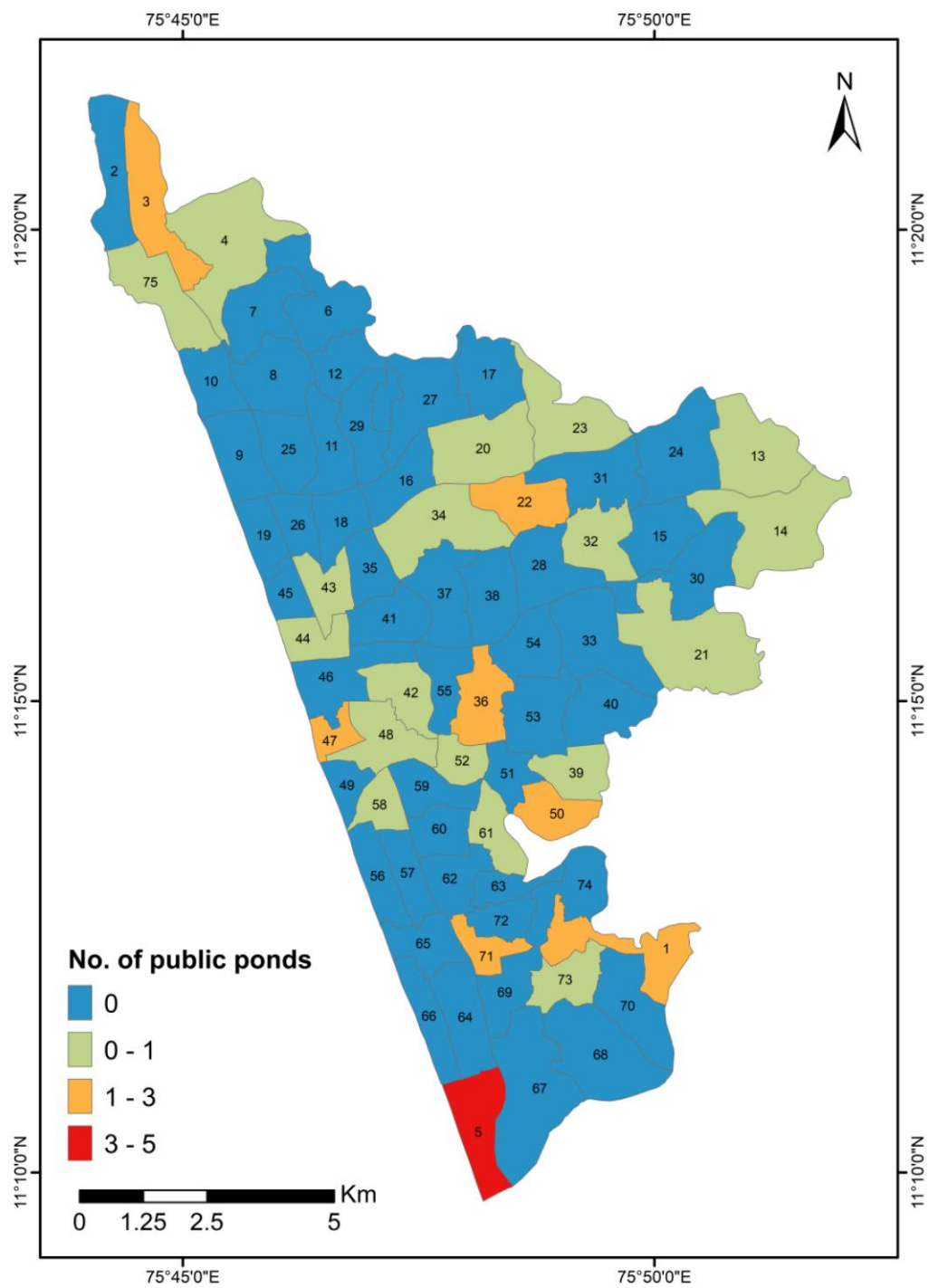
The Pont Atlas brochure extends an invitation to embark on an exploration of the 268 urban ponds, covering 57 acres, embellishing the cityscape. These bodies of water transcend mere reflections within the city; they constitute the vital essence of a water-sensitive urban setting, preserving ecology, public health, and enhancing the overall livability of Kozhikode.

