HISTORY IN LANDSCAPES

BANGALORE

A PHOTO-DOCUMENTATION OF LANDSCAPE TYPOLOGIES IN THE GARDEN CITY

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Landscape Environment Advancement Foundation (LEAF), 2023

Established in 2007, LEAF began by undertaking research and publication in areas of landscape design, understanding and mapping urban phenomena, and plant material. Over the years, these areas have expanded to include developing governance, and city management matrices, the redesign and refurbishment of public parks and public spaces, and looking at the impact of art in the urban fabric - amongst other areas. It supports research programs of various durations, and also undertakes on-ground initiatives.

It has previously worked on a country wide exhibition on landscape design - Tracing Narratives - that explored the various facets of landscape design and its history in India; and then an architecture exhibition called Death of Architecture that studied the nature of this profession and its practice in the Indian context.

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It began with a Mud Fort built in 1537 by a local chief - Kempe Gowda, then a fort reconstructed of stone in 1761; and later converted to being the British Head Quarters between 1831 and 1881. It has seen the comings and goings of the Marathas - whose history in the city can be surmised from the various inscriptions of Shahaji - the father of Shivaji - and Sambhaji, the son of Shivaji; the Mughals, and then the Maharajas again prior to India gaining Independence in 1947.

In the 1950's, it saw small scale immigration that was prompted as a result of the State investing in the public sector, and in education. Slowly but surely, the city of Bangalore has expressed itself as a closely built town with a number of modern outlying areas, and the landscape has gradually given way to the built.

Over time, it has taken on many mantles and forms; different names. 'A Spot of England in India', 'The Science & Technology Capital of India', 'The Silicon Valley of India', and of course, 'The Garden City of India'; each name denoting a moment in time. The city today is spread over approximately 740 square kilometers, and is continuously interspersed with natural elements, and landscapes that have become useful as larger conceptual underpinnings of human development, and cultures.

The landscape typologies represented in this photo booklet - cultural landscapes for the most part - have become demonstrative of the continuous, dynamic interactions between nature and culture. These landscapes may be considered to be etchings of the cultures and civilizations that have previously claimed this land as their home; constantly being shaped not just by natural forces, but also humanity and its pursuits, and intent. In some cases, these landscapes have become indicative of rituals and ideas that are passed down through the generations, and in others, they are indicative of newer traditions and rituals that will ultimately find their way into the historical writings of this city. This photo-document does the former by looking at typologies such as the *Ashwath Katte*, and the *Thandi Sadak*, and the latter by documenting a sample of IT and Domestic Landscapes the city has on offer. Then, of course, there are some landscapes that become continuous links, from the past to the present, of cultures gone by; in this case they are the lakes, and the public parks of the city. These landscapes have become ways in which to retain, enhance, or lend a sense of identity to the spaces within which they have been established. These landscape typologies continue to be indicative of the manner in which we must move away from the ideas of singularity in the composition of cities, and the urban fabric, and see it for what it is - an all-encompassing microcosm. They are, perhaps, one more indication in understanding the manner in which we navigate the spaces that we occupy.

We have often thought to ourselves, and have also been asked time and again, why it is important to undertake such research and thinking. And the simple answer, perhaps, is that we believe that one must constantly strive to develop new lenses to understand and filter that which we have been presented. This document is an attempt in doing just that.

Through the author's personal take, the document is an attempt to understand this well-documented city in a new light. And then, it hopes to shed light on the very nature and ideas associated with space, and spatiality.

– Vaidehi Bhagwat





Once a dry and semi-arid landscape of rock outcrops and thorny bushes, is now called a Garden City of lush green parks, lakes, and beautiful avenues, rich in diversity of flora brought here from countries and continents across the world. This brief photo-documentation tells a narrative of Bangalore's landscape history and of all the co-authors that wrote it. Landscapes of sustenance, of prayer, of power and of poetry, emerged in the plains and valleys of this region, which began with scattered settlements; ever-evolving with the emerging city.

As humans tried to tame nature, and give forms to landscapes on this wild and rich terrain, nature tamed humans in return. The traditional knowledge systems of the lakes, and irrigation was once integral to the native landscape of the settlements. The culture grew around it; festivals were celebrations of the native ecology. Kagara, the celebration of Goddess Draupadi, is celebrated annually by the Vanniyakula Kshatriya community, and was once centered around nine major water-bodies across the city. Water is now supplied to Bangalore from outside the city, and the system of lakes has been decaying for years, with many of the 9 water-bodies built over with commercial and residential complexes. But, the celebration still goes on. Humans may adapt to changes in landscape quickly, but are persistent with their rituals. Kadelekai Parishe, an annual groundnut fair, is kept alive, although the lake and groundnut farms in the context were transformed to a dense urban fabric long back. The worship of the Snake God at the *Ashwath Katte* is still an important everyday ritual, although the sacred groves, and with it, the snakes, have disappeared.

Landscapes are not static picturesque, but rather an ever-evolving dialogue between humans and nature. In this photo documentation, I have tried to capture some stories of this changing dialogue through different times, and of different landscapes in and around the Garden City, and weave the stories together in a hope that it might tell an interesting tale of the places of nature that I live in and adore very dearly. The landscape typologies, and places covered in the compilation are amongst the many expressions of nature found in the broader region of the South Deccan plateau. The typologies were decided according to their relation to Bangalore's history, and their prominence in everyday encounters. Some elements are integrated as subsets to a larger typology; smaller surface water-bodies such as wetlands and *Honda* (pit) are explained within the lake typology. Some important typologies in history, such as the *Gunduthopu* (village forest), and community orchards do not exist anymore in the city, hence, documenting these was not possible.

The photographs of places in the narrative are at some instances of typologies or elements, and how different expressions of these elements can be found in the Bangalore region, telling stories from different times, and of factors that came into play in their evolution. To give an example, I photographed the *Kalyani* at three different places, at the Bhoganandishwara temple in the outskirts of the city, where the landscape still holds its original condition and purpose, a *Kalyani* within a dense urban fabric which was restored structurally, however is not used for its original purpose, and lastly a *Kalyani* which was filled and paved upon due to its lost ecological system, and is currently being used for a different played important roles in the making of the Garden City, such as Lal Bagh, and Cubbon Park.

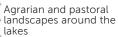
The narrative does not cover all the elements, and every detail of history, which is large in number, and thoroughly researched by many scholars in the past few decades. But, it talks about a few which were significant and/or pivotal, primarily with photographs, supported by short notes, and maps.

The time-line graphic in the next page represents the emergence of various elements and places of landscape. However, it does not talk about the evolution of the typology or a place through time. The evolution and change of expressions of each of these landscapes will be described more in the respective chapters.

