

# CITY BIODIVERSITY INDEX CHENNAI



City Biodiversity Index – Chennai



By launching the State's first biodiversity index for Chennai, Tamil Nadu has set a benchmark. Our commitment is to build on this foundation, ensuring every stride in development is anchored in sustainability and the safeguarding of our natural wealth.

- Honourable Cheif Minister Thiru.M.K.Stalin

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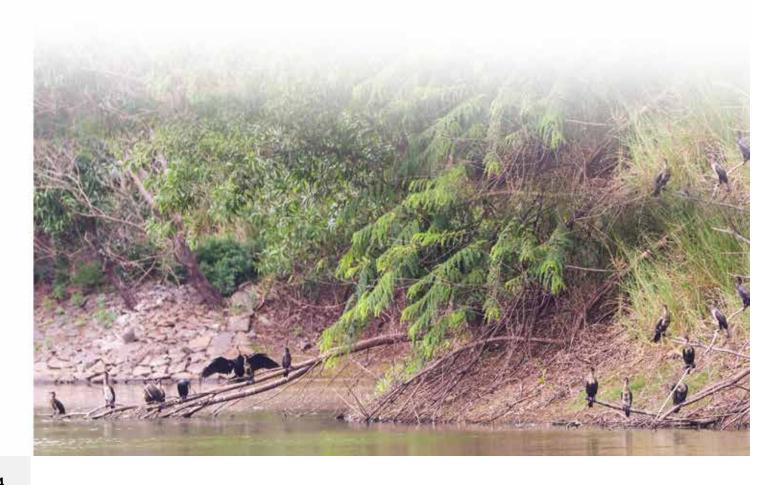
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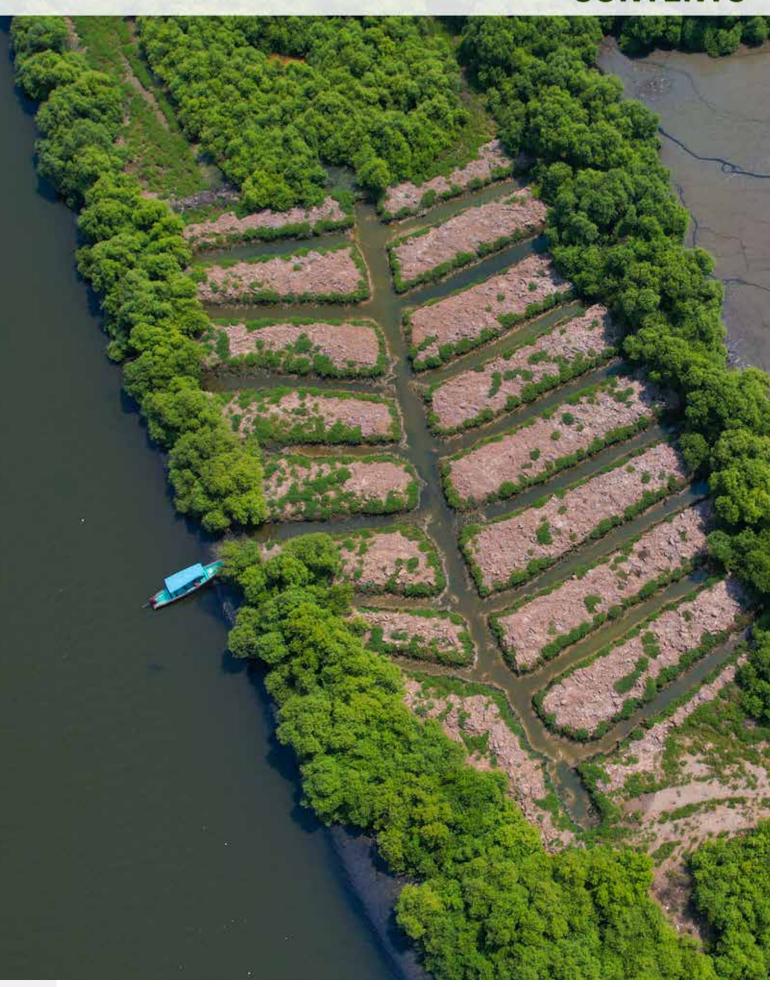
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# **ABBREVIATIONS**

°C Degree Celsius

CBI City Biodiversity Index

CBSE Central Board of Secondary Education

cm Centimetre

CMA Chennai Metropolitan Area

CMDA Chennai Metropolitan Development Authority

CoP Conference of Parties

CRRT Chennai River Restoration Trust
CSCL Chennai Smart City Limited

E East

GCC Greater Chennai Corporation

ha Hectare

ICSE Indian Certificate of Secondary Education

INR Indian Rupee

ITT Indian Institute of Technology

LBSAP Local Biodiversity Strategy and Action Plan

LULC Land Use Land Cover

m Metre

MCC Madras Christian College
MNS Madras Naturalists' Society

N North

NBSAP National Biodiversity Strategy and Action Plan

NGO Non-Governmental Organization

NIR New Infra Red

OECM Other Effective Area-based Conservation Measures

PCCF Principal Chief Conservator of Forests

RGB Red Green Blue

SCBD Secretariat for the Convention on Biological Diversity

SEZ Special Economic Zone
SPV Special Purpose Vehicle

sq. km. Square Kilometre sq. m. Square Metre

SWM Solid Waste Management
TNBB Tamil Nadu Biodiversity Board

TNGCC Tamil Nadu Green Climate Company

UGS Urban Green Space

# **SECTION 1: ABOUT CITY BIODIVERSITY INDEX**

he City Biodiversity Index (CBI) or the Singapore Index was developed in 2008, when it was acknowledged in the Ninth Biodiversity Conference of Parties (COP) that cities and local bodies can support the implementation of a country's National Biodiversity Strategy and Action Plan (NBSAP).

The Index consolidates the available biodiversity-related indicators locally, which can help cities evaluate and benchmark their biodiversity conservation efforts. CBI scoring is quantitative in nature. A total of 23 indicators makes up the index, measuring a city's native biodiversity, the ecosystem services provided and biodiversity governance. Scores range between zero to four points for each indicator, with a maximum overall score of 92. The first year is considered the baseline against which cities can then chart their subsequent evolution.

According to the Secretariat for the Convention on Biological Diversity (SCBD)<sup>1</sup>, some of the benefits that cities derived from the application of the index include "a) the process facilitated capacity-building in biodiversity conservation, b) the indicators also function as biodiversity conservation guidelines and c) assistance in setting priorities for conservation actions and budget allocation through quantitative scoring". The CBI of Chennai was developed by ICLEI- Local Governments for Sustainability, South Asia.



### SUMMARY OF THE SCORES

The CBI of Chennai, 2024 has been prepared based on the SCBD endorsed user's manual for CBI, updated in 2014. The 23 indicators that make up the index are grouped into three main components viz. Native Biodiversity, Ecosystem Services provided by Biodiversity and Governance and Management of Biodiversity.

The city scored a total of 38 out 72 for 18 indicators (refer Figure 1). Since this was the baseline year the indicators 4-8 were not considered for the analysis. The first section on "Native Biodiversity in the City", contributed to a score of 12 out of 20 as only 5 indicators were taken into consideration. The city scores well in this section, indicating that portions of its natural habitat represented by its wetlands and natural vegetation support biodiversity. Indicators 11-14, which relate to "Ecosystem Services provided by Biodiversity in the City" scored 6 out of 16 points. The city scores below average here which indicates that the health of the ecosystems needs to be improved to improve ecosystem functions. Indicators 15-23, which correspond to "Governance and Management of Biodiversity in the City" contributed to a score of 17 out of 36 points. This is an average score, indicating that biodiversity matters are being considered to some extent by the Greater Chennai Corporation (GCC), which positively impacts the conservation and functioning of natural ecosystems.

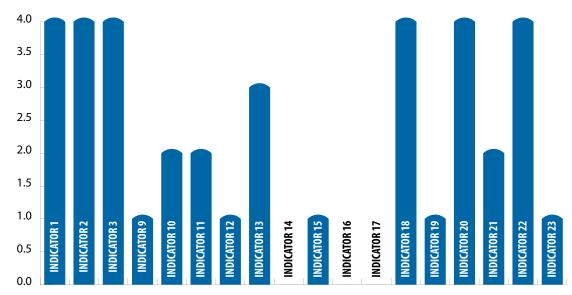


Figure 1: Snapshot of the 2024 CBI of Chennai

# SECTION II: CITY BIODIVERSITY INDEX OF CHENNAI

# PART A: PROFILE OF THE CITY

Chennai, formerly known as Madras, is the capital city of the state of Tamil Nadu. The city is located between coordinates 12°50′49″ N and 13°17′24″ N latitude and 79°59′53″ E and 80°20′12″ E longitude [1]. The city of Chennai encompasses an area of 426 km² and lies at an elevation of 7m above sea level. As the city is positioned on the south-eastern coastal plain, also known as the Coromandel coast off the Bay of Bengal, close to the Equator, it experiences a tropical wet and dry type of climate [2]. There is less variation in the local temperature. April, May and June are the hottest months of the year with maximum recorded temperature ranging around 38°C and 40°C. December and January are the coldest months with lowest recorded temperature being 24°C. Mean annual rainfall is about 140cm [3]. Owing to north-east monsoon winds, Chennai experiences most rainfall from mid-September to mid-December.

# **GEOPHYSICAL CHARACTERISTICS**

The city of Chennai is situated in north-east of Tamil Nadu on a "sandy shelving breaker swept beach" [4]. The area is low-lying and the land surface is flat. The city's elevation rises slightly as the distance from the sea shore increases. Two rivers namely, the Couum river and the Adyar river flow through the city of Chennai. Couum river starts from Kesavaram village and intersects the city through the centre, whereas the Adyar river flows to the south. A third river, Kortaliyar, flows through the northern periphery of the city and ultimately, drains into the Bay of Bengal at Ennore. A man-made canal, Buckingham canal, runs parallel to the Coromandel coast and links the two rivers [5]. Through its course, the canal connects the coastal districts from Guntur in Andhra Pradesh to South Arcot in Tamil Nadu and enters the city of Chennai at Tondiarpet in the north. Another east-west canal, Otteri Nullah, runs through north Chennai and joins the Buckingham canal at Basin Bridge.

Administratively, Chennai is situated within the Chennai Metropolitan Area (CMA), covering an area of 1189 km2 [1], [6] This includes the city of Chennai, 16 municipalities, 20 town panchayats, 10 panchayat unions and 214 villages in the Thiruvallur and Kancheepuram districts. The city, under the Greater Chennai Corporation (GCC) extends over an area of 426 sq.km.



### DEMOGRAPHY

As per the Census of India 2011 [7] the total population of the city of Chennai is 4,646,732. Out of the total, the number of males is 2,335,844 and the number of females is 2,310,888. The city of Chennai scores high in literacy with a total of 3,776,276 individuals falling under the bracket. The number of male individuals who are literate are 1,968,079 and the number of female individuals is 1,808,197. Average literacy rate of Chennai is 90.18 percent with males constituting 93.70 percent and females as 86.64 percent. Major religion practised in the city of Chennai is Hinduism with 80.73 percent followers [7]. Other religions followed in the region include Islam (9.45 percent), Christianity (7.72 percent), Jainism (1.11 percent), Sikhism (0.06 percent) and Buddhism (0.06 percent).

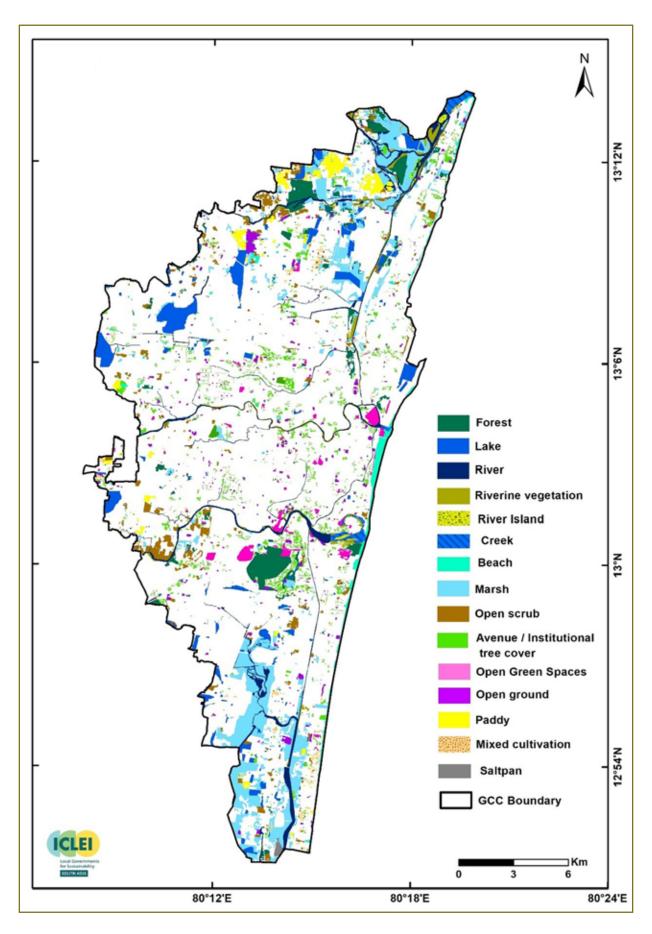
#### **ECONOMY**

Chennai is the fourth most densely populated city in India [8]. The city is also termed as a globalization hotspot, considering growing foreign direct investment and likewise economic transformations. By 2030, owing to large-scale development in housing, industrial and commercial sector, Chennai is predicted to become a megapolis. The city of Chennai itself accounts for 10.94 percent of the state income [5]. The informal sector including self-employed traders, hawkers and family-based workers is estimated to have employed about 1 million in Chennai. Economic trends in the city are marked with a growing contribution from Information Technology, Business process outsourcing industries.

Chennai is the largest economic, cultural and educational hub of the state of Tamil Nadu. Popularly referred to as the 'Gateway of South India', the city caters to a large number of both domestic and international tourists. The city of Chennai is an important transportation hub for road, railways, air and sea ports joining mega cities both in India and abroad. Chennai is also called the 'Health Capital of India' [9], believed to provide healthcare services to 45 percent of health tourists from abroad and about 30 to 40 percent of health tourists from the country itself.

Fishing contributes majorly to the local economy of the city of Chennai [5]. About 18,500 males and 5,500 females are employed in fisheries and other allied activities in Chennai Metropolitan Region. The economy of Chennai is also based on the automobile industry [10]. The city has emerged as a major export hub for cars. Other small-scale industries predominant in the region include metals, rubber, electrical machinery, transport equipment, leather and fur products and non-metallic mineral products.





### NATURAL ASSET MAP OF CHENNAI

#### **BIODIVERSITY**

Owing to the geographical location of Chennai, the city is bestowed with different types of ecological landscapes such as estuaries like the Adyar and Cooum estuaries and wetlands such as Pallikaranai and Singanallur wetlands, hills with forest cover like Pallavaram Hills and big sandy beaches along the long coastline [5]. These include man-made structures like water reservoirs and tanks made to ensure urban water supply and patches of farmland. Guindy National Park and the Pallikaranai Marsh Reserve Forest (designated as a Ramsar site in 2022) are two protected areas in the city's municipal boundaries. The forested areas of the IIT campus, MCC campus, Guindy National Park, Theosophical Society campus and Kattupalli Island have remnant natural vegetation, which have been enhanced due to plantation. These in addition to parks, make up urban green spaces in Chennai. The Metropolitan region of Chennai is also bestowed with various water bodies such as the Pulicat Lake in the north, the Nagari hill range in the northwest and Muttukadu in the south.