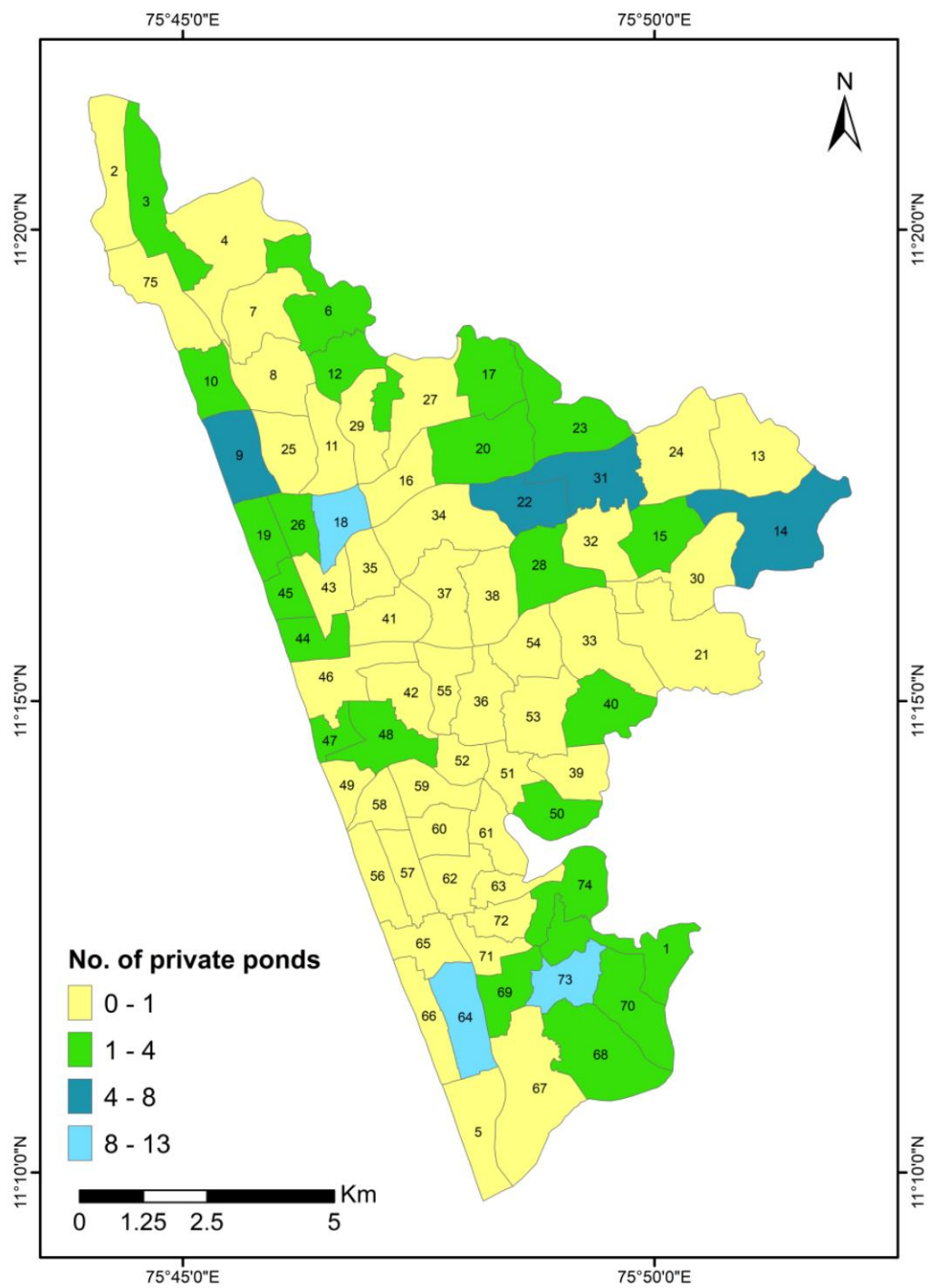
Aquatic Landscape of Kozhikode City

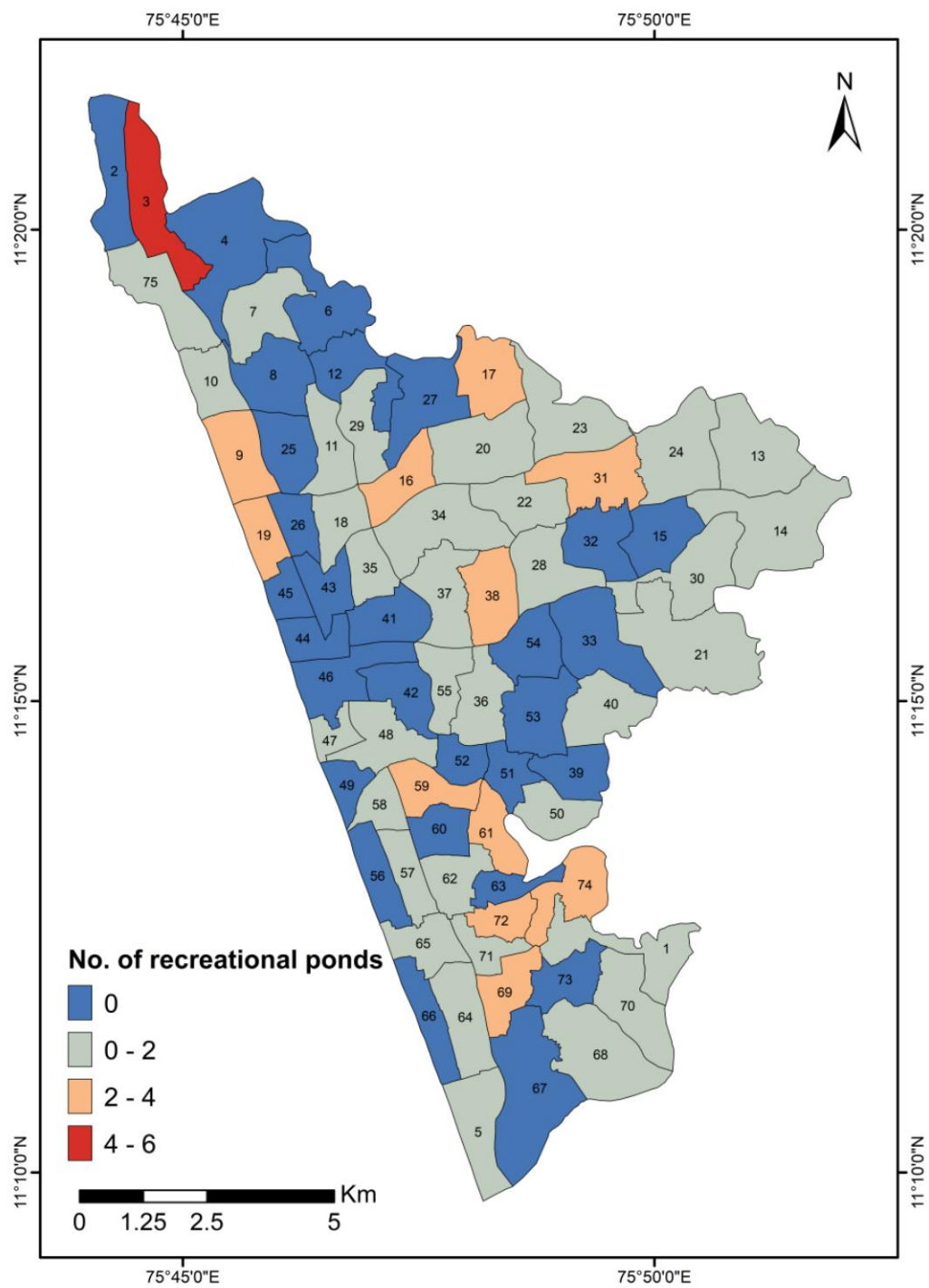
Nestled in history and culture, Kozhikode is a lively city that takes pride in its captivating aquatic landscape, a key player in shaping its distinct identity. This investigation delves into the diverse components that enhance the city's aquatic allure, underscoring the significance of water bodies in crafting both the visual and ecological fabric of Kozhikode. The ecological significance of Kozhikode's urban ponds is paramount, contributing to the overall health and balance of the city's ecosystem. These water bodies play a crucial role in supporting biodiversity, providing habitats for a diverse array of flora and fauna within an urban environment.