	NATURAL landscape of boulders and grasslands	a few billion years ago	Boulder landscape of Dharwar Craton of the South Deccan plateau		
	early settlements PRODUCTIVE landscape in the valleys	around 4th century		Surface water reservoirs emerged in fertile valleys and plains	
H TIME	SACRED and CULTURAL landscapes	11th - 18th century	Protected village forests <i>(Gundu Thopu)</i> and sacred groves <i>(Devarakadu)</i>	社会会自体でき	
THROUGH	RECREATIONAL and experimental landscapes	1760s - mid 19th century		1760 - Hyder Ali started a royal orchard near the fort - present day Lal Bagh	1870 - Cubbon Park created by the British
LANDSCAPES	urban landscapes - COMMONS	19th - 20th century			Avenue tree plantations, started by the British and populated by the municipality
LAND	INSTITUTIONS landscapes in and around the built	1970s - present		1973 - IIMB Modern landscape architecture	

Grassland habitats in the rain shadows of the hills







The landscapes of prayer and faith-of *Kalyanis, Devarakadus* and *Ashwath Kattes*



Thandi Sadak- shaded pathways with native flowering vines near the temples and markets





1889 - Glass House, a conservatory in Lal Bagh proposed by John Cameron



New nurseries emerged to supply seedlings of new plant species from across the world

Domestic landscapes flourished with wide variety of plants species



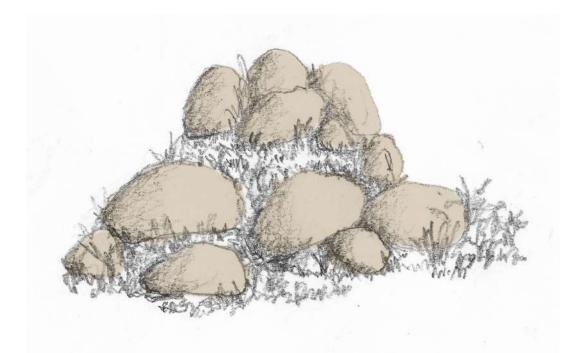
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1963 - BBMP Horticulture Department was formed





Landscape of the Tech Parks- globally identical picturesque landscapes



BOULDER LANDSCAPE

The terrain of Bangalore is part of the Dharwar Craton, one of the oldest rocks found in India, formed around 3.5 billion years ago. The semi-arid landscape of rock outcrops, and thorny vegetation, now only found in the outskirts of the city, was once the natural landscape of the region surrounding Bangalore.

BOULDER LANDSCAPE

photo 1: Boulder landscape, Sultanpet

BOULDER LANDSCAPE

Once the boulders stood tall on the rolling landscapes of Bangalore, sheet rocks laid on vast horizontal expanses. Formed through magma, oceanic crusts, earthquakes, polished by wind and rain, for billions of years, nature was the only author and sculptor of this vast landscape of gneisses, of the Dharwar Craton. Humans started intervening around these landscapes a few thousand years ago. This mighty boulder landscape can be witnessed in its natural form in the outskirts of the city of Bangalore.

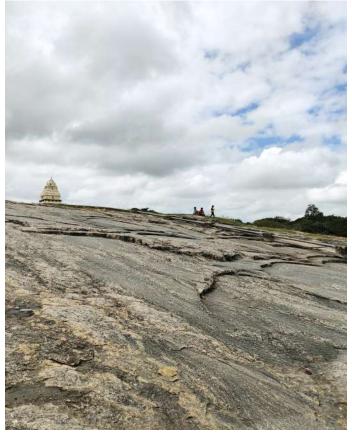


photo 2: Kempe Gowda Tower, Lal Bagh

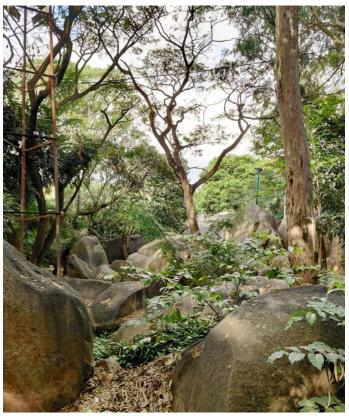
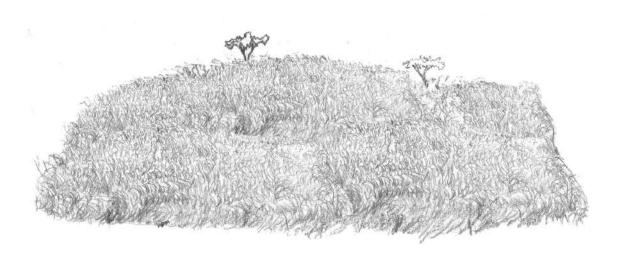


photo 3: Bugle Rock Park, Basavanagudi

Kempe Gowda, the ruler of Bangalore in the 16th century, built four towers to mark the boundary of the city. One of these towers, built on the sheet rock at the Lal Bagh, is protected by the Geological Survey of India as one of the oldest rocks in the world *(photo 2)*. The steep boulder landscape of the present day Bugle Rock Park *(photo 3)* was used as a defense strategy in many wars around Bangalore, including the war between Tipu Sultan and the British Force. Many temples are built on top of the boulder hillocks. These landscapes of power and prayer, co-authored by nature and humans, are where the Dharwar Craton still appears in the dense urban fabric of the city.



GRASSLAND

The dry Savanna landscape of large open lands with grasses, seasonal wetlands and scattered woods on the gentle sloping plains between the rocky boulder hills.



GRASSLAND

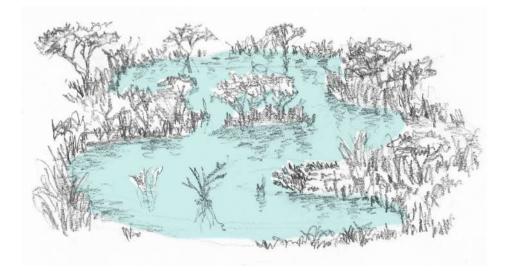
The valleys between the rocky hills were originally natural grasslands, devoid of large tree covers, supporting the native wildlife in the low lying plains. These grassland habitats were the ideal grounds for human settlements, offering fertile ground for productive landscapes and wetlands which became places where settlements intervened, deepening the terrain, making tanks to collect the rainwater. Years of emerging and evolving settlements and rapid urbanization in the past few decades have almost completely erased this native landscape around the Bangalore region. The 356 acres of grassland around Hesaraghatta lake-bed *(photo 4),* 30 km to the north-west of the city, is the last remaining grassland habitat in the region.

