

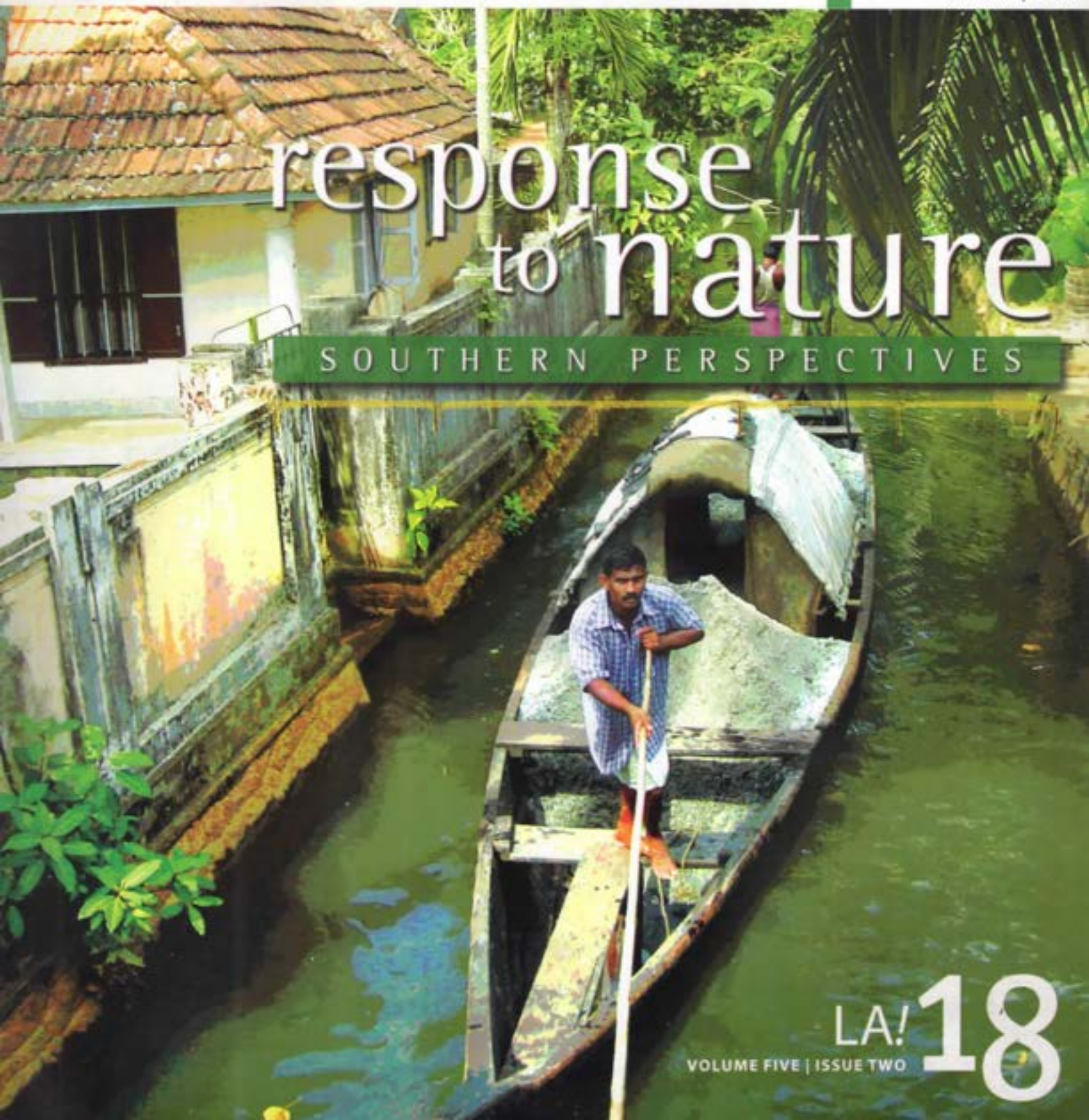
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SOUTHERN PERSPECTIVES



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DEVELOPMENT OF WETLAND PARK

VALANTHAKAD ISLAND, COCHIN



Valanthakad Island is situated on the south-eastern part of the Cochin city. The island is surrounded by water with Thripunithura River on the east, Kaithapuzha Kayal of Vembanad Lake on the south, Nettoor Thodu on the west and Valanthakad River and Thevarkadu Thodu on the north. Taking a tour around Valanthakad is an enchanting feeling with the breathtaking beauty of an outstanding natural landscape wetlands and mangroves.

TOP: Panoramic view from Nettoor gives the impression of a coconut grove island in less populated rural village setting and allows a closer look at the island.

