

Rewriting the future of Colombo's wetlands: Harnessing stories, histories and heritage for inclusive wetland management in Sri Lanka

Colombo's wetlands reflect the deep and diverse history of Sri Lanka's capital, revealing centuries of interaction between people, water and nature.

The history of Colombo's wetlands spans thousands of years and is tied to river deltas, historical kingdoms and colonial rule. Geological formations and processes created these expansive marshlands long before the establishment of human settlements. From around 200 BCE and through the Portuguese, Dutch and British colonial periods, wetland water systems were integrated and altered for agriculture, transport, and housing. Today, the wetlands are rich with stories of emerging powers and kingdoms, fourteenth- and fifteenth-century ramparts and natural defensive barriers, flood mitigation and waterways used for transport.

This project seeks to uncover more than 500 years of human-wetland interactions by bringing together environmental historians, heritage scholars, artists, ecologists, hydrologists and social scientists. Through archival research, historical mapping and participatory creative workshops, the project will work with local communities to document the stories, memories and cultural heritage embedded in Colombo's wetlands. By reconnecting people with the history and significance of these landscapes, the project aims to inspire more inclusive and participatory wetland management. It will demonstrate how cultural heritage and local knowledge can complement scientific understanding to support better decision-making and strengthen community stewardship.

A fragment of our wetland history

Hydrogeologically, Colombo's wetlands comprise an expanse of interconnected marshlands spreading across the metropolitan region we know today. Over the years, the Colombo Wetlands have been built upon, altered, strategically used and conserved to meet various needs.

The wetlands in the Kotte area played an important role in shaping the development of the Kotte Kingdom during the fifteenth century (Figure 1). The king at the time selected this naturally fortified location, surrounded by water bodies and marshlands, because it was nearly impregnable. Literature indicates that these ecosystems were ideal for building a fortress and strengthening defences against the powerful Arya Chakravarthi dynasty, a line of kings who ruled the Jaffna Kingdom in the north from the thirteenth to the seventeenth century, while also offering strategic waterways for naval operations against enemy merchant vessels.

The Kotte Kingdom (1412–1597) was protected by a strong rampart, a moat and an extensive network of surrounding wetlands (Figure 2). The old fort rampart extended from the north-eastern side of the Diyawanna Oya (lake) to the western side of Kolonnawa Lake. The moat was positioned on the outside of the rampart (Figure 3) and connected

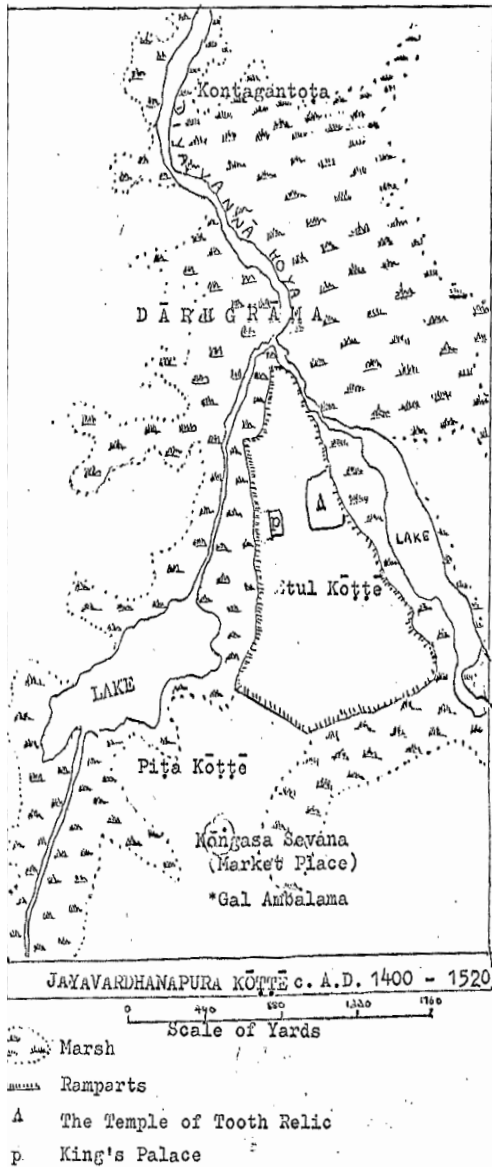


Figure 1. The Jayawardenepura Kotte area, AD 1400–1520
Source: Pieris and Naish 1920

The Kotte Kingdom's power declined with the arrival of the Portuguese in 1505 and subsequent occupation by the Dutch (1658–1796) and British (1796–1948), which had significant impacts on Sri Lanka's economy, society, environment and governance.