Classification of urban ponds in Kozhikode city

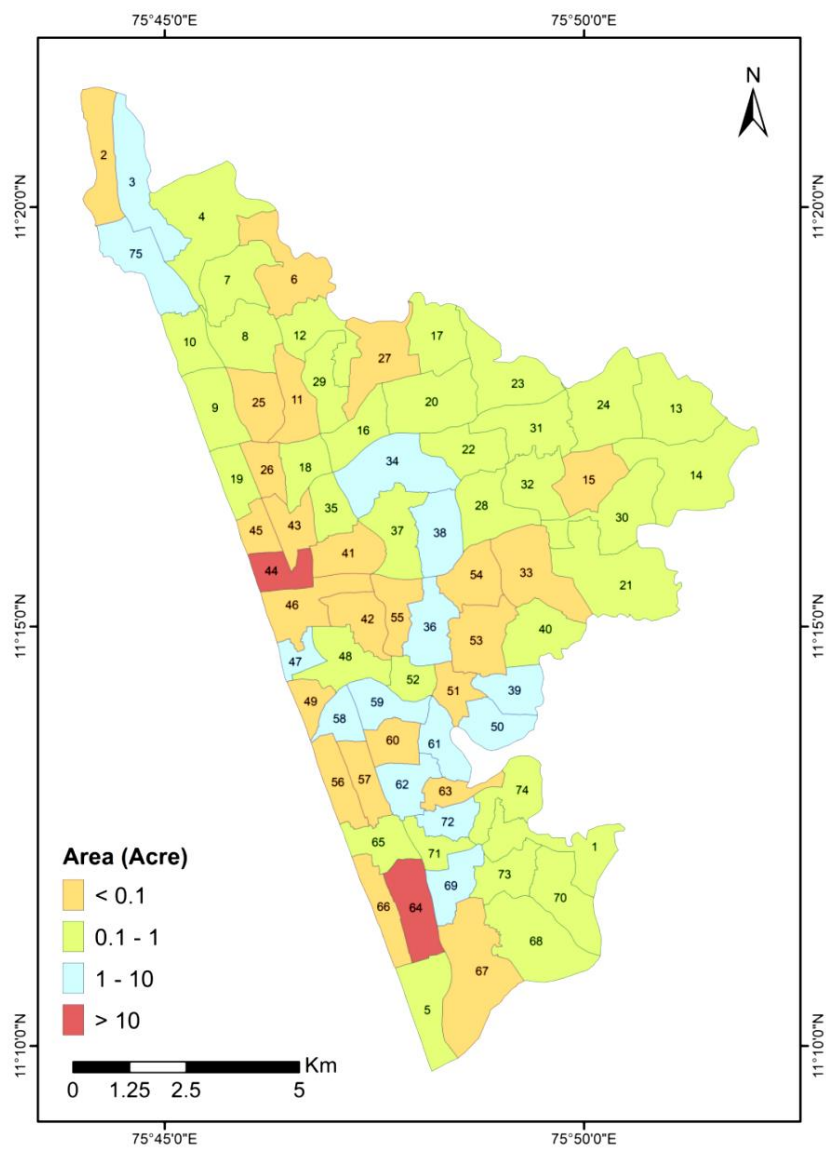
Type of ponds	Number	Type of use	Number	Area (Acre)	Number of ponds
Public ponds	34	Drinking purpose	6	>10	1
Private ponds	139	Bathing/Irrigation purpose		1-10	11
Recreational ponds (Temple ponds/ Mosque ponds)	96	Aquaculture purpose	2	0.1-1	61
				<0.1	195
		Not using/Abandoned		Total number	268