Sacred groves were once present extensively across Chennai, however the only groves that remain are found in the IIT campus in Chennai and in Guindy National Park[11]. The grove in IIT is dedicated to Sri Durga Peeliamman and occupies an area of 10 acres. The grove in Guindy National Park is dedicated to the Sapta Kannikas or seven virgins are often identified with Sapta Matrikas (Seven Mothers).

**The Natural Asset Map** of Chennai, which has been developed by ICLEI South Asia (refer Figure 2), illustrates the city's green and blue land use types ranging from its rivers, lakes, marshes, forests and coast to its plantations and institutional green spaces. The urban green spaces in the city encompass institutional green cover, open green space, and some urban forests. Small agricultural spaces also exist within the city where some cereals and vegetables or fodder crops are grown.

Chennai is fairly rich in flora and fauna however the city lacks a comprehensive biodiversity profile. To provide a glimpse of the ecology and environment of the city of Chennai, a brief description is given below.

Flora: The ecological history of Chennai is rooted in the presence of two cultural landscapes namely, Neithal and Paalai, representing the coast and coastal wetlands respectively [12]. According to Daniels et al., [13], Palmyra and Phoenix (*Phoenix sylvestris*) palms interspersed with thickets historically made-up Chennai's coastal plains. According to Krishnan (2014)², other important trees of the city include woodapple (*Feronia limonia*), *Clausena dentata*, neem, *Aegle marmelos*, *Pithecolobium dulce*, *Acacia* species, *Samanea saman* (planted), *Avicennia* species and *Cerbera odollam* at the Adyar estuary and the latter also along the Buckingham canal, *Calophyllum inophyllum* and *Thespesia populnea*, mainly planted, near the beach, *Lannea coromandelica*, *Zizyphus mauritiana*, *Zizyphus xylopyrus*, *Capparis* species, *Atlantia monophylla*, *Ochna squarrosa*, *Morinda tinctoria* and *Toddalia asiatica*. The city once was especially notable for its banyan trees which dotted roadsides where they were planted.

The main flora documented [14] from Adyar creek include some invasive alien species like *Prosopis juliflora*, *Lantana camara*, *Senna occidentalis* and *Croton bonplandianus* along with species like *Ipomoea pes-caprae*, *Thespesia populnea*, *Pongamia pinnata*, *Abrus precatorius*, *Zizyphus jujuba*, *Azadirachta indica*, *Morinda* sp.

 ${\color{red}2.} \quad \underline{\text{https://www.currentconservation.org/the-wildlife-of-madras-city-2/}}\\$ 

3. Personal communication

Urban green spaces (UGSs) are predominantly college campuses, government gardens, parks and private lands in the city of Chennai. In a study [15] conducted at such UGSs within the metropolitan region of Chennai, 45 tree species were documented belonging to 21 families.

Guindy National Park was originally a mix of tropical scrub and Palmyra dominated thorn woodlands. Over the years it was enriched with native and exotic trees to create the present vegetation structure that resembles a natural forest. Within the park's dry evergreen scrub and thorn forest, grasslands and water bodies are over 350 species of plants represented by trees, shrubs, climbers, herbs and grasses [16]. Some of the dominant tree species found in the park include *Annona squamosa*, *Atalantia monophylla*, *Feronia limonia* and *Azadirachta indica*.

The Theosophical Society campus, which is the second largest green patch after Guindy National Park, is an important green lung of the city. Its flora comprises 161 trees, 84 shrubs, 179 herbs and 25 climbers that belong to 85 families, representing nearly an equal percentage of exotic and native species [13]. The native flora of the campus consists of mangroves, psammophytes, and tropical dry evergreen vegetation. *Avicennia marina* and *Excoecaria agallocha* are restricted to the tidal zone along the Adyar estuary.

The IIT Madras campus was originally part of the Guindy National Park. The vegetation type within the campus and the National Park is Tropical Dry Evergreen Forest. A variety of flora and fauna have been recorded from the open grasslands, wetlands, thick forest patches and patches of scrub jungle that make up the campus habitat. Pitchandikulam Forest Consultants<sup>3</sup> have recorded 335 species of flowering plants.

Within the Pallikaranai marshland, the mixing of freshwater and brackish tidal water has limited the vegetation to herbaceous plants like salt-tolerant sedges (Cyperaceae) and grasses. 141 species of plants, including 29 species of grass make up the floral diversity (Care Earth, 2002, Daniels, 2002).

Fauna: In Guindy National Park, 14 species of mammals including blackbucks, spotted deer, jackals, a wide variety of snakes, geckos, tortoises and over 150 species of birds, a rich diversity of butterflies and spiders, grasshoppers, ants, termites, crabs, snails, slugs, scorpions, mites, earthworms, millipedes, are present[17]. A survey in 2017 yielded 90 species of butterflies belonging to 5 families and 16 sub families and eleven species of host plants [18]. Within the IIT campus, mammals such as blackbuck, spotted deer, jackals, mongoose, monkeys, squirrels, toddy cats, wild cats, various types of reptiles, a plethora of insects including about 40 different species of butterflies and about 100 species of birds have been recorded.<sup>4</sup>

The Palluyir Trust and Care Earth Trust have documented biodiversity within the city, extensively. The Palluyir Trust has put out educational resources in the form of guides documenting butterflies, marine fauna including coastal fish, trees and wild flowers of the city.

The Pallikaranai marshland, an important natural ecosystem in Chennai, supports 115 bird species, ten mammals, 21 reptiles, ten amphibians, 46 fish, nine molluscs, five crustaceans, and seven butterfly

- 4. https://home.iitm.ac.in/prakriti/prakriti/home1.html
- 5. https://palluyirtrust.org/?page\_id=22246

species. The estuarine marshland was declared a Ramsar site in 2022. According to the Ramsar information sheet, fish species that are ecologically significant within the wetland include *Anguilla bengalensis*, *Anguilla bicolor*, *Trichogaster chuna*, and *Channa orientalis* [19].

A study [20]in 2016-2017 on the edible fish of Adyar estuary identified 42 species belonging to seven orders and one class. Thryssa malabarica, Elops saurus, Megalops cyprinoides, Chanos chanos, Arius arius, Arius jella, Mystus gulio, Chelone parsia, Chelone tade, Mugil cephalus, Planiliza macrolepis, Lates calcarifer, Ambassis ambasis, Chanda nama, Sillago sihama, Gazza minuta, Secutor insidiator, Sphyraena jello, Oreochromis mossambicus and Etroplus maculata commonly occurred and had commercial importance. Tilapia (Oreochromis mossambicus) was the most abundant. A study in 2014 recorded, 57 species in the estuarine reach of the Adyar, and 28 species at their wetland rehabilitation site (Adyar Poonga) of which 13 species were encountered in brackish water east of the spillway and 21 in fresh water west of the spillway) [21].

On the outskirts of Chennai, within the Chennai Metropolitan Area are some important habitats like Madras Christian College, a biological heritage site which has documented 19 species of mammals, 26 species of birds, 12 species of butterflies, 4 species of beetles, 4 species of spiders and about 10 species of reptiles [22]. Studies on Chembarambakkam lake just outside Chennai recorded snakes such as *Ahaetulla nasuta* (Common Vine Snake), *Atretium schistosum* (Olivaceous Keelback), *Bungarus caeruleus* (Common krait), *Daboia russelii* (Russell's Viper), *Dendrelaphis tristis* (Common Bronzeback Tree Snake), *Gongylophis conicus* (Common Sand Boa) and *Oligodon arnensis* (Common Kukri Snake) [23]. Thirty two species of fish have also been identified within the lake [11].

# ADMINISTRATION OF BIODIVERSITY

In the city of Chennai, biodiversity is administered by the following territorial and city level agencies.

**Tamil Nadu Forest Department:** This Department, headed by the Principal Chief Conservator of Forests (PCCF) deals with the protection, management and conservation of forests in the state of Tamil Nadu.



The initiatives of the Department are largely guided by the National Forest Policy of 1894, 1952 and 1988. The department also supports programs such as Coastal Area Management, Green India Mission, Hill Area Development Programme and National Afforestation Programme. For more information, please visit: <a href="https://www.forests.tn.gov.in/">https://www.forests.tn.gov.in/</a>

**Chennai Metropolitan Development Authority (CMDA):** CMDA was constituted as an ad-hoc body in 1972. The Authority aims to provide "people friendly administration in the process of ensuring better quality of life in Chennai Metropolitan Area through environmentally sustainable, economically progressive and technologically innovative management policies and programs". For more information, please visit: <a href="http://www.cmdachennai.gov.in/index.html">http://www.cmdachennai.gov.in/index.html</a>

**Tamil Nadu Biodiversity Board (TNBB):** TNBB aims to ensure effective implementation of Biological Diversity Act, 2002 and the Biological Diversity Rules, 2004, for conservation of biodiversity, sustainable use of its components and fair and equitable sharing of benefits arising out of utilization of genetic resources in the state of Tamil Nadu. For more information, please visit: <a href="https://tnbb.tn.gov.in/tnbb.php">https://tnbb.tn.gov.in/tnbb.php</a>

**Greater Chennai Corporation (GCC):** GCC is the oldest Municipal institution in India, established on the 29<sup>th</sup> September 1688. GCC maintains roads, street lights, storm water drain, parks and community halls. The Corporation also looks after solid waste management in the city of Chennai. For more information, please visit: <a href="https://chennaicorporation.gov.in/gcc/">https://chennaicorporation.gov.in/gcc/</a>

**Chennai Smart City Limited (CSCL):** This city agency aims to create a network of smart mobility, smart technology, smart environment, smart water and smart energy in the city of Chennai. Under the smart environment program, it aims to retrofit green space, maintain parks and restore water bodies in the city. For more information, please visit: <a href="https://cscl.co.in/">https://cscl.co.in/</a>

In 2006, the Government of Tamil Nadu formed a Trust to protect the lakes and rivers of Chennai which was initially named Adyar Poonga Trust and later renamed Chennai Rivers Restoration Trust. The Trust is involved in the rehabilitation of Chennai's water ways and water bodies as well as the development of Eco Parks. It is managed by a Special Purpose Vehicle (SPV) 'Adyar Poonga Trust'.



# PART B: INDICATORS OF THE SINGAPORE INDEX ON CITIES' BIODIVERSITY

# **NATIVE BIODIVERSITY**

#### INDICATOR 1: PROPORTION OF NATURAL AREAS IN THE CITY

According to the Singapore Index Manual, natural areas are defined as "comprising predominantly native species and natural ecosystems, which are not, or no longer, or only slightly influenced by human actions, except where such actions are intended to conserve, enhance or restore native biodiversity."

#### METHODOLOGY

As per the CBI user manual

#### Principle for calculation of the indicator

(Total area of natural, restored and naturalised areas)

÷

(Total area of city) × 100%

**Scoring Range:** (based on the CBI user manual)

0 point: <1.0%

1 point: 1.0% - 6.9% 2 points: 7.0% - 13.9% 3 points: 14.0% - 20.0%

4 points: > 20.0%

#### CITY DATA AND CALCULATIONS

The definition of natural areas in the Singapore Index manual is difficult to strictly apply within the context of Indian cities where the ground realities are significantly different. Income inequality, a high population density, and limited infrastructural outreach means that while there are native and natural ecosystems, public access to these areas cannot be completely restricted.

To calculate the proportion of natural areas in the city, a natural asset map (Figure 2) of Chennai was prepared and referred to. Table 1 shows the various natural classes that have been identified in the natural asset map of Chennai that apply to the calculation of this indicator. Anthropogenically influenced land classes such as Open Green Spaces, Open ground, Agricultural areas, Institutional green spaces were not considered.

Table 1: Natural assets used in the calculation of indicator 1

SI. No.	Land class	Area (sq.km)	Area (%)
1	Forest	10.91	2.47
2	Lake	15.20	3.45
3	River	10.25	2.33
4	Riverine	4.21	0.96
5	Marshes	32.47	7.36
6	Open Scrub	9.33	2.12
7	Beach	4.28	0.97
8	River Island	0.32	0.07
9	Creek	1.75	0.40
	Total	88.73	20.13

**Principal for calculating the indicator:** (Total area of natural, restored and naturalized areas)

÷ (Total area of city) × 100%

Total area of natural, restored and naturalized areas: 88.73 sq. km.

Total area of city: 440.89 sq. km.

RESULT: 20.12 % SCORE: 4

# **RECOMMENDATIONS TO MAINTAIN SCORE**

The city of Chennai has been built over a complex network of seasonal lakes and marshes. It is this network, together with coastal habitats that give the GCC a high score under this indicator.

In 2012, 474 wetlands were identified in Greater Chennai [24]. Other studies like [25, 26] have highlighted that half of these wetlands have been converted for various uses, encroached upon or used as dumping sites. These include lakes such as Adambakkam, Kilkattalai, Narayanapuram Lake, Mangal Eri, Manali and Madhavaram Jheels, Ambattur Lake, Velachery Lake.

Special Economic Zones (SEZs) and highways dominate the southern suburbs and have impacted the city's largest wetland, the Pallikaranai Marshland, a Ramsar site. Despite this designation, the site is at risk from Perungudi dump yard, which does not have proper lining to prevent leachate and other waste from flowing into the marsh and groundwater. Water quality analyses have detected the presence of mercury, lead, and cadmium in quantities four times over permissible levels[27]. A recent study [28] found that every metre cube of surface water in the Pallikaranai marshland contains an average of 1,758 microplastics. Although the site is presently being biomined by GCC under the Swachh Bharat Mission, and is expected to be completed by September 2024, there appears to be no clear plan to remediate the area.<sup>6</sup> Newspaper reports state that fresh dumping is still occurring.<sup>7</sup> Additionally, the GCC has set up a Construction and Demolition Waste and a Garden Waste processing plant at the site. They further propose setting up of Solid Waste Management related projects (Material Recovery Facility of 500 TPD) and large green belts in the area. This will be further detrimental to the ecology of the marshland.

Due to this loss of marshlands across Chennai and the blockage of numerous creeks, the city has been experiencing a series of flooding events. The Adyar estuary which is currently being restored by the CRRT, has lost its ecological character due to urbanization, discharge of untreated domestic waste, industrial effluents and encroachments and is filled with alien invasive species. *Prosopis juliflora, Pontederia crassipes, Parthenium hysterophorus, Lissachatina fulica* were commonly encountered across the city in abundance.

The city must work towards ecological restoration of its wetlands on priority. According to WWF India, if dumping of waste is banned and water channels rejuvenated, around 60% of Chennai's wetlands can be saved. GCC can take steps in this direction [29].