The terrain of Hesaraghatta grasslands transformed, starting with the construction of Hesaraghatta lake in the 1890s. In 1892, Bangalore faced a situation of near-drought, resulting in deepening of many existing lakes and formation of new lakes. The Hesaraghatta reservoir was constructed with embankments on the Arkavathi river to meet the water demands of the increasing population of the city. The remaining grasslands around the lake were also slowly encroached, and used as agriculture lands, grazing lands, and built upon. In 2013, Bangalore Development Authority (BDA) planted over one lakh trees in the grassland, damaging its natural ecosystem.

The Hesaraghatta grasslands support many schedule I species such as the Indian Leopard, and the Lesser Florican, and is inhabited by 235 species of birds, 400 species of insects, and 100 butterfly species. In the last decade, there have been many initiatives by citizens, environmentalists, and scientists to protect this last remaining landscape with proposals of declaring the area as a conservation reserve.



photo 5: Grassland near the lake-bed at Hesaraghatta



LAKE

Lakes in Bangalore are human-made surface water reservoirs - locally called *Kere*. Hundreds of years old traditional knowledge systems of interconnected lakes use the topography of the region to collect and store surface water. At a point in the 19th century, there were around 20,000 lakes across the region surrounding Bangalore.



LAKE

The semi-arid climate of the water-deprived region highly determined the early settlement patterns. The West was rugged, with massive rock outcrops and thorny vegetation on steep slopes. The North and East, with gentle slopes, fall in the rain shadow of the Western hills. Here, low lying valleys were fertile and had seasonal wetlands creating potential grounds for settlements. The early settlements usually began with the creation of lakes in the valleys, ensuring the essentials for the sustenance of life. Other water structures such as *Honda* (pits) and *Bhaavi* (open wells) worked as decentralized secondary sources of water in dry seasons.





photo 8: Devarbeesinahalli lake

Rulers through times, Ganga, Chola, Hoysala, Vijayanagara amongst others built and maintained these lakes, surrounded by wetlands and farms; an essential resource in the livelihood of the communities. The topography of Bangalore creates three major valleys, each having an interconnected network of lakes and canals, which was sufficient for the water demand of the city until 1933. With water coming from outside the city, the natural ecosystem of Bangalore's lakes decayed in the last few decades (fig 1). Many lakes were filled and built over with commercial and residential complexes. The landscape around the remaining lakes also changed from wetlands and farms to high rise concrete buildings (photo 8), leaving no permissible ground for percolation. The *Rajakaluve*, canals connecting the lakes, once working as seasonal bio-swales, are also concretized and polluted with domestic and industrial waste from the encroachment.

photo 7: Ulsoor lake

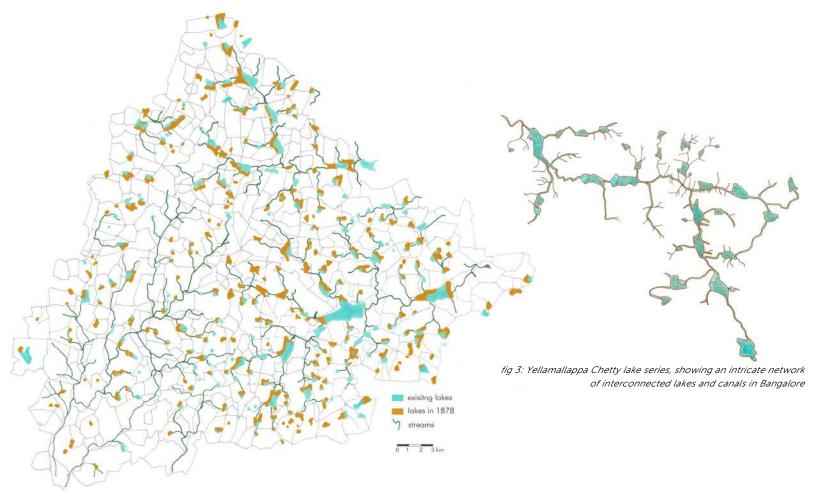


fig 1: Map of Bengaluru's lake network in 1878 and present



fig 2: Sampangi lake, before being built to Kantiveera stadium

There have been initiatives by environmentalists, NGOs, citizens and government bodies towards the ecological restoration of the lakes. In 1985, the Lakshman Rau Committee, constituted by the Karnataka state government, provided a number of focused recommendations for the protection of lakes in the state. A PIL filed by the Environment Support Group (ESG) in 2008 led to a court-constituted expert committee which developed a set of guidelines for lake protection. Jalaposhan, a local NGO collaborating with scientists, ecologists, local fisher and grass-cutter communities, working towards the conservation of Jakkur lake (*photo 9*), was successful in restoring the native ecology of the lake, rehabilitating over 200 species of migrating birds. There is hope for a better future for the lakes of Bangalore, but there is still a long way to go.





PRODUCTIVE LANDSCAPE

In the fertile valleys, crops, vegetables, fruit orchards, woods, and pastures were cultivated, sustaining the settlements.

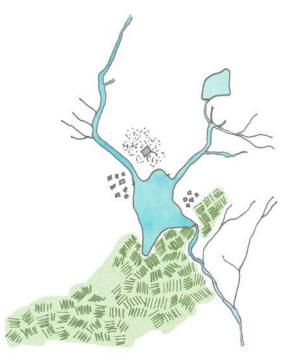
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PRODUCTIVE LANDSCAPE

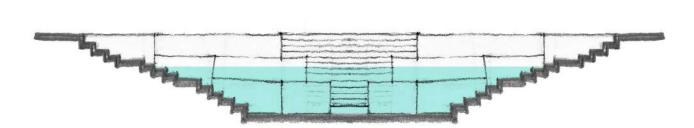
The valleys between the hills provided a fertile ground for productive landscape. Historically the irrigation in agriculture farms was highly dependent on the water from the lakes. In the Summer, the lakes were desilted, and the silt was used as fertilizer in the farms, and the farms were irrigated through water from wells accessing the shallow aquifer. The placement of the crops was also strategic, dry crops such as Ragi and other millets were cultivated in the higher plains, whereas water intensive crops such as Paddy, were cultivated in the lower plains near the lakes. Festivals tell the stories of human relationships with landscape. Kadalekai Parishe, a groundnut fair, is held every year in the first month of the Hindu year, at the Bull temple in Basavanagudi.



photo 11: Agriculture landscape around Varthur lake



This area was once a fertile land of groundnut farms, and is now densely populated with housing and commercial buildings. But, the tradition of the Kadalekai Parishe persists, telling a rich history of the once existing agrarian landscape. The cultivation crops and cycles were guite unchanged for hundreds of years, until new interventions were introduced by Tipu Sultan, and then the British. In 1792, Tipu declared the sandalwood to be protected, and created a monopoly on the sale of tobacco and pepper. The British proposed new crops such as sugarcane, which became very successful, and generated huge revenue. Around the mid-20th century, many peripheral farms cultivating dry crops such as Ragi, were converted to housing for industrial workers. Currently the large agrarian areas exist only in the outskirts of the city. The newly developed areas, such as Bellandur and Varthur, have a few remaining small farms in the surrounding area of the lake (photo 11).