ABOVE: Going around Valanthakad Island provides a variety of experiences - from the gentle backwaters taking one through small and larger canals of Nettoor and Thevacadu Thodu, Thripunithura and Valanthakad Rivers to the vast expanse of Kaithapuzha Kayal of Vembanad Lake.

Valanthakad Island is an outstanding piece of nature in the heart of Cochin City. A 250 acre island full of wetlands and mangroves, it has 40 families living in the island, primarily surviving on the ecological livelihood of fishing and aquaculture, based on the wetlands inside and surrounding backwaters. The Island is among a few such islands that have remained in their full glory amidst the fast changing urban scenario, contributing to the identity of this 'backwater city' of Cochin.

The project - Development of Wetland Park, Valanthakad Island is a starting phase

Community Profile

The community of Valanthakad Island is an economically backward yet an ecologically forward class. Lying next to a city with problems of pollution, water shortage and unsettled garbage, this island boasts of living on small ponds of freshwater lens and fresh air. The island community has been typically affected by urbanization, yet they are compassionate for the rich nature that surrounds them.

Concept Development

Today, Cochin is losing its identity as a backwater city. The rapid development

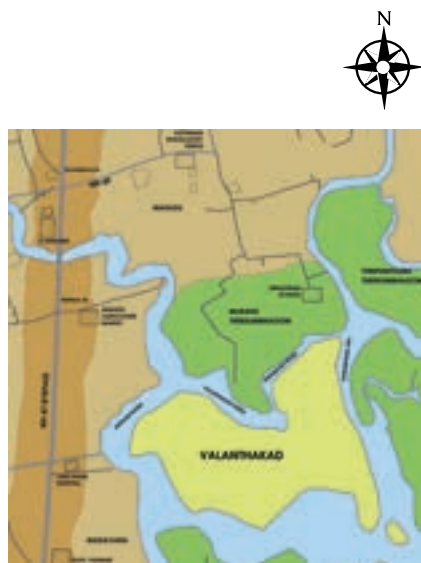
The core concept of the proposal is to enhance the ecological livelihood by adding more value to it. Here, tourism in a controlled atmosphere is proposed to be brought in to trigger an alternative economic activity. Kerala's success in tourism is based on its beauty of cultural landscape and this gives a key to protect it as well. An opportunity is provided to see and absorb a living museum of the cultural landscape of the wetlands along with the natural beauty. The opportunity to see and learn about mangroves, resident and migratory avian as well as aquatic species provides a perfect symbiotic experience.



for the Valanthakad Island Development Project aims at conserving wetlands, mangroves, and cultural landscape of this unique place. The urban development project looks at reinventing the cultural landscape to conserve and protect it and the 'Wetland Park Project' is conceived as a stepping stone to realize this dream by making the citizens of Cochin savor its natural beauty while at the same time protecting it through public watch. The project also looks at how expenditure done for tourism can also contribute towards community development.

is dangerously looking at consuming its waterfronts, filling its wetlands and cutting its mangrove jungles. Fortunately, several areas in the city still continue to be wetlands, canals and streams that support a huge number of resident and migratory species. Valanthakad Island is a typical example among such systems, which contributes to mitigating disasters and floods in this large backwater system, flushing major rivers to the sea. With its cultural landscape, the island provides an opportunity to conserve culture and nature within urban reach.





Design Process

The first task of the project is to connect Valanthakad Island to the surrounding urban fabric, without losing its charm. For this, station points are identified from where the island will be connected by enhancing the water-based transport system. A limited area of about 18 acres is selected for the Wetland Park Project as a receiving point for the visitors to come and experience the beauty of wetlands. In the next phase, the walkways and trails would be further extended beyond the boundaries of the park, where the visitors would experience various ecological livelihoods and facets of nature inside the island. For this, several walks and backwater trails are incorporated in the plan. The islanders would in-turn become part of this project by becoming trained guides themselves,

and also conducting economic activities based on their livelihood itself such as food festivals, craft exhibitions, fish sale, etc. Home-stays, ride on traditional boats etc. can add on to the income. The Wetland Park, in turn would become the nodal point for the entire island's development.

In this Wetland Park, 14.5 acres will be left as water bodies and wetlands, 1.75 acres as mangroves and 2 acres will be landscaped expressly to protect and re-establish the flora and fauna of this region. The project in its entirety envisages creating awareness of the fascinating ecology of this estuary and raising the consciousness amongst the general public on environmental issues.

One of the highlights of the park is the 10 acre lake surrounded by typical vegetation of the backwater eco-systems of the

Vembanad Lake. The dominant theme for the park is the Wetland Conservation and demonstration of methods and approaches to deal with wetlands.