<sup>6. &</sup>lt;a href="https://www.thehindu.com/news/cities/chennai/greater-chennai-corporation-may-alter-design-of-perungudi-eco-park-in-pallikaranai-marshland/article67835714.ece">https://www.thehindu.com/news/cities/chennai/greater-chennai-corporation-may-alter-design-of-perungudi-eco-park-in-pallikaranai-marshland/article67835714.ece</a>

https://timesofindia.indiatimes.com/city/chennai/greater-chennai-corporation-pushes-trash-into-ramsar-site-pallikaranai-marshland/articleshow/99328885.cms

The GCC must complete biomining for the entire Pallikaranai Marsh and then initiate remediation actions several of which were outline in the Comprehensive Management Plan for Pallikaranai Marsh (2014-2019). To prevent future management issues, waste management across the city must be streamlined, decentralised composting units must be set up at the ward levels and implementing strict regulations against open dumping should be prioritised. Greening programs must focus on improvement of riverine vegetation, marsh vegetation, mangroves and their associates to restore the historical ecological character of the city comprising of dense thickets, dominated by woody and thorny plants. Working together with several well-established scientific organisations in the city will help to restore some of this ecological character and improve the health of local ecosystems.



# INDICATOR 2 : CONNECTIVITY MEASURES OR ECOLOGICAL NETWORKS TO COUNTER FRAGMENTATION

# METHODOLOGY

As per the CBI user manual

#### Principle for calculation of the indicator

$$\frac{1}{A_{\text{total}}} * (A_1^2 + A_2^2 + A_3^2 + ... + A_n^2)$$

#### Where:

- A<sub>total</sub> is the total area of all natural areas
- A<sub>1</sub> to A<sub>2</sub> are areas that are distinct from each other (i.e. more than or equal to 100m apart)
- n is the total number of connected natural areas

This measures effective mesh size of the natural areas in the city.  $A_1$  to  $A_n$  may consist of areas that are the sum of two or more smaller patches which are connected. In general, patches are considered as connected if they are less than 100m apart.

**Scoring Range:** (based on the CBI user manual)

0 point: < 200 ha 1 point: 201 - 500 ha 2 points: 501 - 1000 ha 3 points: 1001 - 1500 ha 4 points: > 1500 ha

#### **City Data and Calculations**

The patches associated with the land classes used to calculate indicator 1 i.e., Forests, Lakes, River and its associated vegetation, Marshes, Open scrub, Beach, River Island and Creek have been considered in this calculation. In reality, other landscapes represented in Chennai by the land classes like open green spaces, agricultural and institutional planted landscapes also form a part of the ecological network to counter fragmentation for several species. However, these have not been considered following the guidelines of the CBI manual.

1230 polygons (patches) can be merged with the land classes rivers, beach, and some lakes have been considered a single unit as per the 100m proximity rule (refer Figure 3). So, the total area of this big patch ( $A_1$ ) is 6384.28 ha. In the same way, Patch  $A_2$  of area 321.6 ha was formed by merging the Guindy forest area polygon and the lake polygon inside it. 581 natural area patches are outside the 100m buffer of these big patches. According to the 100 m proximity rule these patches inter merge to yield 313 patches ( $A_3 - A_{315}$ ). The values of  $A_1$  to  $A_{453}$  is given in Annexure 1.

 $A_{total} = 8637.49 \text{ ha}$ 

As per the final calculation

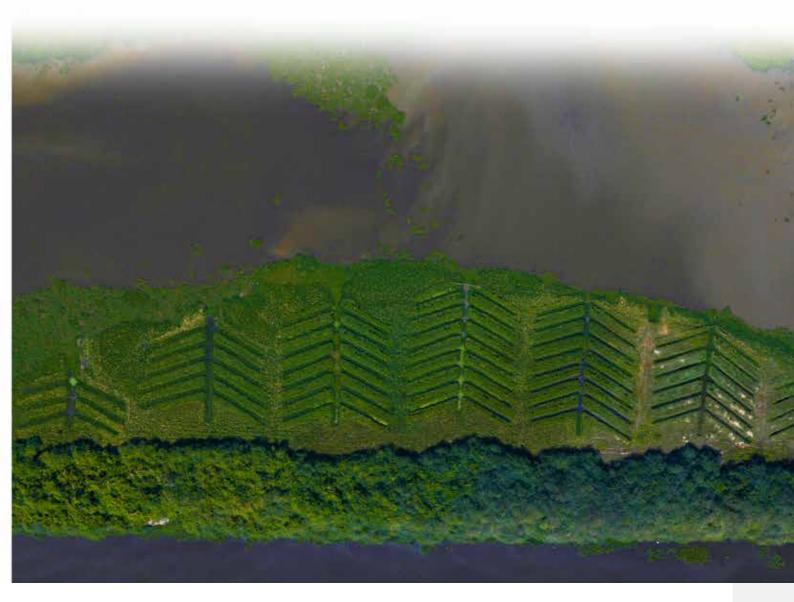
Indicator 2 = 1/8637.49 ha x (41039973.65 ha<sup>2</sup>) = 4751.31 ha

RESULT: 4751.31 ha SCORE: 4

# **RECOMMENDATIONS TO MAINTAIN SCORE**

As previously outlined in Indicator 1, the city scores well as a result of its wetland complex, which is interconnected, offering biodiversity some movement through the city. These connections are being severed due to urbanization. Despite the high score on this indicator, it is important to consider the health and functionality of the system as well. Restoration projects that consider the ecology of the area and holistic city planning can help to improve functionality as well as ensure the wetland complex remains interconnected.

The city can also consider applying for Ramsar City Accredition. This global recognition, if secured, will further help the city in protecting and improving the health and functionality of its wetlands.



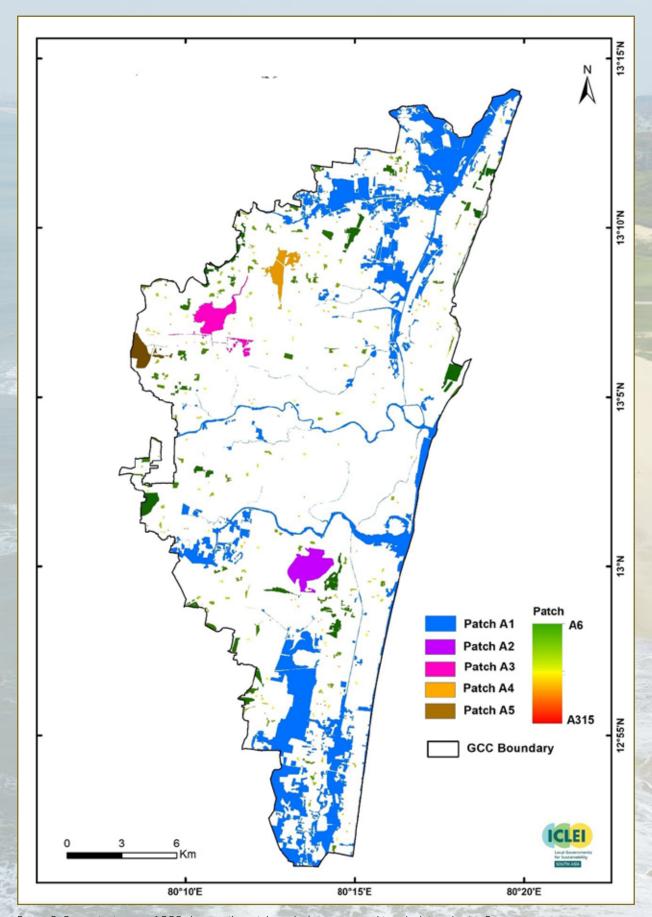


Figure 2: Connectivity map of GCC showing the patches which were merged to calculate indicator  $2\,$ 

# **INDICATOR 3: NATIVE BIODIVERSITY IN BUILT UP AREAS (BIRD SPECIES)**

### **METHODOLOGY**

#### How to calculate indicator

Number of native bird species in built up areas where built up areas include impermeable surfaces like buildings, roads, drainage channels, etc., and anthropogenic green spaces like roof gardens, roadside planting, golf courses, private gardens, cemeteries, lawns, urban parks, etc. Areas that are counted as natural areas in indicator 1 should not be included in this indicator.

**Scoring Range:** (based on the CBI user manual)

0 point: < 19 bird species
1 point: 19 - 27 bird species
2 points: 28 - 46 bird species
3 points: 47 - 68 bird species
4 points: > 68 bird species

#### **City Data and Calculations**

Secondary data available on citizen science platforms such as eBird (2024)<sup>8</sup> developed by Cornell Lab of Ornithology, was referred to for this indicator. The list developed was then vetted by Gnanaskandan Kesavabharathi and Umesh Mani from the Madras Naturalists' Society (MNS).

Of the 344 bird species that were recorded from within and around the city, 157 species are resident species of which 90 occur within anthropogenically altered spaces of the city. The list of the birds considered for calculation of this indicator is provided in Annexure 2.

**RESULT: 90 bird species** 

**SCORE: 4** 

# **RECOMMENDATIONS TO MAINTAIN SCORE**

Chennai lies directly under one of the most significant global flyways for migratory birds - the Central Asian flyway. The city's wetlands are an important habitat for several migratory and resident birds. Open scrub and grasslands, although slowly disappearing, are also important habitats for birds. These mosaic patches of natural areas together with some modified urban blue-green spaces are what enables a high diversity of resident birds. However, recent surveys of bird populations by citizen scientists have found that the numbers and species diversity of birds in Chennai, are reducing with every subsequent annual survey [30]. To maintain this score, the city should look into partnering with researchers, birders and citizen scientists to identify and protect birding hotspots in the city and develop strategies on how urban spaces can be enhanced as supporting habitats. Undertaking invasive species management by forging stronger partnerships with research organisations and civil society will benefit the city's bird life.

# INDICATORS 4-8 : CHANGE IN NUMBER OF NATIVE SPECIES METHODOLOGY

#### How to calculate indicator

The change in number of native species is used for indicators 4 to 8. The three core groups are:

- Indicator 4: vascular plants
- Indicator 5 : birds
- Indicator 6: butterflies

These groups have been selected as data are most easily available and to enable some common comparison.

Cities can select any two other taxonomic groups for indicators 7 and 8 (e.g. bryophytes, fungi, amphibians, reptiles, freshwater fish, molluscs, dragonflies, beetles, spiders, hard corals, marine fish, seagrasses, sponges, etc.)

The above data from the first application of the Singapore Index would be recorded in Part I: Profile of the City as the baseline.

Net change in species from the previous survey to the most recent survey is calculated as:

Total increase in number of species (as a result of re-introduction, rediscovery, new species found, etc.) minus number of species that have gone extinct.

**Scoring Range:** (based on the CBI user manual)

0 point: Maintaining or a decrease in the number of species

1 point: 1 species increase2 points: 2 species increase3 points: 3 species increase

4 points: 4 species or more increase

#### CITY DATA AND CALCULATIONS

For the indicators 4-8, information was sourced from scientific publications, government reports, white papers, and citizen science platforms like eBird and iNaturalist. Taxa experts were consulted with at the final stage of the list development.

In the case of indicator 4, the list of plants was compiled from various sources including Adyar Poonga Trust (2008)[32], IUCN (1971) [33], Palluyir Trust<sup>9, 10</sup>, Muthulingam and Thangavel (2012) [34] and validated by A. Mohamed Niyaz, Presidency College, Chennai. Indicator 5 was compiled from eBird and validated by Gnanaskandan Kesavabharathi and Umesh Mani from the MNS. Indicator 6 was compiled from Evangeline and Santhy [18] IIT Madras<sup>11</sup> and Palluyir Trust<sup>12</sup> and vetted by Dr. Sankararaman H. from the Vanavarayar Institute of Agriculture.

For indicators 7 and 8, two additional taxonomic groups of fish and mammals, respectively were chosen. Indicator 7 was compiled from Adyar Poonga Trust [32], Palluyir Trust<sup>13</sup> and Ramanujam et al.

- 9. https://palluyirtrust.org/?wpdmpro=common-trees-of-chennai
- 10. https://palluyirtrust.org/?wpdmpro=common-wild-flowers-of-chennai
- 11. https://home.iitm.ac.in/prakriti/prakriti/bflies.html
- 12. https://palluyirtrust.org/?wpdmpro=butterflies-of-chennai

(2014) [21] and vetted by Dr. Divya Karnad, Assistant Professor at Ashoka University while Indicator 8 was compiled from IIT Madras<sup>14</sup> and validated by A. Mohamed Niyaz, Presidency College, Chennai.

These lists will form the baseline for comparison when the index is revisited by the city, after 5 years. Annexure 2 provides details of the species lists that have been considered for indicators 4-8.

For indicators 7 and 8, two additional taxonomic groups of reptiles and spiders, respectively were chosen. Indicator 7 was compiled from Rajashekhara et al. (2022) and Kalki et al. (2021) and vetted by Manoj Kumar. B.R while Indicator 8 was compiled from Nalini Bai et al, (2012) and vetted by Mr. Vrijulal M.V., Founder and Researcher at the Foundation for Research & Education in Nature Science & Sustainability.

These lists will form the baseline for comparison when the index is revisited by the city, after 3-5 years. Annexure 2 provides details of the species lists that have been considered for indicators 4-8.

RESULT: Since this is the baseline year for the species count, the city will not receive any score on the indicators 4-8 and the same will be excluded from the overall calculation.



- 13. https://palluyirtrust.org/?wpdmpro=common-marine-fishes-of-chennai
- 14. https://home.iitm.ac.in/prakriti/prakriti/animals1.html

# **INDICATOR 9: PROPORTION OF PROTECTED NATURAL AREAS**

# **METHODOLOGY**

#### How to calculate indicator

(Area of protected or secured natural areas)  $\div$  (Total area of the city)  $\times$  100%

**Scoring Range:** (based on the CBI user manual)

0 point: < 1.4% 1 point: 1.4% - 7.3% 2 points: 7.4% - 11.1% 3 points: 11.2% - 19.4% 4 points: > 19.4%

#### CITY DATA AND CALCULATIONS

Protected areas in Chennai include Guindy National Park, which is one of the smallest national parks in India, occupying an area of 2.70 sq.km.

The city also has a reserve forest area under the jurisdiction of the Forest Department of 6.97 sq. km.

This includes areas under Pallikaranai, Sholinganallur and Perumbakkam.

The Pallikaranai marshlands, a Ramsar site in the city, extends over an area of 12.47 sq.km.

Area of protected or secured natural areas = 22.14 sq. km.

Total area of the city = 440.89 sq.km

Proportion of Protected Natural Area = 22.14÷440.89 × 100%



### **RECOMMENDATIONS TO IMPROVE SCORE**

The Pallikaranai marshlands were only given legal protection<sup>15</sup> in 2007, after events of severe flooding in adjacent residential districts. Despite this, the land use around the marshlands has changed due to a boom in real estate, a declaration of special economic zones and population growth. The marshland was declared a Ramsar Site in 2022 in an attempt to increase protection to this ecologically significant site. Unfortunately, the marshland is challenged due to refuse dumping, waste burning, sewage disposal, and contaminated storm water runoff. The most immediate threat to the marshland is the Perungudi dump yard. Some recommendations to address this threat have been detailed under Indicator 1. Several management plans have also been developed for the site, the last being developed by the Care Earth Trust in 2014 [31]. The results from monitoring of the site's physical, chemical and biological parameters should feed into an updated management and restoration plan that outlines strategies to improve the health of this wetland. This exercise should be extended to other wetlands and water bodies such as the Sholinganallur wetland, Adambakkam, Kilkattalai, Narayanapuram Lake, Velachery Lake, as well. This will not only improve the score on this indicator, but will also significantly improve water availability and flood resilience in the city.