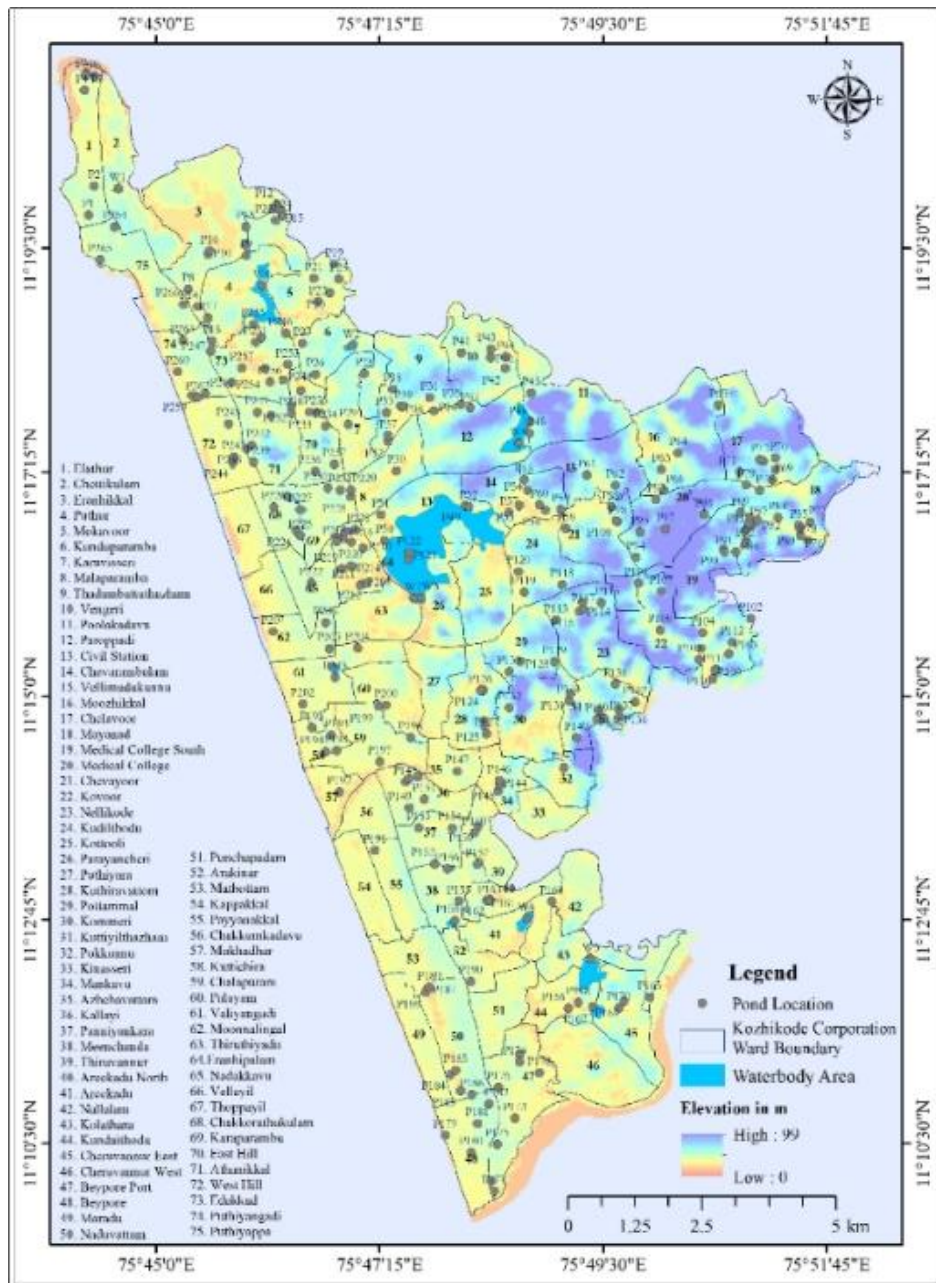
Pond Size	Number of ponds
Small Ponds (Area: <0.1 acres)	195
Medium-sized Ponds (Area: 0.1 - 1 acres)	61
Large Ponds (Area: 1 - 10 acres)	11
Very Large Ponds (Area: 10 - 12.12 acres)	1
Total	268