KALYANI

Kalyani is a square or rectangular constructed surface water basin normally, but not always, associated with temples. The water of the *Kalyani* would be used only for temple rituals, such as *Theerthasnana* (bathing of the deities) and the celebration of *Theppotsavam* (procession of the principal idol of the temple), amongst others.

photo 12: Kalyani at Bhognandishwara temple precinct, Sultanpet

YAN

KALYANI

Each main temple of the settlement would have its own water structure, a *Kalyani*. Similar structures with different names, such as Pushkarni or Oorni, are found across South India, famously in the ancient temples of Hampi. The earliest built *Kalyanis* found in Bangalore are said to be around 1000 years old. One such is the *Kalyani* near Champka Dhama temple. In the present day, most of the *Kalyanis* in and around the city are maintained by the temples, and used regularly; one such example is the *Kalyani* at Bhognandishwara temple (*photo 12*).



photo 14: Kalyani at Sampangiram Nagar

A few *Kalyanis* near lakes and in gardens are maintained by government bodies. However, the expression of these *Kalyanis* have been changed with additions like steel railings, and installation of pumps *(photo 13)*.

As the surroundings of the temple precincts changed from open landscapes to paved roads and buildings, the ecological functioning of the *Kalyani* was also affected. The *Kalyani* at Sampangiram Nagar (photo 14) was filled and converted into a cultural space a few years back, as the changes in the surrounding topography caused a lack of water collection. The Sampangiram Nagar *Kalyani* is now used by the children in the neighborhood as a playground, and by the devotees of the temple during festivals, such as Karthika Somvara, when the *Kalyani* is transformed with hundreds of oil lamps for night long celebrations.

photo 13: Kalyani in Cubbon park



ASHWATH KATTE

Ashwattha means Peepal tree in Sanskrit, *Katte* means platform in Kannada. *Ashwath Katte* is a cultural and religious landscape under the Peepal tree with idols of the Snake God, and shrines of Hindu deities.

photo 15: Ashwath Katte at Corporation Circle

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ASHWATH KATTE

A landscape of prayer and faith, the *Ashwath Katte* portrays pacts of humans' peaceful co-existence with the wilderness, bound with mutual respect and nourishment. *Ashwath Katte*, traditionally found in the sacred groves, is a platform under a Peepal tree or a Neem tree with idols of the Snake God, and shrines of Hindu deities. The traditional landscape of sacred groves, locally called as *Devarakadu*, which literally translates to "God's Forest", consisted of clusters of mythologically significant tree species, such as Peepal, Neem, Banyan, and Sampige, amongst others, protecting the native ecology of the region.



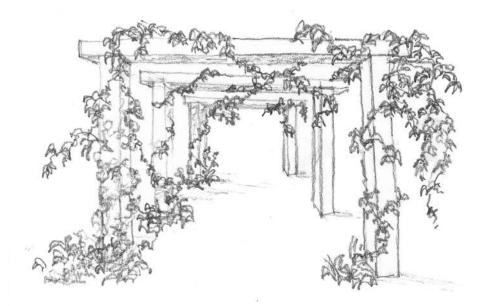
photo 16: Ashwath Katte at Sultanpet



photo 17: Ashwath Katte at Mavalli

The early settlements, surrounded by wilderness, were also home for snakes. The worship of the Snake God was a symbolic ritual of faith in co-existence - the humans would protect the ecology of these sacred groves, where the wild species can live and flourish, and the snakes, in return, would not harm them.

Most of the *Ashwath Kattes* found in the city are now isolated from their native surroundings of the sacred groves *(Devarakadu).* The rituals of worship still continue. The *Ashwath Katte* at the Corporation Circle is one of the exceptions in the city where the sacred landscape around the *Katte* is preserved in its native expression *(photo 15).*



THANDI SADAK

Thandi Sadak, as the name clearly suggests, is a cool pathway, traditionally located around the temple precincts, and markets, with stone colonnades and native flowering vines running over it.

THANDI SADAK

photo 18: Thandi sadak in front of a temple ruin, Corporation Circle

THANDI SADAK

The mention of the landscape of creeping vines is found in Paramanand's poem 'Shiva Bharat' of 1670, describing Bangalore after Maratha general Shahaji took over the city.

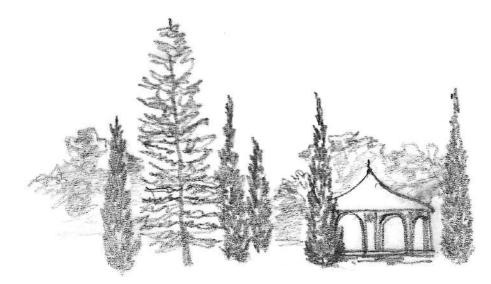
Thandi Sadak, a shaded semi-open pathway, traditionally made of stone columns and beams with native vines running over, is one of the only traditional elements where landscape actively becomes a part of space making, where its purpose is not of sustenance or prayer or significance, but solely of poetry and of creating a comfortable experience for a passerby on a hot afternoon.

A 14th century temple ruin near Corporation circle (photo 18) has a beautiful *Thandi Sadak* in front of its entrance with scarlet clock vines running over it. This structure traditionally would have been exclusively made of stone, but currently has a steel grill at the top.

The influence of the British transformed this landscape typology with new materials and expressions, inspired from the western garden element - the trellis *(photo 19)*.



photo 19: Trellis at Cubbon Park



LAL BAGH

Originated as a cypress garden started by Hyder Ali in a Char-Bagh layout, a traditional Islamic style garden of four quadrants and water channels, Lal Bagh flourished with many interventions by botany enthusiasts, initially Tipu Sultan, then the British, and currently the BBMP's Horticulture Department.