An innovative approach to urban planning, through integration of Nature-based Solutions is the need of the hour for a city like Chennai.

Daniels et al. [13] call for natural habitats within the city's limits to be declared as 'nature monuments' 'nature utility spaces' and be carefully managed. By creating new and innovative instruments that allow for protection of natural habitats, outside of the protected area network, the city can improve its score. As the city expands, other noteworthy natural areas such as Nanmangalam Reserve Forest will require protection and management strategies.

The city can also look into declaration of OECMs to increase the proportion of natural areas.

Chennai's traditional coastal communities are also an important wealth of knowledge on the use and management of coastal natural resources. Collaboration between these stakeholders will lead to holistic and equitable solutions and more participative management of the city's natural spaces, which can have a positive impact on the score under several indicators including this one.



# INDICATOR 10 : PROPORTION OF INVASIVE ALIEN SPECIES METHODOLOGY

#### How to calculate indicator

(Number of invasive alien species) ÷ (Number of native species) × 100%

**Scoring Range:** (based on the CBI user manual)

0 point: > 30.0%

1 point: 20.1% - 30.0% 2 points: 11.1% - 20.0% 3 points: 1.0% - 11.0%

4 points: < 1.0%

#### CITY DATA AND CALCULATIONS

The flowering plant taxon was used to carry out the invasive species analysis. Referring the Tamil Nadu Policy on Invasive Plants and Ecological Restoration (2022), the list was compiled and the nativity of each species was assessed.

A total of 72 invasive species were identified in the city. The total number of native species in the city is 458.

#### **Calculation**

Total Number of Invasive Alien Species = 72

Total Number of Native Species = 458 (Annexure 2)

Proportion of Invasive Alien Species =  $(74 \div 458) \times 100$ 

**RESULT: 15.7%** 

SCORE: 2

# RECOMMENDATIONS TO IMPROVE SCORE

Invasive species are present in the city and were commonly observed in and around wetlands. *Neltuma juliflora, Parthenium hysterophorus*, were commonly encountered invasive plants, during field surveys.

A local study of invasive species within the city would be valuable. Furthermore, a risk assessment of the alien invasive species should be conducted. The risk assessment will enable an understanding of which species are high, medium, low and insignificant in their impacts on local ecosystems. Once the risk assessment has been carried out, strategies that can be taken up by city authorities, in partnership with academic institutions, NGOs and state authorities, can be identified and implemented. The Local Biodiversity Strategy and Action Plan, when developed, can also include actions and implementation strategies to address invasive species.

# ECOSYSTEM SERVICES PROVIDED BY BIODIVERSITY INDICATOR 11: REGULATION OF QUANTITY OF WATER

#### **METHODOLOGY**

How to calculate indicator

(Total permeable area) ÷ (Total terrestrial area of the city) × 100%

Scoring Range: (based on the CBI user manual)

O point: < 33.1%

1 point: 33.1% - 39.7% 2 points: 39.8% - 64.2% 3 points: 64.3% - 75.0% 4 points: > 75.0%

#### CITY DATA AND CALCULATIONS

City-level mapping of permeable/non-permeable spaces is absent, and hence a permeability map (Figure 4) was prepared by ICLEI South Asia for the purpose of calculating this indicator. Sentinel 2, level 2 data was extracted from the Copernicus Open Access Hub of the European Commission for the analysis of the area with a cloud cover of less than 1% on 10<sup>th</sup> of March 2024. Red (R), Green (G), Blue (B), and Near Infrared (NIR) bands with 10m spatial resolution pre-processed for the supervised classification. Informed by field surveys and Google Satellite data, land classes including cropland, open ground, plantation, river, water bodies, scrubland, dense vegetation, mangroves, sparse vegetation, marshes, open ground, and urban built-up were considered for the classification. After the LULC classification, the respective land classes were merged and the permeability map was prepared.

Item	Area (ha)	Area (%)
Permeable land area	23333.32	52.92
Waterbody	2673.07	6.06
Impermeable area	18082.50	41.01

Total Terrestrial Area of the city = 41400.23 ha (Excluding area of water bodies)

Total Permeable Area (+ area of water bodies) = 26006.39ha

Regulation of Quantity of Water= (26006.39÷41400.23) × 100

**RESULT: 62.81% SCORE: 2** 

# **RECOMMENDATIONS TO IMPROVE SCORE**

Although Chennai receives an average annual rainfall of 1200-1300 mm, only 5% of this actually seeps into the ground in urban areas [35]. The city in addition to its wetlands once had a network of manmade reservoirs in the form of tanks, ponds, temple tanks and wells, which have become defunct or lost due to its rapid urbanisation. Reviving and restoring this traditional infrastructure would be extremely beneficial. Parallelly, organisations like the City of 1000 tanks consortium and the Akash Ganga Trust Rain Center, are trying to improve water availability in Chennai through a network of Nature-based Solutions, including rainwater harvesting, vegetation ditches and anaerobic treatment of waste water. Wetlands if protected adequately and restored will not only improve the movement of water through the city, but also protect it from flooding and act as water reservoirs. The Sponge Park initiative of the city will definitely improve permeability and water storage in the areas where they are being developed. It is important that these eco parks and sponge parks have minimal concretisation and identify the relevant, ecologically suited vegetation for plantation activities.

Onboarding NGOs with adequate technical expertise on native wetland vegetation and ecological restoration, will help to improve the score of this indicator, along with improving the ecological functioning of these parks.



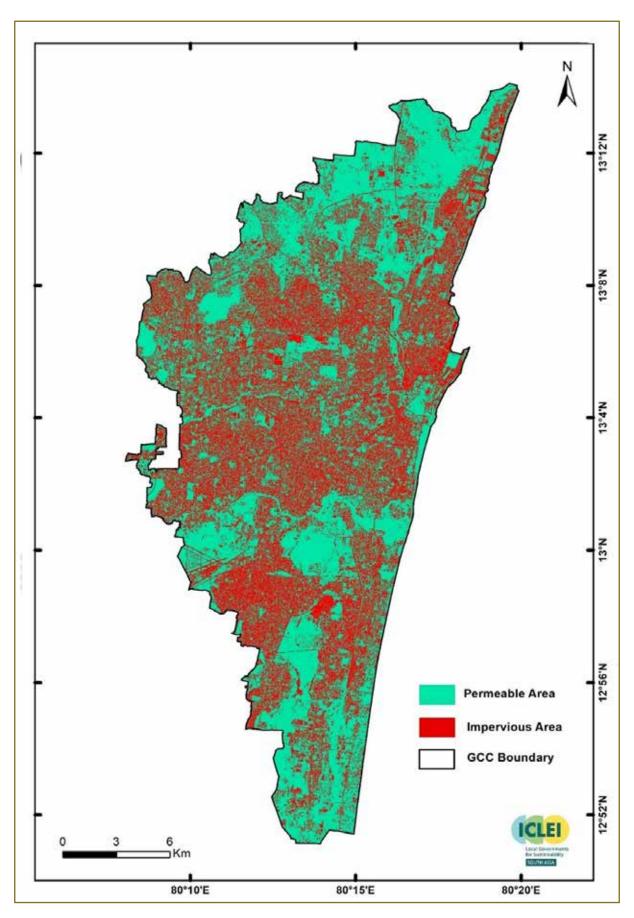


FIGURE 3: PERMEABLE AREA OF GCC

# INDICATOR 12 : CLIMATE REGULATION CARBON STORAGE AND COOLING EFFECT OF VEGETATION

# **METHODOLOGY**

#### How to calculate indicator

(Tree canopy cover)  $\div$  (Total terrestrial area of the city)  $\times$  100%

Scoring Range: (based on the CBI user manual)

0 point: < 10.5%

1 point: 10.5% - 19.1% 2 points: 19.2% - 29.0% 3 points: 29.1% - 59.7% 4 points: > 59.7%

#### **CITY DATA AND CALCULATIONS**

In order to calculate indicator 12, a tree cover map (Figure 5) was developed using Sentinel satellite imagery (less than 1% cloud cover). The data was extracted from the USGS Earth Explorer program for the analysis of the GCC Area. Area. Sentinel bands 2, 3, 4, 8, were pre-processed and used in the supervised classification process. Land use classes of forest, avenue tree patches, and plantations, were utilized in the supervised classification. After the LULC classification, the respective land classes were merged and tree cover map was prepared.

Item	Area (sq. km.)		
Tree cover	7488.81		
Total terrestrial area	41400.23		

Tree cover = (7488.81) / (41400.23) \*100

**RESULT: 18.09% SCORE: 1** 



# RECOMMENDATIONS TO IMPROVE SCORE

The 2021 Annual Forest Report [36] observed a 26% increase in Chennai's forest cover over the last decade (2011-2021), which has been attributed to the Miyawaki initiative by GCC.

Like other Indian cities, the number of ornamental species is increasing in comparison to native species. The existing green cover has a significant proportion of invasive species such as *Prosopis juliflora*. These invasives need to be replaced with native species. Learnings from successful examples of removal of invasives and establishment of native species can be put into implementation by the city. It is recommended that the city have discussions with scientists at the Centre for Ecological Restoration of Degraded Ecosystems, University of Delhi, in this regard.

Palms, mangroves, riverine vegetation which were the main constituents of Chennai's native vegetation should be considered in planting programs. Nurseries under the Forest Department and Horticulture Department should focus on propagating indigenous species and endemic species and distributing these to the citizens and for mass plantation events.

Avenue plantations and plantations in institutional spaces can be augmented to increase the score through collaborations with TNGCC, which already has mechanisms and protocols in place to accelerate green cover in the State.



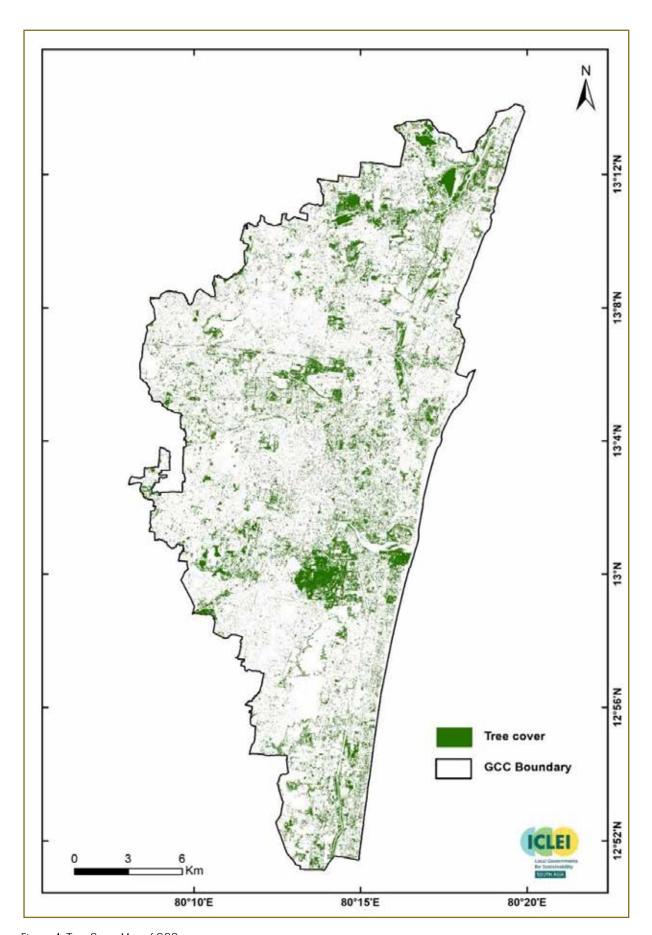


Figure 4: Tree Cover Map of GCC

# INDICATOR 13: RECREATIONAL SERVICE METHODOLOGY

#### How to calculate indicator

(Area of parks with natural areas and protected or secured natural areas)/1000 persons

**Scoring Range:** (based on the CBI user manual)

0 point: < 0.1 ha/1000 persons 1 point: 0.1 - 0.3 ha/1000 persons 2 points: 0.4 - 0.6 ha/1000 persons 3 points: 0.7 - 0.9 ha/1000 persons 4 points: > 0.9 ha/1000 persons

#### **City Data and Calculations**

There are 908 parks in Chennai which are under various government agencies. GCC manages 161 of these parks, 621 are outsourced to third parties and 120 are maintained through adoption of a park; 3 are maintained by SHG and 2 by CMRL. Together the parks make up a total area of 213.05 ha (Annexure 3).

In addition to the Corporation, the CRRT manages the Adyar Creek & Estuary Project – Phase 1 (Adyar Poonga) and Phase 2 Ecoparks which occupy and area of 58 acres and 242 acres, respectively. The Tamil Nadu Horticulture Department manages the city's botanical gardens, Semmozhi Poonga (3.17 ha) and Madhavaram Botanical Garden (8.5 ha) while the Forest Department manages the city's protected and reserve forests such as Guindy National Park and Pallikaranai Marshland. Within Guindy National Park, the Children's Park and Snake Park are accessible to the public as recreational spaces and cover an area of 22 acres. The park of the Pallikaranai Marshland accessible to the public has an area of 2.5 acres.

An important recreational space, is the coastal beaches, maintained by GCC. This covers an area of 428.51 ha.



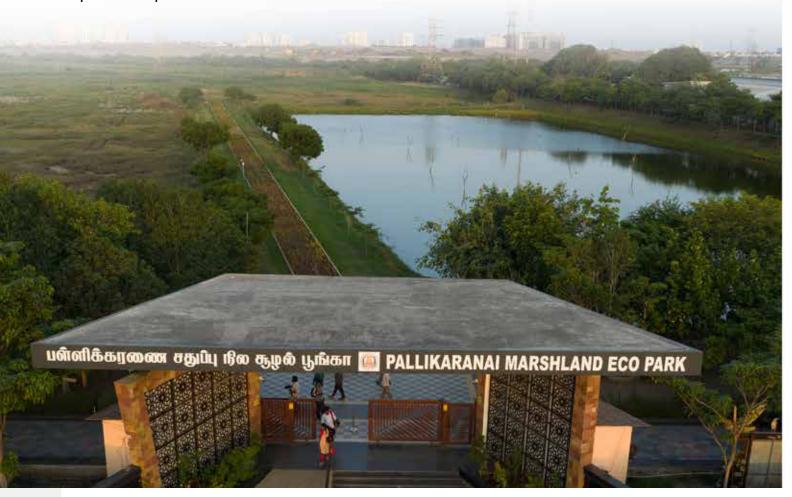
RESULT: 0.78 ha /person

SCORE: 3

## **RECOMMENDATIONS TO IMPROVE SCORE**

There are several established and upcoming eco-parks in the city aimed at restoration of Chennai's Adyar Creek, Cooum and Buckingham Canals and at Pallikaranai. These ecoparks, add to improvement in the recreational areas in the city. In addition, the sponge parks, which are presently under development, will also help to boast the score of the city under this indicator.