The Portuguese maintained a focus on defence, creating embankments and other defensive works that incorporated the wetlands. The Dutch focused on constructing waterways



Figure 2. Old city plan of Kotte on the wall of the Archaeology National Museum Kotte

Source: Department of Archaeology, photo taken by Chaturangi Wickramaratne

(canals) and modifying the wetlands for commerce, transport, flood drainage and urban development. The British expanded the drainage system and reclaimed wetlands for urban expansion, including government buildings, housing and road networks, as well as for flood control to “protect” the city. Over the course of history, the focus shifted from working with wetlands to controlling, draining and building over wetlands. Modern Colombo is a landscape that reflects this layered history (Figure 4).

The Colombo Wetland Complex (CWC) currently spans 1,900–2,000 ha (approximately, 19 km²) and is globally recognised for its biodiversity and contribution to climate adaptation. In 2018, Colombo was accredited as a Ramsar Wetland City. Despite extensive technical assessments and management and conservation efforts by numerous stakeholders, these wetlands still face severe threats from pollution, encroachment, unregulated development and extreme weather events.



Figure 3. The outer and inner moat and the peripheral wall of the ancient Kotte Kingdom. Photos taken by Radheeka Jirasinha

Connecting wetland history with future management

The main aim of the project is to reconnect communities with the history and heritage of their wetlands to cultivate a sense of identity and ownership needed for improved management and conservation. Using participatory methods, it will also support communities in shaping more sustainable future trajectories for their wetlands. To this end, the project will be conducted in three broad phases:

Phase 1: Drawing on local and international archival resources, the project team will examine diverse historical records and maps to trace wetland management practices, technological adaptations and local knowledge systems across Colombo's major historical epochs, including the Kotte Kingdom (1412–1597) and colonial periods (1505–1948). Concurrently, the team will explore Colombo's post-colonial histories of wetland adaptation using photo, film and newspaper archives, and conduct community

workshops using participatory mapping and photovoice techniques to gather contemporary perspectives on living with Colombo's wetlands.

Phase 2: The project team will conduct community engagement workshops and use historical findings as prompts for participatory visioning exercises in which Colombo wetland communities articulate desired futures for their wetland landscapes. The team will collect interview and survey data to evaluate the effectiveness of these interventions for building wetland awareness and resilience. Collaborating with local writers and artists, the project will then co-produce creative outputs that give lasting visibility to the communities' visions.

Phase 3: Drawing on the findings from community engagement activities, the project team will develop a practical toolkit for humanities-led approaches to wetland management and disseminate the results to local and international academic and policy audiences.

Working with the University of Hull and the Postgraduate Institute of Archaeology (PGIAR) at the University of Kelaniya, this project takes a novel humanities-centred approach, using storytelling, history and cultural heritage to foster lasting community stewardship of Colombo's threatened urban wetlands. Building on IWMI's previous work on [community-based wetland management](#), [wetland ecosystem services modelling](#) and transformative governance approaches, including the [Rights of Wetlands framework](#), the project extends this foundation by uncovering the historic and cultural dimensions of Colombo's wetland landscapes. These insights will provide a basis for reconnecting communities with their wetlands and reimagining more sustainable pathways for their future management.



Figure 4. Wetlands in Kolonnawa and the increasing urban environment. Photo taken by Martin Seemungal/IWMI

Project details

Title	Rewriting Colombo's Wetlands: Harnessing stories, histories and heritage for inclusive wetland management in Sri Lanka
Overall project impact	Reconnect communities with wetland history and heritage to cultivate the identity and ownership necessary for conservation, using participatory methods to rewrite wetland futures in community settings
Phase 1	Articles on Colombo's wetland heritage and histories and wetland stories and folk traditions
Phase 2	Public exhibition of our art/community work and a short documentary on wetland stories/history
Phase 3	Toolkit for humanities-led approaches to wetland management and policy briefs on best practices for humanities interventions in wetlands for local and international audiences
Partners	University of Hull, UK (Lead) International Water Management Institute (IWMI), Colombo, Sri Lanka Postgraduate Institute of Archaeology (PGIAR), University of Kelaniya, Sri Lanka
Funding program	British Academy Award for International Interdisciplinary Research Projects 2026
Project timeframe	20 April 2026 – 20 April 2028

Additional reading

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IWMI
International Water
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The International Water Management Institute (IWMI) is an international, research-for-development organization that works with governments, civil society and the private sector to solve water problems in developing countries and scale up solutions. Through partnership, IWMI combines research on the sustainable use of water and land resources, knowledge services and products with capacity strengthening, dialogue and policy analysis to support implementation of water management solutions for agriculture, ecosystems, climate change and inclusive economic growth. Headquartered in Colombo, Sri Lanka, IWMI is a CGIAR Research Center with offices in 16 countries and a global network of scientists operating in more than 55 countries.

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