LAL BAGH

In about 1760, Hyder Ali started a 40 acre royal garden with rose and cypress plantations near the Bangalore Fort. Hyder Ali imported plants from other Mughal gardens in Lahore, Delhi, Multan, and Arcot. He brought the Vanniyakula Kshatriya community, traditional cultivators of kitchen gardens, from Tamil Nadu, to manage the cypress garden. This community extensively contributed to maintaining the garden with their knowledge and expertise. Tipu Sultan, the successor of Hyder Ali, extended this royal landscape with comprehensive planting of native and exotic species of flowers, fruits, vegetables and other plants. He imported species from Africa, South America, Central Asia, East Asia, Australia and the Canary Islands. Species such as the Rain tree, and African Tulip tree, brought to India by Tipu, are now inseparable from the image of the city.

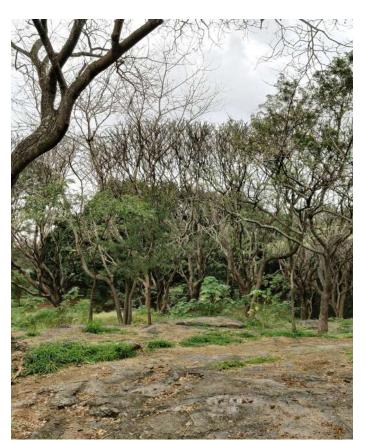


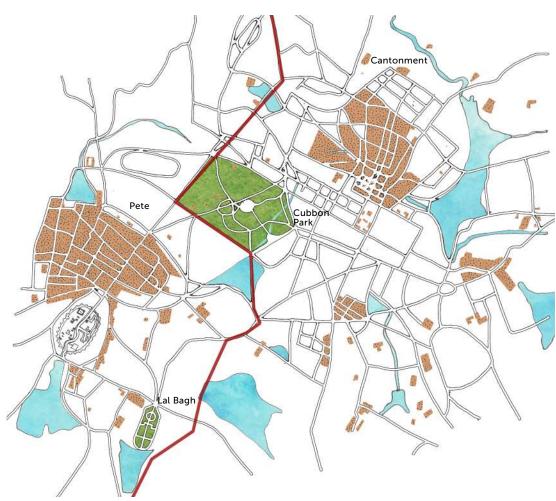
photo 22: Lal Bagh



photo 21: Lal Bagh

The landscape of Lal Bagh is not only symbolic of power and significance, but also of leisure and of experiments which continue till date.

The British continued the experiments of tree diversity in the park. Lal Bagh (named so after its magnificent rose gardens) was declared as the Government Botanical Garden in 1857. In 1908, Gustav Hermann Krumbeigel, landscape architect, structured the Lal Bagh even further with pathways, fountains, steps, etc. creating the picturesque landscape one encounters today.



In the 1914 map of Bangalore (*fig 5*), the symmetrical Char-Bagh layout of Lal Bagh can be seen. The 1791 painting by Robert Hyde also shows the cypress garden of Hyder Ali in the distance (*fig 6*), with the Kempe Gowda Tower on the sheet rock in the front. *Fig 7* shows the more evolved face of the garden with flower beds, more varieties of trees, bandstand, and pathways.

In the present day Lal Bagh, one can observe the layers of history and the influence of different rulers, as this landscape embraces the tower of Kempe Gowda, the cypress gardens of the Mughals, and the Glass House built by the British.

fig 5: A map of the city of Bangalore in 1914, showing existing Pete, & Lal Bagh, and the Development of Cantonment and Cubbon Park



fig 6: East view of Bangalore, by Robert Hyde Colebrooke in 1791



fig 7: Lal Bagh in 1890s, by an unknown photographer





CUBBON PARK

A landscape of nostalgia and poetry, Cubbon Park was created in 1870, by the British to feel more at home by creating picturesque images in nature which resembled the landscape of their country.



CUBBON PARK

Cubbon Park came to life for two primary reasons, to form a continuous green corridor which connected the city center and the cantonment, and for the British to feel at home. Tree species and gardening techniques were brought here from their home countries to create picturesque landscapes. 250 acres of land between the *Pete* and the cantonment was transformed from agriculture farms to carefully planted meadows, orchards, and woodlands. *Fig 8* shows the sparse landscape of Cubbon Park in the late 19th century, unidentifiable when compared to the present day dense landscape of Cubbon Park. While urbanization has erased most of the nature from the city, Cubbon Park and Lal Bagh, known as the two lungs of the city, become essential spaces of nature for the citizens to escape to from the everyday hustle bustle.