GCC can increase the use of indigenous plants to improve biodiversity and reduce maintenance costs in the eco-parks and sponge parks. This approach not only supports local wildlife but also enhances the aesthetic appeal of parks. Development of community urban forests, with support from NGOs, can also help improve the score under this indicator. The Biodiversity Management Committee can play a lead role in forging such partnerships.



## **INDICATOR 14 : EDUCATIONAL SERVICE**

## **METHODOLOGY**

#### How to calculate indicator

Average number of formal educational visits per child below 16 years to parks with natural areas or protected or secured natural areas per year

Scoring Range: (based on the CBI user manual)
0 point: 0 formal educational visit/year
1 point: 1 formal educational visit/year
2 points: 2 formal educational visits/year
3 points: 3 formal educational visits/year
4 points: > 3 formal educational visits/year

#### CITY DATA AND CALCULATIONS

Discussions with officials of GCC and other stakeholders yielded the information that park visits are not mandatory for schools, as per the set curriculum. However, schools do voluntarily organize these visits, in accordance with their schedule.

Therefore, no formal educational visits per child below 16 years take place to parks with natural areas or protected or secured natural areas per year.

RESULT: No formal educational visit/year

SCORE: 0

## **RECOMMENDATIONS TO IMPROVE SCORE**

Though the city administration has limited influence on the curriculum of the various boards followed by schools in the city, they can give a directive to municipal schools to include such visits in their curriculum. It must be highlighted however that GCC has been proactive about this by initiating a pilot programme on nature-based learning in five municipal schools with a local NGO, the Palluyir Trust. If institutionalised, Chennai will be the first Indian city to establish a system of formal educational visits of school children to parks and natural areas. GCC can also encourage municipal school teachers to undergo teacher trainings on nature-based learning, which will support practical learning and help students connect with nature.

# GOVERNANCE AND MANAGEMENT OF BIODIVERSITY INDICATOR 15: BUDGET ALLOCATED TO BIO DIVERSITY

## **METHODOLOGY**

#### How to calculate indicator

(Amount spent on biodiversity related administration) ÷ (Total budget of city) × 100%

**Scoring Range:** (based on the CBI user manual)

0 point: < 0.4%
1 point: 0.4% - 2.2%
2 points: 2.3% - 2.7%
3 points: 2.8% - 3.7%
4 points: > 3.7%

#### **CITY DATA AND CALCULATIONS**

The following budget allocations in the city budget for the financial year 2023-24 contribute to biodiversity conservation

- 1) Singara Chennai = INR 620,000,000
- 2) Parks and Gardens = INR 100,000,000

Total Budget of GCC = INR 44,662.9 million

Total Budget Allocated for Biodiversity = INR 720 million

 $(720) \div (44,662.9) \times 100$ 

**RESULT: 1.6%** 

## **RECOMMENDATIONS TO IMPROVE SCORE**

SCORE: 1

Presently the main budget allocations for biodiversity fall under park development, maintenance and beautification, and some plantation work. The city must take up a more active role in biodiversity governance. Budgeting for retrofitting parks with permeable surfaces, increasing the opportunities for awareness and education through meaningful and interactive signage can have better outcomes on the resilience and biodiversity of Chennai. The city should develop the Local Biodiversity Strategy and Action Plan, which will help to improve allocation of funds for biodiversity related activities.

# INDICATOR 16: NUMBER OF BIODIVERSITY PROJECTS IMPLEMENTED BY THE CITY ANNUALLY

### **METHODOLOGY**

#### How to calculate indicator

Number of programmes and projects that are being implemented by the city authorities, possibly in partnership with private sector, NGOs, etc. per year.

In addition to submitting the total number of projects and programmes carried out, cities are encouraged to provide a listing of the projects and to categorise the list into projects that are:

- 1. Biodiversity related
- 2. Ecosystems services related

**Scoring Range:** (based on the CBI user manual)

0 point: < 12 programmes/projects
1 point: 12 - 21 programmes/projects
2 points: 22 - 39 programmes/projects
3 points: 40 - 71 programmes/projects
4 points: > 71 programmes/projects

#### **City Data and Calculations**

Chennai city has implemented the following projects and programmes related to biodiversity in the year 2023-24 with support from other government bodies, NGOs and the private sector:

- Water bodies and parks have been developed under AMRUT 2.0
- Under Singara Chennai 2.0, greening of traffic islands, central meridians and beautification of parks are being carried out
- Development of 58 Sponge Parks in association with NGOs and parastatal agencies to improve ground water recharge and permeability
- Management and improvement of 189 parks
- O Plantation work and associated maintenance along avenues, riverine areas and flyovers

RESULT: <12

**SCORE: 0** 

## **RECOMMENDATIONS TO IMPROVE SCORE**

GCC needs to take up more varied projects with a variety of stakeholders to improve this score. Partnering with the Corporate Social Responsibility wings of several companies operating in the city, NGOs and educational institutions to scientifically restore and improve lakes, parks and green spaces in the city are low hanging fruits which the city can start immediately. Furthermore, the GCC should also develop the Local Biodiversity Strategy and Action Plan which will help to identify suitable partnerships, funding sources and activities targeted at improving biodiversity.

# INDICATOR 17: POLICIES, RULES AND REGULATIONS EXISTENCE OF LOCAL BIODIVERSITY STRATEGY AND ACTION PLAN

### **METHODOLOGY**

#### How to calculate indicator

Status of LBSAP (or any equivalent plan); number of associated CBD initiatives.

**Scoring Range:** (based on the CBI user manual)

O point: No LBSAP\*

1 point: LBSAP not aligned with NBSAP

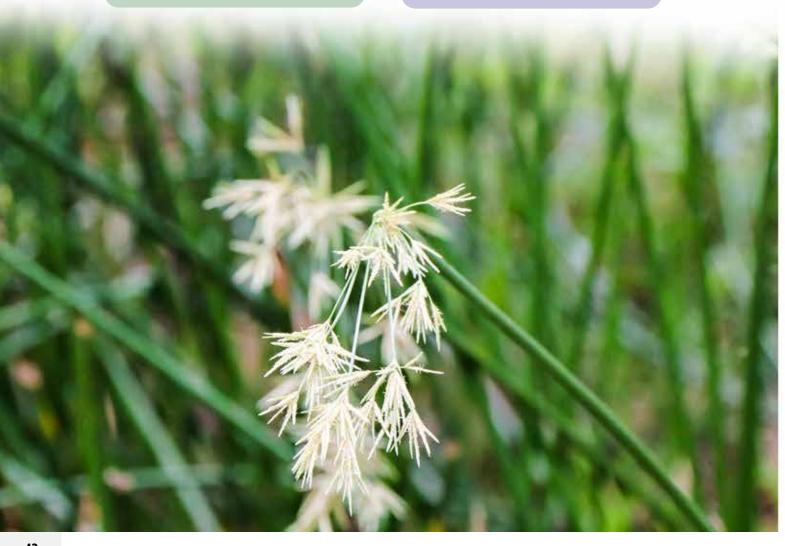
2 points: LBSAP incorporates elements of NBSAP, but does not include any CBD initiatives\*\*
3 points: LBSAP incorporates elements of NBSAP, and includes one to three CBD initiatives
4 points: LBSAP incorporates elements of NBSAP, and includes four or more CBD initiatives

#### **City Data and Calculations**

The LBSAP of Chennai city has not yet been developed.

**RESULT: No LBSAP** 

SCORE: 0



<sup>\*</sup> LBSAP or equivalent.

<sup>\*\*</sup> The thematic programmes of work and cross-cutting issues of the CBD are listed in http://www.cbd.int/programmes/. The Strategic Plan for Biodiversity (2011-2020), including the Aichi Biodiversity Targets can also be used as a reference framework (http://www.cbd.int/sp/default.shtml).

### RECOMMENDATIONS TO IMPROVE SCORE

Developing an LBSAP can improve several indicators' score, which will help the city better plan and administer to its local biodiversity.

## INDICATOR 18 : INSTITUTIONAL CAPACITY - ESSENTIAL BIODIVERSITY RELATED FUNCTIONS

### **METHODOLOGY**

How to calculate indicator

Number of essential biodiversity related functions\* that the city uses.

Scoring Range: (based on the CBI user manual)

0 point: No functions
1 point: 1 function
2 points: 2 functions
3 points: 3 functions
4 points: > 3 functions

#### CITY DATA AND CALCULATIONS

Chennai has the following biodiversity functions within its boundaries

- 1. Perivar Science and Technology Centre, where the Birla Planetarium is housed
- 2. Government Museum
- 3. Semmozhi Poonga Botanical Garden
- 4. Madhavaram Botanical Garden
- 5. Snake Park at Guindy National Park
- 6. Nature Education Centre at Children's Park in Guindy National Park
- 7. Fauna museum at Madras Christian College
- 8. Entomology section at Loyala College

There are several information boards on biodiversity within the Pallikarani Wetlands as well.

RESULT: 8 SCORE: 4

## **RECOMMENDATIONS TO MAINTAIN SCORE**

A number of biodiversity functions exist in the city and they seem to be well accessed as well. Regular maintenance of these facilities, will help to further improve biodiversity communication.

Simplifying science and improving science communication through interactive displays and interpretation centres in all public spaces will also improve their utilisation and awareness.

<sup>\*</sup> The functions could include the following: biodiversity centre, botanical garden, herbarium, zoological garden or museum, insectarium, etc.

# INDICATOR 19 : INSTITUTIONAL CAPACITY - INTER - AGENCY CO - OPERATION

### METHODOLOGY

#### How to calculate indicator

Number of city or local government agencies involved in inter-agency co-operation pertaining to biodiversity matters.

Scoring Range: (based on the CBI user manual)

0 point: 1 or 2 agencies\* cooperate on biodiversity matters
 1 point: 3 agencies cooperate on biodiversity matters
 2 points: 4 agencies cooperate on biodiversity matters
 3 points: 5 agencies cooperate on biodiversity matters
 4 points: > 5 agencies cooperate on biodiversity matters

#### **City Data and Calculations**

Biodiversity issues are cross-sectorial and, require inter-agency efforts. While there are collaborations between GCC and various district and state government agencies on various infrastructural projects in the city, local agencies who work on biodiversity related projects are limited. Given below are various local government agencies that are involved in matters related to biodiversity conservation in the city.

- 1) GCC
- 2) CSCL
- 3) CRRT

RESULT: 3 SCORE: 1

## **RECOMMENDATIONS TO IMPROVE SCORE**

The city needs to facilitate more inter-agency cooperation on biodiversity issues, in order to improve the score under this indicator. The city can look into establishing an outreach and research wing, which will assist the city and the Biodiversity Management Committee in undertaking projects on biodiversity conservation. The successful example of Centre for Heritage, Environment and Development, the research wing of Kochi Municipal Corporation, can also be studied by GCC.

<sup>\*</sup> Agencies could include departments or authorities responsible for biodiversity, planning, water, transport, development, finance, infrastructure, etc.

## INDICATOR 20 : PARTICIPATION AND PARTNERSHIP FORMAL OR INFORMAL PUBLIC CONSULTATION

### **METHODOLOGY**

#### How to calculate indicator

Existence and state of formal or informal public consultation process pertaining to biodiversity related matters.

Scoring Range: (based on the CBI user manual)
O point: No routine formal or informal process

1 point: Formal or informal process being considered as part of the routine process 2 points: Formal or informal process being planned as part of the routine process

3 points: Formal or informal process in the process of being implemented as part of the routine process

4 points: Formal or informal process exists as part of the routine process

#### CITY DATA AND CALCULATIONS

The GCC consults its citizens on matters related to biodiversity especially in projects funded by international organisations like the World Bank, Asian Development Bank, KfW. The resident welfare associations too, are involved in greening of their areas and are regularly consulted by GCC. Public consultation process pertaining to biodiversity exists in the city.

RESULT: Formal or informal process exists as part of the routine process

SCORE: 4

### **RECOMMENDATIONS TO MAINTAIN SCORE**

To maintain this score the GCC must continue public consultations in spheres related to and that impact biodiversity. This will improve public participation, public ownership and transparency. Developing a formal consultation structure and integrating the same with actions taken up through the annual municipal budget will also help the city to maintain the high score.



## INDICATOR 21 : PARTICIPATION AND PARTNERSHIP INSTITUTIONAL PARTNERSHIP

#### METHODOLOGY

#### How to calculate indicator

Number of agencies/private companies/NGOs/academic institutions/international organisations with which the city is partnering in biodiversity activities, projects and programmes.

Instances of inter-agency co-operation listed in Indicator 19 should not be listed here again.

**Scoring Range:** (based on the CBI user manual) O point: No formal or informal partnerships

1 point: City in partnership with 1-6 other national or subnational agencies/private companies/NGOs/academic

institutions/international organisations

2 points: City in partnership with 7-12 other national or subnational agencies/private companies/NGOs/academic

institutions/international organisations

3 points: City in partnership with 13-19 other national or subnational agencies/private companies/NGOs/academic

institutions/international organisations

4 points: City in partnership with 20 or more other national or subnational agencies/private companies/NGOs/

academic institutions/international organisations

#### **City Data and Calculations**

GCC is presently partnering with the following agencies on biodiversity-related activities, projects, and programmes.

- 1) ICLEI Local Governments for Sustainability, South Asia for development of the City Biodiversity Index
- 2) Environmentalist Foundation of India for the Samudra Ocean Conservation Project, Restoration of Lakes and Ponds and afforestation work within GCC jurisdiction
- 3) Palluyir Trust for nature-based learning in public parks
- 4) Chennai Metropolitan Development Authority on development of Sponge Parks
- 5) Communitree for creation of urban forests and waste management
- 6) Thuvakkam for creation of urban forests
- 7) Seeraku for creation of urban forests and other plantation activities
- 8) ExNoRa International Foundation for waste management and plantation activities
- 9) Green Velachery for plantation drives
- 10) Nilalgal for greening and tree protection
- 11) Eco Green for plantation activities

RESULT: 11 SCORE: 2

## **RECOMMENDATIONS TO IMPROVE SCORE**

GCC can improve its score on this indicator by forging more partnerships with NGOs, academic institutions and international organisations. While the city is partnering with several NGOs, there is scope for increasing partnerships with academic institutions and international organisations, already working in the city on biodiversity related matters.



## INDICATOR 22 : EDUCATION AND AWARENESS: IS BIODIVERSITY OR NATURE AWARENESS INCLUDED IN THE SCHOOL CURRICULUM

### **METHODOLOGY**

#### How to calculate indicator

Is biodiversity or nature awareness included in the school curriculum (e.g. biology, geography, etc.)?

**Scoring Range:** (based on the CBI user manual)

O point: Biodiversity or elements of it are not covered in the school curriculum

1 point: Biodiversity or elements of it are being considered for inclusion in the school curriculum
2 points: Biodiversity or elements of it are being planned for inclusion in the school curriculum
3 points: Biodiversity or elements of it are being planned for inclusion in the school curriculum

3 points: Biodiversity or elements of it are in the process of being implemented in the school curriculum

4 points: Biodiversity or elements of it are included in the school curriculum

#### **City Data and Calculations**

The schools within the city follow the curriculum of various boards such as the Central Board of Secondary Education (CBSE), Tamil Nadu State Common Board of School Education and Indian Certificate of Secondary Education (ICSE). All these boards have included biodiversity and nature awareness in various subjects like Biology, Geography and Environmental Sciences. Therefore, biodiversity or elements of it are included in the school curriculum.