Wetlands of Kozhikode City

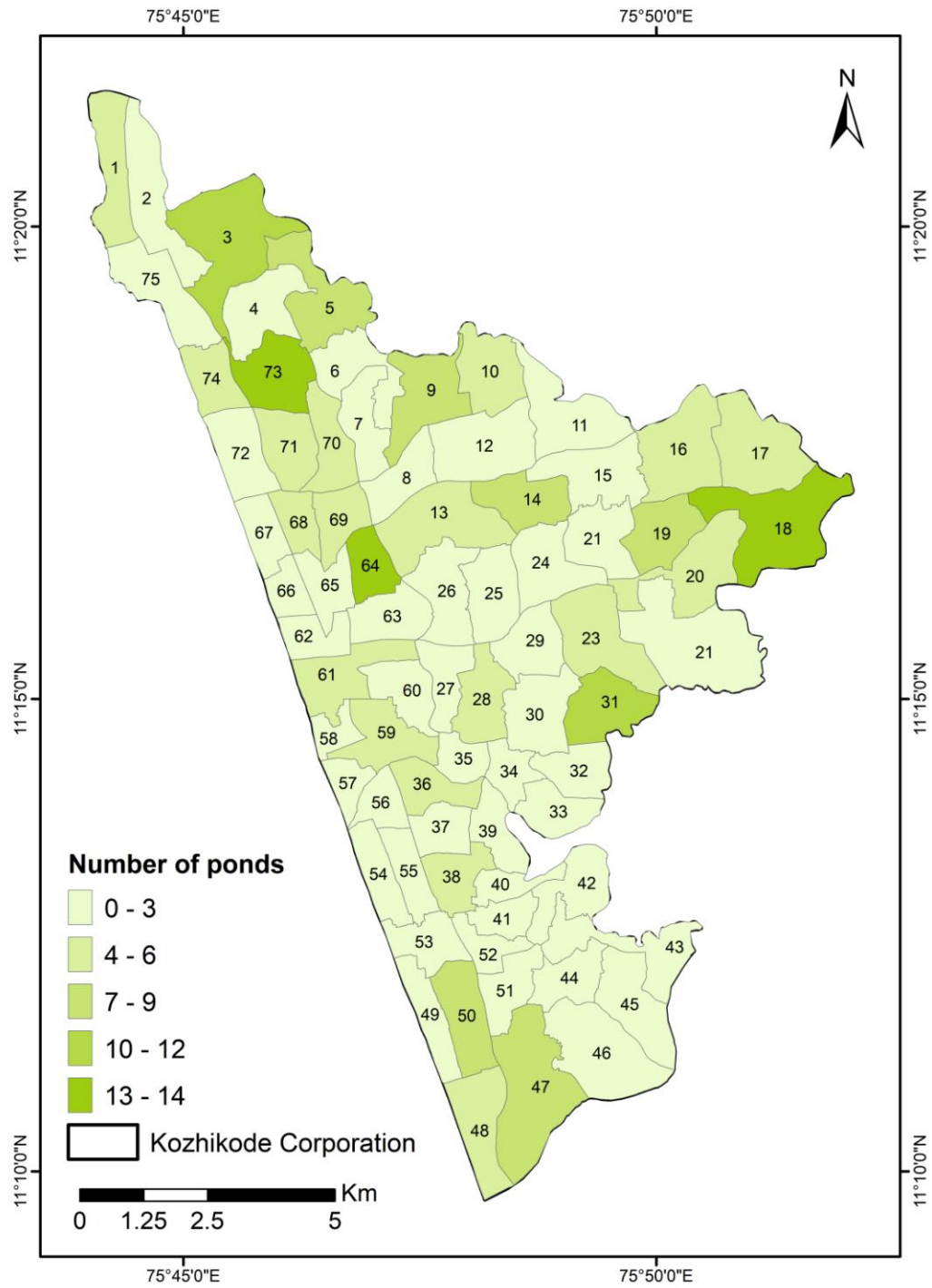
In Kozhikode Corporation, the Kottuli wetland stands out as one of the prominent wetlands, boasting the highest area of 329.48 acres among the eight identified wetlands. This sizable expanse underlines the ecological significance of the Kottuli wetland, contributing to the region's biodiversity and environmental balance.