fig 8: Cubbon Park in 1890s, by an unknown photographer



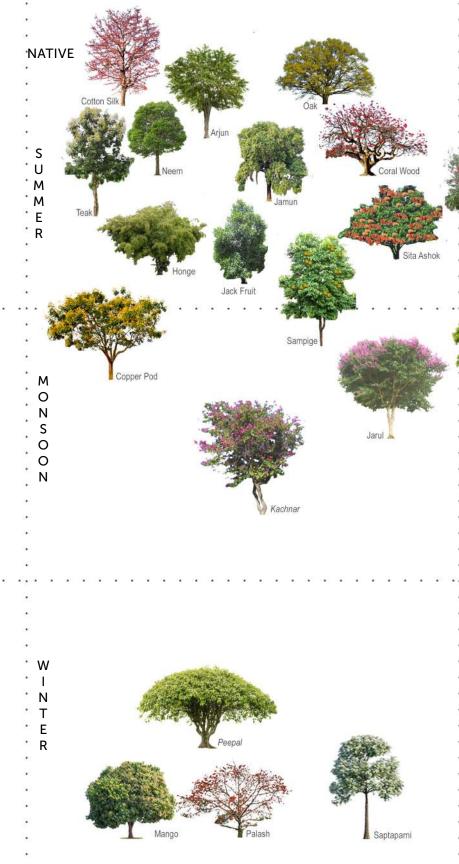
photo 25: Cubbon Park

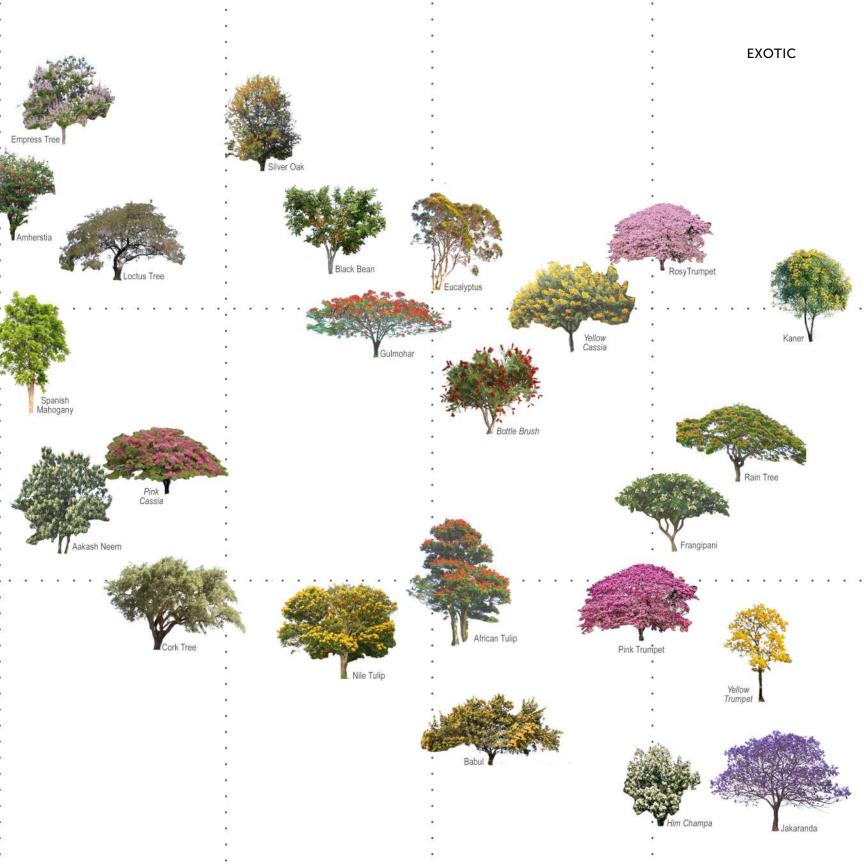
The concepts of English gardening, such as serial blossoming, and specimen tree, were used in designing the park. Many tree species were brought to Bangalore for its suitable weather from the Royal Gardens of Kolkata, such as Jacaranda, Trumpet tree, Nile Tulip, amongst many others, which were later populated in many public parks, and on road sides, painting the streets of Bangalore purple, pink, and yellow.

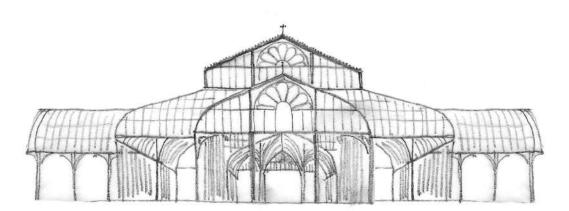
The park has become a hot spot of cultural activities, ranging from morning yoga clubs, to stand-up performances on weekends. Various wooden sculptures that are found in the park are the outcome of a wood carving workshop organized by the Horticulture Department where artists created 19 sculptures from fallen branches of the Rain tree, and Gulmohar. The dialogue between humans and nature has changed. The fallen wood once was used as fuel, now is utilized in making art. But as long as the dialogue persists, original, evolved or new, the language of landscape lives on.

DIVERSITY OF TREE SPECIES IN CUBBON PARK & BANGALORE

The tree diversity of Bangalore can be understood through understanding the tree diversity in Cubbon Park. The landscape of Cubbon Park was originally agriculture fields, and hence many native trees, such as Honge, Jackfruit, Peepal, Neem, Copper Pod, Cotton Silk, etc. are abundantly found in the park. A colorful collage is formed with many layers of exotic tree species which entered this region . during various times. Tree species from different regions of India were propagated for their use of fruit, leaves or bark, such as the Mango tree. The naturalized tree species such as Coconut and Tamarind came to India thousands of years back and have been integrated in the landscape and culture of India. Hyder Ali and Tipu Sultan, with their keen interest in botany, brought tree species from different parts of the world, such as the African Tulip, Rain tree, Eucalyptus, Gulmohar, etc. and planted them in the region surrounding Bangalore in the 18th Century. The British brought tree species from their home country and colonies, such as Trumpet tree, Jacaranda, Cassia, Australian Chestnut, etc. This diverse catalogue of tree species was planted carefully to ensure at least one blossom in sight throughout the year, a design strategy called serial blossoming. While most native trees blossom during the summer, the exotic tree species become essential to keeping the canopy collages colorful through the year.







GLASS HOUSE

Set up in 1889 by the British, Glass House, a built space for experiments in nature, was the first of its kind in the region of Bangalore. The Royal Botanical Gardens in Kolkata were the primary herbarium for the British to procure new plant species from across the world. The Glass House in Bangalore became a place through which this new plant material made its way to the landscapes of the Garden City.



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GLASS HOUSE

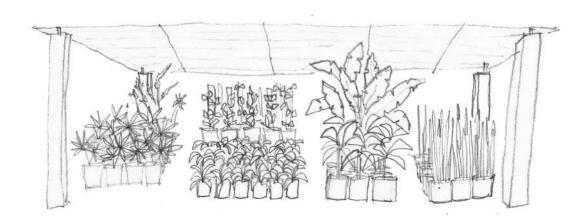
Glass House in Lal Bagh was built by the British in 1889 to commemorate the visit of Sir Albert Victor, grandson of Queen Victoria and former Prince of Wales.

The conservatory was proposed by John Cameron, an expert in botany, who introduced almost 160 new plant species in Lal Bagh every year in his service of 33 years. The Glass House became the primary place for horticulture experiments, where new plant material was brought and propagated, from where it was supplied to the newly setup nurseries around Lal Bagh, from where it was made accessible to the public, entering the domestic landscape of the Bungalow gardens.

Sir John Cameron also started the Mysore Horticulture Society, in 1912 which hosted regular Flower Shows at Lal Bagh. The biennial flower horticultural shows at Lal Bagh, on Independence day and Republic day, bring together the gardening enthusiasts of the city. It also encourages the gardeners through competitions and award prizes in the best home gardens of fruits, vegetables and flowers.



photo 27: Glass House, Lal Bagh



NURSERY

Around the mid-19th century, new nurseries emerged in the surroundings of Lal Bagh with diverse plant material, brought to the city by the British.



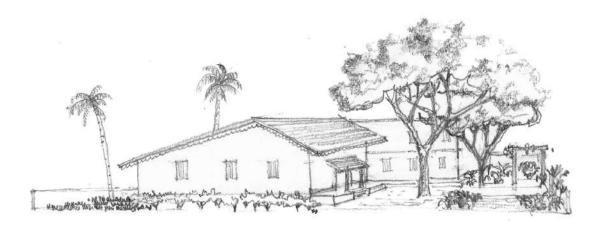
NURSERY

The concept of the nursery was brought to India by the British, to procure and propagate exotic plants. In 1836, the Agri-horticultural Society at Lal Bagh brought flowering seeds and plants from across the world to Bangalore. The new nurseries were equipped with the English plants to cater to the new demand in the gardens of the colonial bungalows. Prior to this, the propagation and exchange of plants used to happen between neighboring homes and relatives.