RESULT: Biodiversity or elements of it are included in the school curriculum

SCORE: 4

## **RECOMMENDATIONS TO MAINTAIN SCORE**

Though the city has scored very high here, it needs to be noted that this indicator measures the theoretical aspects of biodiversity education. Indicator 14, which measures practical aspects of biodiversity education, received the lowest score possible. This highlights that environmental education not just in Chennai, but in the country at large, needs to strike the right balance between theory and practice. Once the pilot programme on nature-based learning is institutionalised, then GCC will be able to showcase the correct balance needed between theoretical and practical learning on biodiversity.

## INDICATOR 23: EDUCATION AND AWARENESS NUMBER OF OUTREACH OR PUBLIC AWARENESS EVENTS

## **METHODOLOGY**

#### How to calculate indicator

Number of outreach or public awareness events held in the city per year.

**Scoring Range**: (based on the CBI user manual)

O point: O outreach events/year

1 point: 1 - 59 outreach events/year
2 points: 60 -149 outreach events/year
3 points: 150-300 outreach events/year
4 points: > 300 outreach events/year

#### **City Data and Calculations**

The major outreach programmes instituted by GCC include tree plantation activities, Swachh Bharat / Cleanliness drives and beach cleaning activities.

**RESULT: 1 - 59** 

**SCORE: 1** 

## **RECOMMENDATIONS TO IMPROVE SCORE**

Some NGOs like Pitchandikulam Forest Consultants, Environmentalist Foundation of India, Palluyir Trust, Nizhal conduct awareness and nature education programs on a regular basis in the city. Environmentalist Foundation of India for example runs a museum on wheels, a limnology laboratory that teaches children about lake ecology, Palluyir Trust organises nature walks and promotes nature learning, Nizhal organises tree walks. Although the city government has some association with these organisations, it should formally tie-up with them to undertake regular city-level outreach programmes in the sphere of biodiversity. The Green Tamil Nadu Mission introduced a Heritage Tree Tour of Chennai in 2023, which it plans to continue in 2024. Collaborating with the mission to institutionalise these types of tours will also help to improve the score on this indicator.

Table 2: Summary of the Points received for each Indicator

Table 2: Summary of the Points received for each		
	Maximum	Chennai
Component Native Riediversity	Score	City's Score
Component – Native Biodiversity Indicators		
	4 points	4 points
Proportion of Natural Areas in the City     Connectivity Measures	4 points	4 points
2. Connectivity Measures  2. Native Piediversity in Puilt Lip Areas (Pird Species)	4 points	4 points
<ul><li>3. Native Biodiversity in Built Up Areas (Bird Species)</li><li>4. Change in Number of Vascular Plant Species</li></ul>	4 points	N/A
· · · · · · · · · · · · · · · · · · ·		N/A
5. Change in Number of Bird Species	4 points	N/A N/A
6. Change in Number of Freshwater fish Species	4 points	
7. Change in Number of Species (Odonates)	4 points	N/A
8. Change in Number of Species (Amphibians)	4 points	N/A
9. Proportion of Protected Natural Areas	4 points	1 point
10. Proportion of Invasive Alien Species	4 points	2 points
Component – Ecosystem Services Provided by Biodiversity		
Indicators	1	1
11. Regulation of Quantity of Water	4 points	2 points
12. Climate Regulation: Carbon Storage and Cooling Effect of Vegetation	4 points	1 point
13. Recreation and Education: Area of Parks with Natural Areas	4 points	3 points
14. Recreation and Education:Number of Formal Education Visits per Child	4 points	0 points
Below 16 Years to Parks with Natural Areas per Year		
Component – Governance and Management of Biodiversity		
Indicators	1	 
15. Budget Allocated to Biodiversity	4 points	1 point
16. Number of Biodiversity Projects Implemented by the City Annually	4 points	0 points
17. Existence of Local Biodiversity Strategy and Action Plan	4 points	0 points
18. Institutional Capacity: Number of Biodiversity Related Function	4 points	4 points
19. Institutional Capacity: Number of City or Local Government Agencies Involved in Inter-agency Cooperation Pertaining to Biodiversity Matters	4 points	1 point
20. Participation and Partnership: Existence of Formal or Informal Public Consultation Process	4 points	4 points
21. Participation and Partnership: Number of Agencies/Private Companies/ NGOs/Academic Institutions/International Organisations with which the City is Partnering in Biodiversity Activities, Projects and Programmes	4 points	2 points
22. Education and Awareness: Is Biodiversity or Nature Awareness Included in the School Curriculum	4 points	4 points
23. Education and Awareness: Number of Outreach or Public Awareness Events Held in the City per Year	4 points	1 points
Component – Native Biodiversity in the City (Sub-total for indicators 1-10)*		15 / 20 points*
Component – Ecosystem Services provided by Biodiversity (Sub-total for indicato	rs 11-14)	6 / 16 points
Component – Governance and Management of Biodiversity (Sub-total for indicat		17 / 36 points
Total	J.3 13 23)	38 / 72 points
1044		30 / 12 points

 $<sup>\</sup>ensuremath{^*}$  as this is the baseline year, the score will only be applicable for five indicators out of ten

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## ANNEXURE 1 – CALCULATION OF INDICATOR 2

Table 3: Calculation of patch size of natural spaces in Chennai

lable 3. Calculatio	ii oi pattii size oi i	naturai spaces in Chemiai			
Patch No	Area (ha)	Area square (ha²)	Patch No	Area (ha)	Area square (ha²)
A1	6384.28	40759031.12	A35	9.46	89.50
A2	321.63	103447.79	A36	9.28	86.16
A3	293.24	85987.35	A37	8.57	73.47
A4	177.01	31333.96	A38	8.49	72.16
A5	143.66	20637.62	A39	8.46	71.56
A6	82.74	6846.11	A40	8.22	67.54
A7	79.05	6249.06	A41	8.16	66.62
A8	76.30	5821.22	A42	8.14	66.22
A9	62.34	3886.23	A43	8.01	64.20
A10	61.83	3823.43	A44	7.74	59.86
A11	61.40	3769.64	A45	7.73	59.80
A12	37.66	1418.56	A46	7.06	49.82
A13	23.65	559.11	A47	6.65	44.26
A14	23.58	556.15	A48	6.56	43.07
A15	20.10	404.11	A49	6.43	41.39
A16	19.63	385.42	A50	6.30	39.65
A17	19.38	375.69	A51	6.20	38.40
A18	18.70	349.73	A52	6.06	36.77
A19	16.92	286.43	A53	6.02	36.22
A20	16.68	278.23	A54	5.98	35.75
A21	15.88	252.24	A55	5.85	34.21
A22	15.60	243.44	A56	5.69	32.38
A23	14.93	223.03	A57	5.66	31.99
A24	14.91	222.33	A58	5.53	30.54
A25	14.33	205.42	A59	5.39	29.07
A26	12.88	165.81	A60	5.38	28.93
A27	12.83	164.69	A61	5.25	27.55
A28	12.60	158.84	A62	5.22	27.25
A29	11.81	139.59	A63	5.20	27.00
A30	11.49	131.95	A64	5.17	26.75
A31	11.44	130.82	A65	4.90	24.02
A32	10.24	104.87	A66	4.82	23.25
A33	10.21	104.23	A67	4.79	22.96
A34	9.52	90.61	A68	4.52	20.40

Patch No	Area (ha)	Area square (ha²)	Patch No	Area (ha)	Area square (ha²)
A69	4.46	19.93	A110	2.24	5.03
A70	4.39	19.23	A111	2.22	4.93
A71	4.34	18.83	A112	2.20	4.84
A72	4.32	18.63	A113	2.14	4.59
A73	4.30	18.52	A114	2.11	4.43
A74	4.28	18.34	A115	2.08	4.32
A75	4.28	18.30	A116	2.07	4.29
A76	4.23	17.91	A117	2.04	4.16
A77	4.09	16.74	A118	2.02	4.07
A78	4.01	16.09	A119	2.00	4.01
A79	3.99	15.92	A120	1.97	3.89
A80	3.95	15.57	A121	1.90	3.60
A81	3.91	15.33	A122	1.88	3.54
A82	3.78	14.29	A123	1.84	3.39
A83	3.69	13.65	A124	1.82	3.30
A84	3.61	13.05	A125	1.74	3.02
A85	3.49	12.19	A126	1.72	2.95
A86	3.34	11.13	A127	1.71	2.93
A87	3.23	10.41	A128	1.66	2.77
A88	3.22	10.37	A129	1.61	2.58
A89	3.20	10.25	A130	1.57	2.46
A90	3.17	10.04	A131	1.55	2.41
A91	3.14	9.86	A132	1.54	2.37
A92	3.10	9.58	A133	1.51	2.28
A93	3.00	9.02	A134	1.51	2.27
A94	2.97	8.85	A135	1.50	2.26
A95	2.86	8.20	A136	1.50	2.24
A96	2.84	8.07	A137	1.49	2.21
A97	2.80	7.82	A138	1.47	2.17
A98	2.76	7.62	A139	1.46	2.12
A99	2.74	7.53	A140	1.43	2.04
A100	2.70	7.30	A141	1.42	2.02
A101	2.64	6.99	A142	1.41	1.97
A102	2.64	6.99	A143	1.39	1.93
A103	2.64	6.98	A144	1.35	1.82
A104	2.55	6.53	A145	1.35	1.81
A105	2.47	6.11	A146	1.33	1.76
A106	2.44	5.95	A147	1.31	1.72
A107	2.40	5.77	A148	1.31	1.72
A108	2.35	5.54	A149	1.31	1.72
A109	2.28	5.21	A150	1.30	1.68

Patch No	Area (ha)	Area square (ha²)	Patch No	Area (ha)	Area square (ha²)
A151	1.29	1.67	A192	0.74	0.55
A152	1.29	1.67	A193	0.74	0.55
A153	1.28	1.64	A194	0.74	0.55
A154	1.28	1.63	A195	0.74	0.55
A155	1.27	1.61	A196	0.73	0.53
A156	1.23	1.52	A197	0.73	0.53
A157	1.23	1.51	A198	0.72	0.52
A158	1.20	1.43	A199	0.72	0.52
A159	1.19	1.41	A200	0.70	0.50
A160	1.17	1.37	A201	0.70	0.49
A161	1.13	1.27	A202	0.70	0.49
A162	1.04	1.07	A203	0.69	0.48
A163	1.03	1.06	A204	0.68	0.47
A164	1.02	1.04	A205	0.66	0.43
A165	1.02	1.03	A206	0.65	0.43
A166	1.00	1.01	A207	0.65	0.42
A167	0.99	0.99	A208	0.64	0.41
A168	0.99	0.98	A209	0.64	0.41
A169	0.99	0.98	A210	0.63	0.40
A170	0.99	0.97	A211	0.63	0.40
A171	0.98	0.97	A212	0.60	0.36
A172	0.98	0.96	A213	0.59	0.35
A173	0.96	0.93	A214	0.59	0.35
A174	0.96	0.92	A215	0.58	0.33
A175	0.90	0.81	A216	0.57	0.32
A176	0.88	0.78	A217	0.56	0.31
A177	0.88	0.77	A218	0.55	0.30
A178	0.87	0.76	A219	0.54	0.29
A179	0.87	0.75	A220	0.54	0.29
A180	0.86	0.74	A221	0.54	0.29
A181	0.85	0.73	A222	0.53	0.28
A182	0.83	0.68	A223	0.53	0.28
A183	0.81	0.65	A224	0.53	0.28
A184	0.81	0.65	A225	0.52	0.27
A185	0.81	0.65	A226	0.52	0.27
A186	0.80	0.64	A227	0.52	0.27
A187	0.79	0.63	A228	0.51	0.26
A188	0.79	0.63	A229	0.51	0.26
A189	0.79	0.62	A230	0.51	0.26
A190	0.79	0.62	A231	0.51	0.26
A191	0.77	0.60	A232	0.51	0.26

Patch No	Area (ha)	Area square (ha²)	Patch No	Area (ha)	Area square (ha²)
A233	0.50	0.25	A275	0.32	0.10
A234	0.50	0.25	A276	0.32	0.10
A235	0.49	0.24	A277	0.30	0.09
A236	0.49	0.24	A278	0.28	0.08
A237	0.48	0.23	A279	0.27	0.07
A238	0.48	0.23	A280	0.26	0.07
A239	0.48	0.23	A281	0.26	0.07
A240	0.48	0.23	A282	0.25	0.06
A241	0.48	0.23	A283	0.25	0.06
A242	0.46	0.22	A284	0.24	0.06
A243	0.45	0.21	A285	0.24	0.06
A244	0.45	0.20	A286	0.23	0.05
A245	0.44	0.20	A287	0.23	0.05
A246	0.43	0.19	A288	0.23	0.05
A247	0.43	0.18	A289	0.23	0.05
A248	0.43	0.18	A290	0.20	0.04
A249	0.43	0.18	A291	0.20	0.04
A250	0.41	0.17	A292	0.20	0.04
A251	0.41	0.17	A293	0.20	0.04
A252	0.40	0.16	A294	0.19	0.04
A253	0.40	0.16	A295	0.19	0.04
A254	0.40	0.16	A296	0.19	0.04
A255	0.40	0.16	A297	0.17	0.03
A256	0.39	0.15	A298	0.16	0.03
A257	0.39	0.15	A299	0.15	0.02
A258	0.39	0.15	A300	0.15	0.02
A259	0.39	0.15	A301	0.14	0.02
A260	0.38	0.15	A302	0.14	0.02
A261	0.38	0.15	A303	0.14	0.02
A262	0.37	0.14	A304	0.13	0.02
A263	0.37	0.13	A305	0.13	0.02
A264	0.36	0.13	A306	0.12	0.01
A265	0.36	0.13	A307	0.12	0.01
A266	0.36	0.13	A308	0.12	0.01
A267	0.36	0.13	A309	0.11	0.01
A268	0.35	0.12	A310	0.10	0.01
A269	0.35	0.12	A311	0.09	0.01
A270	0.35	0.12	A312	0.08	0.01
A271	0.34	0.11	A313	0.07	0.01
A272	0.33	0.11	A314	0.07	0.01
A273	0.33	0.11	A315	0.07	0.00
A274	0.33	0.11	Total	8637.49	41039973.65

## ANNEXURE 2 – SPECIES LISTS

Table 4: Birds recorded from Chennai city used in the calculation of Indicators 3 and 5