Over the years, the rich plant-life of the wetlands have withstood the changing seasons and tides. The flora of wetlands of Kerala includes over 50 species of mangroves and mangrove associates. The varied and rich avian fauna has attracted many ornithologists with over 100 species nesting in this region. The backwaters and wetlands also houses over 100 aquatic species. Some of these are considered as rare, endangered and threatened species. The wetlands are also swamping grounds for various migratory aquatic and avian species.



ZONES OF THE PARK

The Wetland Park Master Plan has various zones for its development which are connected together with environmentally conscious trails. The various zones are:

- Entrance Zone
- Orientation Zone
- Ecological Interpretation Zone
- Recreation & Children's Activity Zone
- Refreshment Zone
- Habitat Interpretation Zone
- Village Cultural Zone

TRAILS OF THE PARK

The above zones connect each other through various interesting and enthusiastic trails combined with the experiences of learning and awareness. The various trails in the park are;

- Mangrove Trail
- Heritage Trail
- Floating Trail
- Bird watching Raft Trail
- Butterfly Trail
- Habitat Interpretation Trail
- Village Trail
- Backwater Village Tour

ELEMENTS OF THE PARK

The various elements of the park are opportunities for the public to learn and interact with the park combined together with elements of entertainment, amusement and education. These elements are:

- Arrival Court - With ticketing, security, locker room and first aid
- Heritage Court - Areas for having heritage crafts mela with live demonstrations
- Children's Play Area - with active recreation for interactive nature learning
- Interpretation Center - Interpreting center of the Ecology of wetlands of the region
- Amphitheatre with floating stage - For small performances and gatherings
- Moon Garden - With nocturnal blooms
- Boating - Non-motorized traditional boats in the shallow wetland lake for safe boating
 - Heritage Boat Museum - Living museum for people to explore boats of the region
 - Floating Restaurant - A small restaurant on Kettuvallam Hulls
 - Pollination Garden - Interpreting the importance of pollinators
 - Research Station - For research and development on wetland ecology
 - Nursery and Amenities - For wetland species
 - Backwater Habitat Ponds - For interpreting backwater species

FACING PAGE:

ABOVE LEFT: The Urban Context - Even though Valanthakad Island is located amidst fast-growing urban area, the immediate surroundings are rural in nature.

ABOVE RIGHT: Master Plan - Valanthakad Island Tourism Project is envisaged as a holistic approach towards the entire pristine island.

BELOW: The Wetland Park Site

THIS PAGE:

ABOVE: Zone-A : Public Spaces, Entrance & Orientation Zone





LEFT:

An Interpretation Center at the edge of the backwater is proposed for wetland flora, fauna and avian fauna. The building planning adopts a modern approach where as the roof form is derived from the shape of a Kettuvallam.

This wetland reserve will be a significant link in the regional chain of stopovers for birds on their annual migrations, particularly the wading birds who feed on the coastal mudflats. The fascinating ecology of the estuary includes mangroves with roots breaking out through the mud surface, dramatic stilt or prop roots and many creatures from mud skippers and crabs to dragon like monitor lizards. Mangroves and estuarine vegetation function as important fish breeding habitats, natural barriers against cyclones and storms and play a major role in the cleaning of the Vembanad Backwater system.

Each aspect of the park demonstrates a strong commitment to the environment. The electrical requirements will be run by solar energy and the evening illumination of the gardens will be sourced from the hybrid power plant storing energy produced from renewable sources. Appropriate designs that reduce photo pollution, automated lighting systems with programmed operation times, solar

powered energy sources will showcase sustainable environmental practices. The park will generate its own water from storm water collections and treatment of backwater from surrounding water bodies using innovative engineering technology, effective micro organisms, flow forms and roots of vegetation that energize tired and polluted water. The purification and reactivating of this essential element of life will be a keystone principle of the park.

The many features of the park have been expressly designed with a view to make it friendly to physically challenged people. The medicinal and fragrant garden will have special Braille signage for the visually impaired and the sensory gardens will provide the unique experience of hearing, feeling, touching, tasting and seeing parts of plants.



Images and text courtesy Idea Design.

Project
The Wetland Park,
Valanthakad Island, Cochin

Location
Cochin, Kerala, India

Total Area
18.27 Acres (Wetland Park)
256.7 Acres (Valanthakad Island Development Project)

Client/Developer
Department of Tourism,
Government of Kerala

Landscape Design Team
Idea Design, Cochin
Biley E Menon, Architect &
Urban Designer
Chitra Biley, Landscape Architect
Divya S G, Junior Architect
Praveesh K M, Junior Architect

Architecture & Urban Design Consultancy
Idea Design, Cochin

Current Stage of the Project
2007, Project Approval Stage

Project Cost (Landscape, Civil, Horticulture and Irrigation)
RS. 5 Crores (Wetland Park)
RS. 20 Crores (Valanthakad Island Development Project)



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