Post-independence, the BBMP Horticulture Department took horticulture to the rural areas, and to the common man. The Horticulture Produce Co-operative Marketing Society, and the Nurserymen's Co-operative Society were established in Bangalore. Around 357 farms and nurseries were started across the state, for demonstration of new crops and technology to the farmers, seed testing, soil testing, and to start plant protection laboratories.



photo 29: Nursery at Mavalli



DOMESTIC LANDSCAPE

Landscapes of personal expressions, Bangalore's beautiful home gardens are known for their diverse personalized articulations; each resident's own way of connecting with nature at their doorstep.

DOMESTIC LANDSCAPE

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photo 30: Home Garden, near Kasturba road

DOMESTIC LANDSCAPE

Paramanad, in his 1670 poem 'Shiva Bharat', describes the home gardens of Bangalore to have shade giving, and flowering trees. The old houses in Bangalore usually have two gardens, flowering vines and trees in the front, and a vegetable and herbs garden in the back. It is common to see a courtyard around a coconut tree in the traditional houses, as it was believed unholy to cut a coconut tree for the construction of a house. Initiatives such as the Independence Day Home Garden Competition, organized by the Horticulture Department of Lal Bagh, encourages the gardeners to keep the tradition alive. In 2003, BBMP encouraged planting in homes, with bye-laws



photo 31: Apartment complex in Bellandur



photo 32: Balcony garden in an apartment, Bellandur

imposing homes exceeding 200 sq.m to have at least 2 trees planted to improve the environment of the neighborhood. The beauty of the home gardens is in the individuality and expression of the gardener. Around the mid-19th century, there was a drastic shift in the plant species of home gardens, as the seedlings of exotic species were available in the new nurseries. With urbanization, the concepts of domestic landscape changed in apartment complexes, where the designer, the user and the caretaker of the large common landscapes are different. The personalized landscapes, however, continue in the balconies of the apartments.



AVENUE

Overarching trees on the sides of the roads are the identity of Bangalore, so much so, that it is believed that the title of 'Garden City' was given to Bangalore due to its beautiful avenues. Many Bangaloreans who grew up in the central part of the city remembered the roads during their childhood as pink road, yellow road, purple road, red road, and so on, according to the blossoms of the avenue trees.



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AVENUE

AVENUE

Around the mid-19th century, the British started extensive tree plantations on the sides of the main roads of Bangalore. Urban ecologist Harini Nagendra, through her research suggests that the avenues of fruiting trees existed much before in smaller settlements. Many new areas of the city were sparse until the 1980s. SG Neginhal, Bangalore's most celebrated horticulturist, initiated many plantation drives, shading the roads with Rain tree, African Tulip, Jacaranda, Trumpet tree *(photo 34)*, amongst many others.



photo 34: Rosy Tabebuia Tree Avenue, AECS layout, Whitefield

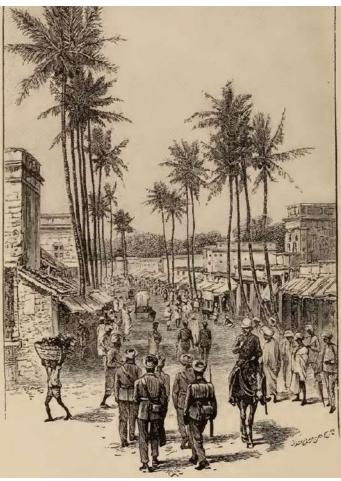


fig 9: The Main Street of the Pettah, Bangalore, 1890, by Edward P. Rice

A vibrant social life unfolds on the footpaths in the shade of these trees. A weavers' community on KR road, which depended on the shaded footpaths, where they worked with extensively long bamboo sticks, disappeared as the Banyan trees were cut in the 1980s to widen the road. Subsequently, Rain trees were planted on KR road, which too formed a fair shade, but were again felled in 2009 for metro construction despite many protests. This is only one of many similar stories of the destruction of nature during the growth of the city.



BBMP PARKS

With the creation of the Horticulture Department under the Bruhat Bengaluru Mahanagara Palike (BBMP), Karnataka became the first state in the country to have a dedicated Horticulture Department focusing on the landscape commons in the city.

photo 35: M N Krishna Rao Park, Basavanagudi

BBMP PAR

BBMP PARKS

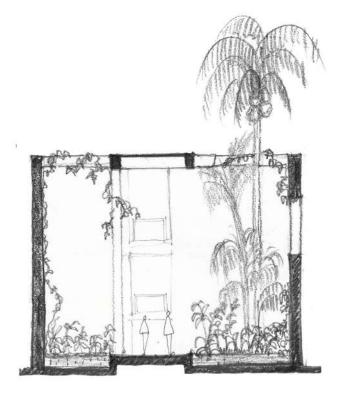
After being formed in 1963, the BBMP's Horticulture Department has developed over 1000 outdoor gardens, and lake parks in the city. An easy access to nature plays an important role in the psychological well-being of humans. The small yet frequent neighborhood gardens are not only places of leisure, but also essential urban common landscapes for the social life of the neighborhood, and ecological resources for clean air, shade and shelter for birds. Many public parks in Bangalore are equipped with outdoor gyms and children's play areas, while some also have extensive medicinal plantations and sacred landscapes like the Star Forest, the Planet Forest, and the Zodiac Forest (locally known as *Nakshatra Vana, Navgraha Vana* and *Rashi Vana*) such as at the JP Park in Methikere.

Responsibilities of the Horticulture Department include taking care of all public landscapes in the city, which has its advantages and disadvantages. While initiatives of avenue tree plantations, restorations of *Kalyanis*, lakes and community gardens, etc. were carried out by the BBMP, there have also been instances of exploitation of nature, including encroachment of many lake beds to build stadiums, bus stands, and commercial complexes. A single authority looking over all ecological, cultural, recreational, historical, and corporate landscapes, homogenizes the diverse nuances of these landscapes to fit them into a simplified metric of urban open spaces.

There have been successful collaborations between the citizens, local communities, and the government bodies. One such example is the restoration of Jakkur Lake, giving hope for possible better ownership of landscape commons of the city in the future.



photo 36: BBMP Park, Kormangala



INSTITUTE

The old institutional campuses of Bangalore, such as IISc and Bangalore University have dense tree plantations in the wide open areas surrounding the buildings. The concepts of modern landscape architecture were brought here with IIM Bangalore, designed by the visionary architect - B. V. Doshi.