S. No.	Common Name	Scientific Name	Family	Resident/ Migrant/ Local Migrant	Anthropogenic
1	Gray Wagtail	Motacilla cinerea	Motacillidae	M	
2	Common Sparrow	Passer domesticus	Passeridae	R	Yes
3	Grey-bellied cuckoo	Cacomantis passerinus	Cuculidae	R	No
4	Pied Crested Cuckoo	Clamator jacobinus	Cuculidae	M	
5	Black Drongo	Dicrurus macrocercus	Dicruridae	R	Yes
6	White-browed Bulbul	Pycnonotus luteolus	Pycnonotidae	R	No
7	Red-vented Bulbul	Pycnonotus cafer	Pycnonotidae	R	Yes
8	Tawny-bellied Babbler	Dumetia hyperythra	Timaliidae	R	No
9	Magpie Robin	Copsychus saularis	Muscicapidae	R	Yes
10	Black Kite	Milvus migrans	Accipitridae	R	Yes
11	Asian Koel	Eudynamys scolopaceus	Cuculidae	R	Yes
12	Indian Pitta	Pitta brachyura	Pittidae	М	No
13	Common Indian Myna	Acridotheres tristis	Sturnidae	R	Yes
14	Blue throated Flycatcher	Cyornis rubeculoides	Muscicapidae	М	
15	Large-billed crow	Corvus macrorhynchos	Corvidae	R	Yes
16	Ashy Prinia	Prinia socialis	Cisticolidae	R	Yes
17	Black bittern	Ixobrychus flavicollis	Ardeidae	R	No
18	Black capped kingfisher	Halcyon pileata	Alcedinidae	М	No
19	Blue rock pigeon	Columba livia	Columbidae	R	Yes
20	Chestnut bittern	lxobrychus cinnamomeus	Ardeidae	R	No
21	Eurasian teal	Anas crecca	Anatidae	М	No
22	Coppersmith Barbet	Psilopogon haemacephalus	Megalaimidae	R	Yes
23	Greater Coucal	Centropus sinensis	Cuculidae	R	Yes
24	Darter	Anhinga melanogaster	Anhingidae	R	No
25	Forest Wagtail	Dendronanthus indicus	Motacillidae	М	No
26	Chestnut-tailed Starling	Sturnia malabarica	Sturnidae	LM	Yes
27	Grey heron	Ardea cinerea	Ardeidae	R	No
28	Grey francolin	Ortygornis pondicerianus	Phasianidae	R	Yes
29	Common hoopoe	<i><b>Upupa epops</b></i>	Upupidae	R	Yes
30	House crow	Corvus splendens	Corvidae	R	Yes
31	House swift	Apus affinis	Apodidae	R	Yes
32	Eurasian Moorhen	Gallinula chloropus	Rallidae	R	Yes
33	River tern	Sterna aurantia	Laridae	LM	No
34	Indian Robin	Copsychus fulicatus	Muscicapidae	R	Yes

S. No.	Common Name	Scientific Name	Family	Resident/ Migrant/ Local	Anthropogenic
				Migrant	
35	Indian Treepie	Dendrocitta vagabunda	Corvidae	R	Yes
36	White-browed wagtail	Motacilla	Motacillidae	R	Yes
30	Willie browed wagtan	maderaspatensis	Motaemidae	"	103
37	Lesser golden-backed	Dinopium benghalense	Picidae	R	Yes
	woodpecker	g			
38	Pied kingfisher	Ceryle rudis	Alcedinidae	R	No
39	Laughing Dove	Spilopelia senegalensis	Columbidae	R	Yes
40	Little grebe	Tachybaptus ruficollis	Podicipedidae	R	No
41	Little Cormorant	Microcarbo niger	Phalacrocoracidae	R	No
42	Little egret	Egretta garzetta	Ardeidae	R	Yes
43	Black-crowned Night-	Nycticorax nycticorax	Ardeidae	R	Yes
	heron				
44	Asian Openbill	Anastomus oscitans	Ciconiidae	R	Yes
45	Orange-headed thrush	Geokichla citrina	Turdidae	М	No
46	Indian Pond heron	Ardeola grayii	Ardeidae	R	Yes
47	Asian Palm Swift	Cypsiurus balasiensis	Apodidae	R	Yes
48	Asian Paradise flycatcher	Terpsiphone paradisi	Monarchidae	М	No
49	Purple Sunbird	Cinnyris asiaticus	Nectariniidae	R	Yes
50	Purple-rumped Sunbird	Leptocoma zeylonica	Nectariniidae	R	Yes
51	Chestnut-winged Cuckoo	Clamator coromandus	Cuculidae	M	
52	Red wattled lapwing	Vanellus indicus	Charadriidae	R	Yes
53	Red whiskered bulbul	Pycnonotus jocosus	Pycnonotidae	R	Yes
54	Rose-ringed Parakeet	Psittacula krameri	Psittaculidae	R	Yes
55	Shikra	Accipiter badius	Accipitridae	R	Yes
56	Common kingfisher	Alcedo atthis	Alcedinidae	R	No
57	Asian Green Bee-eater	Merops orientalis	Meropidae	R	Yes
58	Indian Spot-billed Duck	Anas poecilorhyncha	Anatidae	R	No
59	Spotted Dove	Spilopelia chinensis	Columbidae	R	Yes
60	Scaly-breasted Munia	Lonchura punctulata	Estrildidae	R	Yes
61	Spotted Owlet	Athene brama	Strigidae	R	Yes
62	Pale-billed flowerpecker	Dicaeum	Dicaeidae	R	Yes
		erythrorhynchos			
63	White breasted kingfisher	Halcyon smyrnensis	Alcedinidae	R	Yes
64	White breasted	Amaurornis	Rallidae	R	Yes
	waterhen	phoenicurus			
65	White wagtail	Motacilla alba	Motacillidae	М	
66	Yellow wattled lapwing	Vanellus malabaricus	Charadriidae	R	No
67	Common coot	Fulica atra	Rallidae	R	No
68	Intermediate Egret	Ardea intermedia	Ardeidae	R	Yes
69	Western Marsh Harrier	Circus aeruginosus	Accipitridae	М	
70	Yellow bittern	Ixobrychus sinensis	Ardeidae	R	No
71	Gray-headed Swamphen	Porphyrio poliocephalus	Rallidae	R	No
72	Ruddy-breasted Crake	Zapornia fusca	Rallidae	R	No

S. No.	Common Name	Scientific Name	Family	Resident/ Migrant/ Local Migrant	Anthropogenic
73	Black-winged Stilt	Himantopus himantopus	Recurvirostridae	R	Yes
74	Greater Painted-Snipe	Rostratula benghalensis	Rostratulidae	R	No
75	Wood Sandpiper	Tringa glareola	Scolopacidae	M	
76	Great Cormorant	Phalacrocorax carbo	Phalacrocoracidae	R	No
77	Spot-billed Pelican	Pelecanus philippensis	Pelecanidae	R	No
78	Eastern cattle Egret	Bubulcus coromandus	Ardeidae	R	Yes
79	Glossy Ibis	Plegadis falcinellus	Threskiornithidae	R	Yes
80	Brown Shrike	Lanius cristatus	Laniidae	M	
81	Common Tailorbird	Orthotomus sutorius	Cisticolidae	R	Yes
82	Clamorous Reed Warbler	Acrocephalus stentoreus	Acrocephalidae	M	
83	Whiskered Tern	Chlidonias hybrida	Laridae	M	
84	White-winged Tern	Chlidonias leucopterus	Laridae	M	
85	Black-headed Ibis	Threskiornis melanocephalus	Threskiornithidae	R	Yes
86	Peregrine Falcon	Falco peregrinus	Falconidae	M	
87	Streaked Weaver	Ploceus manyar	Ploceidae	R	Yes
88	Fulvous Whistling-Duck	Dendrocygna bicolor	Anatidae	R	No
89	Gray-headed Lapwing	Vanellus cinereus	Charadriidae	М	
90	Painted Stork	Mycteria leucocephala	Ciconiidae	R	Yes
91	Great Egret	Ardea alba	Ardeidae	R	Yes
92	Purple Heron	Ardea purpurea	Ardeidae	R	No
93	Plain Prinia	Prinia inornata	Cisticolidae	R	No
94	Tricolored Munia	Lonchura malacca	Estrildidae	R	No
95	Western Yellow Wagtail	Motacilla flava	Motacillidae	M	
96	Indian Cormorant	Phalacrocorax fuscicollis	Phalacrocoracidae	R	No
97	Rosy Starling	Pastor roseus	Sturnidae	M	
98	Citrine Wagtail	Motacilla citreola	Motacillidae	M	
99	Greater Flamingo	Phoenicopterus roseus	Phoenicopteridae	LM	No
100	Pheasant-tailed Jacana	Hydrophasianus chirurgus	Jacanidae	R	No
101	Slaty-breasted Rail	Lewinia striata	Rallidae	R	No
102	Baillon's Crake	Zapornia pusilla	Rallidae	M	
103	Blyth's Reed Warbler	Acrocephalus dumetorum	Acrocephalidae	M	
104	Pallas's Grasshopper Warbler	Helopsaltes certhiola	Locustellidae	M	
105	Little Ringed Plover	Charadrius dubius	Charadriidae	R	No
106	Common Sandpiper	Actitis hypoleucos	Scolopacidae	M	No
107	Greater Spotted Eagle	Clanga clanga	Accipitridae	M	
108	Blue-tailed Bee-eater	Merops philippinus	Meropidae	LM	No
109	Barn Swallow	Hirundo rustica	Hirundinidae	M	
110	Bronze-winged Jacana	Metopidius indicus	Jacanidae	R	No
111	Marsh Sandpiper	Tringa stagnatilis	Scolopacidae	M	
112	Ruff	Calidris pugnax	Scolopacidae	М	

S. No.	Common Name	Scientific Name	Family	Resident/ Migrant/ Local Migrant	Anthropogenic
113	Indian Golden Oriole	Oriolus kundoo	Oriolidae	R	Yes
114	Paddyfield Pipit	Anthus rufulus	Motacillidae	R	Yes
115	Blyth's Pipit	Anthus godlewskii	Motacillidae	M	No
116	Red Avadavat	Amandava amandava	Estrildidae	R	Yes
117	Pin-tailed Snipe	Gallinago stenura	Scolopacidae	M	
118	Booted Eagle	Hieraaetus pennatus	Accipitridae	M	
119	Red-naped Ibis	Pseudibis papillosa	Threskiornithidae	LM	Yes
120	Little Stint	Calidris minuta	Scolopacidae	M	
121	Temminck's Stint	Calidris temminckii	Scolopacidae	M	
122	Little Tern	Sternula albifrons	Laridae	М	
123	Common Snipe	Gallinago gallinago	Scolopacidae	М	
124	Green Sandpiper	Tringa ochropus	Scolopacidae	М	
125	Common Redshank	Tringa totanus	Scolopacidae	М	
126	Common Greenshank	Tringa nebularia	Scolopacidae	М	No
127	Eurasian Spoonbill	Platalea leucorodia	Threskiornithidae	R	No
128	Black-winged Kite	Elanus caeruleus	Accipitridae	R	Yes
129	Zitting Cisticola	Cisticola juncidis	Cisticolidae	R	No
130	Pied Bushchat	Saxicola caprata	Muscicapidae	R	Yes
131	Baya Weaver	Ploceus philippinus	Ploceidae	R	Yes
132	White-bellied Sea-Eagle	Icthyophaga Ieucogaster	Accipitridae	R	No
133	Oriental Honey-buzzard	Pernis ptilorhynchus	Accipitridae	R	Yes
134	Indian Spotted Eagle	Clanga hastata	Accipitridae	R	No
135	Brown Boobook	Ninox scutulata	Strigidae	R	No
136	Asian Brown Flycatcher	Muscicapa dauurica	Muscicapidae	M	
137	Loten's Sunbird	Cinnyris lotenius	Accipitridae	R	Yes
138	Common Iora	Aegithina tiphia	Aegithinidae	R	Yes
139	Eyebrowed Thrush	Turdus obscurus	Turdidae	M	
140	Black Baza	Aviceda leuphotes	Accipitridae	M	No
141	Spot-breasted Fantail	Rhipidura albogularis	Rhipiduridae	LM	Yes
142	Short-toed Snake-Eagle	Circaetus gallicus	Accipitridae	R	No
143	Ultramarine Flycatcher	Ficedula superciliaris	Muscicapidae	M	
144	Crested Serpent-Eagle	Spilornis cheela	Accipitridae	R	No
145	Common Buzzard	Buteo buteo	Accipitridae	M	
146	Yellow-footed Green- Pigeon	Treron phoenicopterus	Columbidae	LM	Yes
147	Tickell's Blue Flycatcher	Cyornis tickelliae	Muscicapidae	LM	
148	Black-hooded Oriole	Oriolus xanthornus	Oriolidae	LM	No
149	Alpine Swift	Tachymarptis melba	Apodidae	М	
150	Western Crowned Warbler	Phylloscopus occipitalis	Phylloscopidae	M	
151	Sirkeer Malkoha	Taccocua leschenaultii	Cuculidae	R	No
152	Montagu's Harrier	Circus pygargus	Accipitridae	М	
153	Black Redstart	Phoenicurus ochruros	Muscicapidae	М	
154	Ashy Minivet	Pericrocotus divaricatus	Campephagidae	М	

S. No.	Common Name	Scientific Name	Family	Resident/ Migrant/ Local Migrant	Anthropogenic
155	Indian Nightjar	Caprimulgus asiaticus	Caprimulgidae	R	No
156	Lesser Adjutant	Leptoptilos javanicus	Ciconiidae	M	Yes
157	Ashy Drongo	Dicrurus leucophaeus	Dicruridae	M	
158	Eurasian Hobby	Falco subbuteo	Falconidae	M	
159	Tickell's Thrush	Turdus unicolor	Turdidae	M	No
160	White-bellied Drongo	Dicrurus caerulescens	Dicruridae	LM	Yes
161	Oriental Turtle-Dove	Streptopelia orientalis	Columbidae	LM	Yes
162	Rusty-tailed Flycatcher	Ficedula ruficauda	Muscicapidae	M	
163	Jungle Prinia	Prinia sylvatica	Cisticolidae	R	No
164	Small Minivet	Pericrocotus cinnamomeus	Campephagidae	R	Yes
165	Black-naped Oriole	Oriolus chinensis	Oriolidae	M	
166	Indian Scops-Owl	Otus bakkamoena	Strigidae	R	No
167	Whimbrel	Numenius phaeopus	Scolopacidae	M	
168	Blue-faced Malkoha	Phaenicophaeus viridirostris	Cuculidae	R	No
169	Lesser Whistling-Duck	Dendrocygna javanica	Anatidae	R	No
170	Striated Heron	Butorides striata	Ardeidae	R	No
171	Northern Shoveler	Spatula clypeata	Anatidae	M	
172	Indian Gray Hornbill	Ocyceros birostris	Bucerotidae	R	Yes
173	Eastern Yellow Wagtail	Motacilla tschutschensis	Motacillidae	M	
174	Malayan Night Heron	Gorsachius melanolophus	Ardeidae	M	No
175	Indian Thick-knee	Burhinus indicus	Burhinidae	R	Yes
176	Large Cuckooshrike	Coracina macei	Campephagidae	R	Yes
177	Black-naped Monarch	Hypothymis azurea	Monarchidae	R	No
178	Indian Peafowl	Pavo cristatus	Phasianidae	R	Yes
179	Black-bellied Plover	Pluvialis squatarola	Charadriidae	M	
180	Pacific Golden-Plover	Pluvialis fulva	Charadriidae	M	
181	Black-tailed Godwit	Limosa limosa	Scolopacidae	M	
182	Long-toed Stint	Calidris subminuta	Scolopacidae	M	
183	Pied Avocet	Recurvirostra avosetta	Recurvirostridae	M	
184	Caspian Tern	Hydroprogne caspia	Laridae	M	
185	Garganey	Spatula querquedula	Anatidae	M	
186	Tibetan Sand-Plover	Anarhynchus atrifrons	Charadriidae	M	
187	Northern Pintail	Anas acuta	Anatidae	M	
188	Osprey	Pandion haliaetus	Pandionidae	M	
189	Long-tailed Shrike	Lanius schach	Laniidae	R	Yes
190	Gull-billed Tern	Gelochelidon nilotica	Laridae	M	
191	Red-rumped Swallow	Cecropis daurica	Hirundinidae	R	Yes
192	Wire-tailed Swallow	Hirundo smithii	Hirundinidae	LM	Yes
193	Greenish Warbler	Phylloscopus trochiloides	Phylloscopidae	M	
194	Eurasian Wigeon	Mareca penelope	Anatidae	M	
195	Ashy Woodswallow	Artamus fuscus	Artamidae	R	No