Wetland name	Area (Acres)
Aarothukuzhichali	5.50
Kolakkattuvayal	7.94
Kottuli wetland	329.48
Kunduparampa-Eranjikkal Wetlands	49.67
Mankuzhi	45.80
Mundopadam	15.18
Nagarachira Wetland	2.63
Paroppadi Wetland	45.22
Total	501.42



Location map of the urban ponds identified in Kozhikode city

URBAN POND DISTRIBUTION ACROSS WARDS IN KOZHIKODE



Water quality Insights:

The Water Quality Index (WQI) serves as a valuable tool for categorizing ponds into different statuses. A representative assessment was conducted on a total of 24 ponds, selecting eight ponds from each of the three classifications: Public ponds, Private ponds, and Recreational ponds. Remarkably, 10 ponds from each classification were found to fall into the "Excellent" and "Good" categories, indicating commendable water quality in these specific areas. However, the analysis also revealed that 3 ponds are categorized as having "Poor" water quality, and 1 pond is classified as "Very Poor." These findings underscore the need for targeted interventions to address water quality concerns in specific areas.

WQI RANGE	WATER QUALITY STATUS	NUMBER OF PONDS
<50	Excellent	10
50-100	Good	10
100-200	Poor	3
200-300	Very poor	1
>300	Water unsuitable for drinking	Nil

State of Urban Ponds of Kozhikode City:

The current state of urban ponds reveals a substantial number that is visibly neglected or abandoned, presenting a concerning scenario where these water bodies are not fulfilling any specific purpose. These neglected ponds are characterized by a lack of maintenance, with evident signs of overgrowth, debris accumulation, and a general decline in their aesthetic and functional qualities. The abandonment of these ponds raises questions about their potential under utilization and the missed opportunities they present for contributing to the well-being of the urban environment. Such neglect can have adverse effects on the ecological balance within the city, impacting biodiversity, water quality, and the overall aesthetics of the surrounding areas. Moreover, the absence of a defined purpose for these neglected ponds suggests a disconnect between the potential benefits these water bodies could offer and their current status. Addressing this issue requires a strategic

approach to revitalize and integrate these ponds into the urban landscape. Implementing proper maintenance practices, restoring their ecological functionality, and identifying suitable purposes can transform these neglected ponds into valuable assets for the community.

Center for Water Resources Development and Management (CWRDM)

CWRDM is poised to offer comprehensive technical assistance for initiatives focused on the rejuvenation and conservation of water bodies. Leveraging its expertise and knowledge in water resource management, CWRDM is committed to playing a pivotal role in addressing the challenges related to water body sustainability.

CWRDM offers:

Expert Guidance: A team of seasoned experts provides insights into water resource development and management, guiding the planning and execution of water body rejuvenation programs.

Site Assessment: Thorough site assessments enable tailored strategies by understanding specific conditions and challenges faced by each water body.

Technological Solutions: Proficiency in cutting-edge water management technologies allows CWRDM to recommend and implement innovative solutions for enhanced efficiency and sustainability.

Community Engagement and Capacity Building: CWRDM facilitates community programs to raise awareness, garner local support, and encourage active participation in water body rejuvenation and conservation. Training programs ensure local stakeholders acquire the skills needed for active contributions to the long-term maintenance and conservation of water bodies.

W4C

This research is an integral component of the Water4Change (W4C) "Integrative and fit-for-purpose water sensitive design and governance for fast growing livable cities" research programme. The project is jointly supported by the Netherlands Organisation for Scientific Research (NWO) and the Indian Government Department of Science and Technology (DST) as part of the Cooperation India – the Netherlands program.

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