INSTITUTE

Indian Institute of Science (IISc) *(photo 38)*, established in 1909, and other old educational institutes had large campuses and open areas extensively planted with trees. The native and exotic tree species flourished here without getting disturbed by the rapid urbanization. In these old campuses the nature and the built were distinct, complimenting each other but not overlapping.

Around 1973, the Indian Institute of Management (IIMB) was constructed. This was probably the first time when the landscape was integrated with the built to such an extent that the leaves, and branches of the plants participate in the space making as much as the columns, walls, and doors would *(photo 37)*.



photo 38: IISc main building, CV Raman road

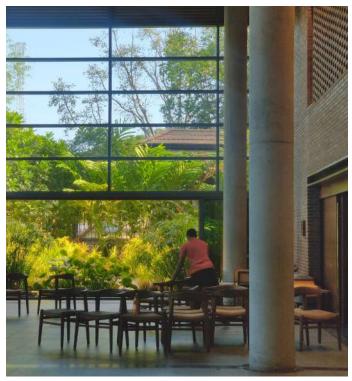
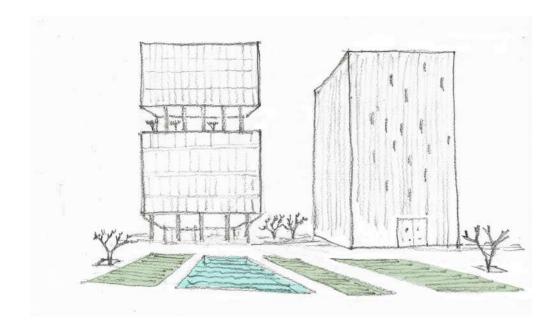


photo 39: Bangalore International Center, Indiranagar

Thus, modern landscape architecture entered the Garden City. The newer institutions, although not as spacious as IISc or IIMB, also celebrated the landscape, taking advantage of the region's suitable climate. Many approaches and experiments are carried out by architects and landscape designers to integrate the landscape with the built and create tranquility in spaces with blurred edges between the inside and the outside, combining the human-made and natural living materials for place making.



TECH PARK

Started in the 1990s, the Information Technology business in Bangalore grew larger, making it the 'Silicon Valley' of India. The city grew rapidly with a large amount of floating population coming from all over the country and the world, and tall towers emerged to inhabit them. This new built typology brought with it the clean and manicured landscapes of the Tech Parks.



TECH PARK

The progress of Information Technology in Bangalore brought with it globally identical tall glass facade towers and with it the highly manicured landscapes. This kind of expression was not only new to Bangalore at its arrival, but also quite in contrast with the image of the Garden City. The ever-evolving landscapes of the city still have a few constants, such as experimentation, dynamics of colors, celebration of native ecology, etc. which are not easily found in these excessively tamed landscapes of the Tech Parks. These uniform and many times forcefully static landscapes may have their own value of polished aesthetics and universality, but here, it seems difficult for humans and nature to have a dialogue with each other.

Inherently, nature has tendencies of changing and so do humans. Each landscape has an authentic form, an evolving/ evolved form, and a potential form. Will this typology evolve into something different, something more rooted in the context of the Garden City? Having a dialogue with humans and the surroundings, even if it is a debate, a discussion, or contemplation?



photo 41: The Bay, Ecoworld, Bellandur

Various landscapes around Bangalore emerged from a dialogue between humans and nature over centuries. As the purpose of landscape changed, from landscapes of sustenance, landscapes of prayer and faith, to strategic tools during wars, landscapes of power, and landscapes of poetry, the dialogue between humans and nature changed too. Wilderness, which was once a symbol of terrifying chaos, is now considered a holy symbol of undisturbed nature. The fallen branches of old trees were once used as fuel wood; now they become a canvas for the sculptors on which they make public art.

As different dwellers perceived the landscape differently, different typologies were formed. The early human settlements took cues from seasonal wetlands to procure potential sources of water. During the battles between rivalries the landscape of boulders was used strategically for self-defense. Kempe Gowda built a tower at the top of the sheet rock of Dharwar Craton, creating a landscape of power. The British took leisure in the suitable climate of the region and created picturesque landscapes that resemble the landscape of their home. Each of these landscapes explored and appreciated in the present, also holds within itself the story of its origin, stories of its evolution, and a potential for its future. If we listen carefully, these stories can be heard, smelled, seen, and felt. Signs are everywhere for us to take cues from. If we pay attention to the recent flooding that clogged many urban areas of the city in the last monsoon, we may understand the potential of the city's decaying lake systems.

While there has been an undeniable damage to the ecology of the traditional landscapes around the Garden City, the dialogue has not been muted. The efforts in reviving the lakes, the grasslands, the avenue trees, among many landscapes of the city, through initiatives from citizens, environmentalists, organizations, and government bodies, are great evidence of the living dialogue, and a hope for a safe and flourishing future for Bangalore's landscapes.

photo 42: Hesaraghatta lake

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GLOSSARY

Ashwath Katte: A place of worship; a platform around a Peepal or a Neem tree with shrines of the Snake God, and other Hindu deities. Ashwath means Peepal tree in Sanskrit, and Katte means a platform in Kannada.

Bhaavi: Open well

Devarakadu: Sacred groves (literal translation: God's forest)

Gundu Thopu: A village forest or woodland, traditionally used as a common resource pool for the community to access the fuel wood, and other forest produce. These protected wild landscapes also worked as a safe environment where the native ecology thrived.

Honda: Surface water collection pits, much smaller in size compared to *Kere* (tanks), dug up near farms to collect water from the canal for irrigation.

Kadalekai Parishe: An annual two-day groundnut fair, held near Dodda Ganesha temple in Basavanagudi, Bangalore. *Kadalekai* means groundnut in Kannada. *Parishe* means fair in Kannada.

Kagara: A local festival celebrating the Goddess Draupadi, with rituals performed near the 9 main water bodies in Bangalore, celebrated annually by the Vanniyakula Kshatriya community.

Kalyani: A rectangular or square surface water structure, usually but not always associated with Hindu temples.

Karthika Somvara: Mondays in the Hindu month of *Kartik*, celebrated with a fast and rituals at the temple.

Kere: Local Kannada name for Lake or Tank (human-made)

Pete: Town (here the old fortified town of Bengaluru)

Rajakaluve: Local Kannada name for canals or storm water drains, both collecting the surface water runoff and also carrying the overflow of the lakes to farms, and other lakes on lower plains.

Thandi Sadak: A trellis covered with creepers, a shaded walkway for the pedestrians, traditionally found in markets and in temple premises.

Theerthasnana: Ritual of bathing of the deities.

Theppotsavam: Hindu festival where the principal idol of the temple is decorated and taken for procession in the *Kalyani*.

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