S. No.	Common Name	Scientific Name	Family	Resident/ Migrant/ Local Migrant	Anthropogenic
196	Red-necked Falcon	Falco chicquera	Falconidae	R	No
197	Brown-headed Gull	Chroicocephalus brunnicephalus	Laridae	M	
198	Black-headed Gull	Chroicocephalus ridibundus	Laridae	М	
199	Terek Sandpiper	Xenus cinereus	Scolopacidae	M	
200	Kentish Plover	Anarhynchus alexandrinus	Charadriidae	R	No
201	Oriental Pratincole	Glareola maldivarum	Glareolidae	R	No
202	Jerdon's Bushlark	Mirafra affinis	Alaudidae	R	No
203	Watercock	Gallicrex cinerea	Rallidae	R	No
204	Indian Roller	Coracias benghalensis	Coraciidae	R	Yes
205	Tawny Pipit	Anthus campestris	Motacillidae	M	
206	Streak-throated Swallow	Petrochelidon fluvicola	Hirundinidae	R	No
207	Bay-backed Shrike	Lanius vittatus	Laniidae	R	Yes
208	Brahminy Kite	Haliastur indus	Accipitridae	R	Yes
209	Sykes's Warbler	Iduna rama	Acrocephalidae	M	
210	Oriental Skylark	Alauda gulgula	Alaudidae	R	No
211	Gadwall	Mareca strepera	Anatidae	M	
212	Lesser Whitethroat	Curruca curruca	Sylviidae	M	
213	Gray-breasted Prinia	Prinia hodgsonii	Cisticolidae	R	No
214	Ashy-crowned Sparrow- Lark	Eremopterix griseus	Alaudidae	R	No
215	Western Reef-Heron	Egretta gularis	Ardeidae	R	No
216	Mongolian Short-toed	Calandrella	Alaudidae	M	
	Lark	dukhunensis			
217	Barn Owl	Tyto alba	Tytonidae	R	Yes
218	Slender-billed Gull	Chroicocephalus genei	Laridae	M	
219	Brahminy Starling	Sturnia pagodarum	Sturnidae	R	Yes
220	Ruddy Turnstone	Arenaria interpres	Scolopacidae	M	
221	Lesser Frigatebird	Fregata ariel	Fregatidae	M	
222	Eurasian Curlew	Numenius arquata	Scolopacidae	M	
223	Bridled Tern	Onychoprion	Laridae	M	
		anaethetus			
224	Sanderling	Calidris alba	Scolopacidae	M	
225	Great Crested Tern	Thalasseus bergii	Laridae	M	
226	Small Pratincole	Glareola lactea	Glareolidae	LM	No
227	Eurasian Oystercatcher	Haematopus ostralegus	Haematopodidae	M	
228	European Roller	Coracias garrulus	Coraciidae	M	
229	Siberian Stonechat	Saxicola maurus	Muscicapidae	M	
230	Daurian Starling	Agropsar sturninus	Sturnidae	M	
231	Curlew Sandpiper	Calidris ferruginea	Scolopacidae	M	
232	Jungle Babbler	Argya striata	Leiothrichidae	R	Yes
233	Cotton Pygmy-Goose	Nettapus coromandelianus	Anatidae	R	No

S. No.	Common Name	Scientific Name	Family	Resident/ Migrant/ Local	Anthropogenic
				Migrant	
234	Gray-fronted Green- Pigeon	Treron affinis	Columbidae	R	No
235	Yellow-throated Sparrow	Gymnoris xanthocollis	Passeridae	R	No
236	Bar-tailed Godwit	Limosa lapponica	Scolopacidae	М	
237	Desert Wheatear	Oenanthe deserti	Muscicapidae	М	
238	Great Knot	Calidris tenuirostris	Scolopacidae	М	
239	Richard's Pipit	Anthus richardi	Motacillidae	М	
240	Lesser Flamingo	Phoeniconaias minor	Phoenicopteridae	М	
241	Broad-billed Sandpiper	Calidris falcinellus	Scolopacidae	М	
242	Tufted Duck	Aythya fuligula	Anatidae	М	
243	Rufous-tailed Lark	Ammomanes	Alaudidae	R	No
		phoenicura			
244	Yellow-billed Babbler	Argya affinis	Leiothrichidae	R	Yes
245	Indian Silverbill	Euodice malabarica	Estrildidae	R	Yes
246	Common Hawk-Cuckoo	Hierococcyx varius	Cuculidae	R	Yes
247	Indian Pied Starling	Gracupica contra	Sturnidae	R	Yes
248	Eurasian Collared-Dove	Streptopelia decaocto	Columbidae	R	Yes
249	White-rumped Munia	Lonchura striata	Estrildidae	R	Yes
250	Eurasian Kestrel	Falco tinnunculus	Falconidae	М	
251	Booted Warbler	Iduna caligata	Acrocephalidae	М	
252	Brown-breasted	Muscicapa muttui	Muscicapidae	M	
	Flycatcher				
253	Bank Swallow	Riparia riparia	Hirundinidae	М	
254	Black-headed Cuckooshrike	Lalage melanoptera	Campephagidae	R	No
255	Lesser Crested Tern	Thalasseus bengalensis	Laridae	М	
256	Yellow-eyed Babbler	Chrysomma sinense	Paradoxornithidae	R	No
257	Knob-billed Duck	Sarkidiornis melanotos	Anatidae	LM	No
258	Asian Woolly-necked Stork	Ciconia episcopus	Ciconiidae	LM	No
259	Common Tern	Sterna hirundo	Laridae	М	
260	Paddyfield Warbler	Acrocephalus agricola	Acrocephalidae	М	
261	Pallid Harrier	Circus macrourus	Accipitridae	М	
262	Large Gray Babbler	Argya malcolmi	Leiothrichidae	R	Yes
263	Cinereous Vulture	Aegypius monachus	Accipitridae	М	No
264	Lesser Black-backed Gull	Larus fuscus	Laridae	М	
265	Great Thick-knee	Esacus recurvirostris	Burhinidae	М	
266	Pallas's Gull	Ichthyaetus ichthyaetus	Laridae	М	
267	Greater Sand-Plover	Anarhynchus leschenaultii	Charadriidae	М	
268	Amur Falcon	Falco amurensis	Falconidae	М	
269	Indian Cuckoo	Cuculus micropterus	Cuculidae	М	No
270	Eastern Marsh Harrier	Circus spilonotus	Accipitridae	М	
271	Common Cuckoo	Cuculus canorus	Cuculidae	М	
272	Plum-headed Parakeet	Psittacula cyanocephala	Psittaculidae	LM	Yes

S. No.	Common Name	Scientific Name	Family	Resident/	Anthropogenic
				Migrant/ Local Migrant	
273	White-eyed Buzzard	Butastur teesa	Accipitridae	R	No
274	Common Babbler	Argya caudata	Leiothrichidae	R	Yes
275	Orange-breasted Green-	Treron bicinctus	Columbidae	LM	No
273	Pigeon	Trefori oferictus	Columbiade		
276	Jungle Bush-Quail	Perdicula asiatica	Phasianidae	R	No
277	Green Warbler	Phylloscopus nitidus	Phylloscopidae	М	
278	Bar-headed Goose	Anser indicus	Anatidae	М	
279	Ferruginous Duck	Aythya nyroca	Anatidae	М	
280	Common Woodshrike	Tephrodornis	Vangidae	R	No
		pondicerianus			
281	Indian Courser	Cursorius	Glareolidae	R	No
		coromandelicus			
282	Sooty Tern	Onychoprion fuscatus	Laridae	М	
283	Fork-tailed Drongo-	Surniculus dicruroides	Cuculidae	М	No
	Cuckoo				
284	Graylag Goose	Anser anser	Anatidae	М	
285	Dusky Crag-Martin	Ptyonoprogne concolor	Hirundinidae	R	Yes
286	Eurasian Wryneck	Jynx torquilla	Picidae	M	
287	Common Ringed Plover	Charadrius hiaticula	Charadriidae	M	
288	Ruddy Shelduck	Tadorna ferruginea	Anatidae	M	No
289	Common Pochard	Aythya ferina	Anatidae	M	
290	Blue Rock-Thrush	Monticola solitarius	Muscicapidae	M	
291	Lesser Cuckoo	Cuculus poliocephalus	Cuculidae	M	No
292	Large-billed Leaf Warbler	Phylloscopus magnirostris	Phylloscopidae	M	
293	Chinese Pond-Heron	Ardeola bacchus	Ardeidae	M	
294	White-throated	Hirundapus caudacutus	Apodidae	М	
	Needletail				
295	Wilson's Storm-Petrel	Oceanites oceanicus	Oceanitidae	M	
296	Blyth's Swift	Apus leuconyx	Apodidae	M	
297	Red-necked Phalarope	Phalaropus lobatus	Scolopacidae	M	
298	Brown Noddy	Anous stolidus	Laridae	M	
299	Great Frigatebird	Fregata minor	Fregatidae	M	
300	Red Collared-Dove	Streptopelia tranquebarica	Columbidae	R	No
301	Blue-capped Rock-	Monticola	Muscicapidae	М	
	Thrush	cinclorhyncha			
302	Steppe Eagle	Aquila nipalensis	Accipitridae	М	
303	Indian Blue Robin	Larvivora brunnea	Muscicapidae	М	
304	Mottled Wood-Owl	Strix ocellata	Strigidae	R	No
305	Spotted Redshank	Tringa erythropus	Scolopacidae	M	
306	Oriental Scops-Owl	Otus sunia	Strigidae	LM	No
307	Sandwich Tern	Thalasseus sandvicensis	Laridae	M	
308	Black-winged	Lalage melaschistos	Campephagidae	R	No
	Cuckooshrike		, , ,		

S. No.	Common Name	Scientific Name	Family	Resident/ Migrant/ Local Migrant	Anthropogenic
309	Crested Treeswift	Hemiprocne coronata	Hemiprocnidae	LM	No
310	Tree Pipit	Anthus trivialis	Motacillidae	M	No
311	Black-breasted Weaver	Ploceus benghalensis	Ploceidae	R	No
312	Great White Pelican	Pelecanus onocrotalus	Pelecanidae	M	
313	Greater Racket-tailed Drongo	Dicrurus paradiseus	Dicruridae	R	No
314	Flesh-footed Shearwater	Ardenna carneipes	Procellariidae	М	
315	Swinhoe's Storm-Petrel	Hydrobates monorhis	Hydrobatidae	М	
316	Roseate Tern	Sterna dougallii	Laridae	М	
317	Brown-rumped Minivet	Pericrocotus cantonensis	Campephagidae	M	
318	Common Rosefinch	Carpodacus erythrinus	Fringillidae	М	
319	Bonelli's Eagle	Aquila fasciata	Accipitridae	R	No
320	White-rumped Spinetail	Zoonavena sylvatica	Apodidae	R	No
321	Egyptian Vulture	Neophron percnopterus	Accipitridae	R	Yes
322	Barred Buttonquail	Turnix suscitator	Turnicidae	R	No
323	Eurasian Sparrowhawk	Accipiter nisus	Accipitridae	M	
324	Dollarbird	Eurystomus orientalis	Coraciidae	LM	No
325	Common Swift	Apus apus	Apodidae	M	
326	South Polar Skua	Stercorarius maccormicki	Stercorariidae	M	
327	Long-tailed Jaeger	Stercorarius longicaudus	Stercorariidae	М	
328	Pomarine Jaeger	Stercorarius pomarinus	Stercorariidae	M	
329	Brown Skua	Stercorarius antarcticus	Stercorariidae	M	
330	Streaked Shearwater	Calonectris leucomelas	Procellariidae	M	
331	Black Stork	Ciconia nigra	Ciconiidae	M	
332	Dark-sided Flycatcher	Muscicapa sibirica	Muscicapidae	M	
333	Large Hawk-Cuckoo	Hierococcyx sparverioides	Cuculidae	M	
334	Jack Snipe	Lymnocryptes minimus	Scolopacidae	M	
335	White-rumped Vulture	Gyps bengalensis	Accipitridae	R	No
336	Short-eared Owl	Asio flammeus	Strigidae	M	No
337	Tawny Eagle	Aquila rapax	Accipitridae	R	No
338	White Stork	Ciconia ciconia	Ciconiidae	M	No
339	Pied Thrush	Geokichla wardii	Turdidae	M	
340	Tickell's Leaf Warbler	Phylloscopus affinis	Phylloscopidae	M	
341	Thick-billed Warbler	Arundinax aedon	Acrocephalidae	M	
342	Rock Eagle-Owl	Bubo bengalensis	Strigidae	R	No
343	Alexandrine Parakeet	Psittacula eupatria	Psittaculidae	Introduced	
344	Rainbow Lorikeet	Trichoglossus	Psittaculidae	Exotic	
		moluccanus		Escapee	

Table 5: Flowering plants found within the city of Chennai (Indicators 4)

S. No	owering plants found within the city of Cl Scientific Name	Family	Status	Invasiveness
1	Dipteracanthus prostratus	Acanthaceae	Native	IIIVusiveiless
2	Justicia prostrata	Acanthaceae	Native	
3	Thunbergia erecta	Acanthaceae	Introduced	
4	Adhatoda zeylanica	Acanthaceae	Native	
5	Rostellularia procumbens	Acanthaceae	Native	
6	Ruellia tuberosa	Acanthaceae	Introduced	Invasive
7	Barleria cristata	Acanthaceae	Native	liivasive
8	Andrographis paniculata	Acanthaceae	Native	
9	Ecbolium viride	Acanthaceae	Native	
10	Hygrophila auriculata	Acanthaceae	Native	
11	Hygrophila balsamica	Acanthaceae	Native	
12	Ruellia cordata	Acanthaceae	Introduced	
13		Acanthaceae	Native	
14	Justicia tranquebariensis Rhinacanthus nasutus	Acanthaceae	Native	
15			Native	
16	Dicliptera paniculata	Acanthaceae Acanthaceae	Native	
17	Lepidagathis cristata	Acanthaceae		
	Rungia repens		Native	
18	Blepharis maderaspatensis	Acanthaceae	Native	
19	Thunbergia fragrans	Acanthaceae	Native	
20	Asystasia gangetica	Acanthaceae	Native	
21	Barleria prionitis	Acanthaceae	Native	
22	Crossandra infundibuliformis	Acanthaceae	Native	
23	Justicia gendarussa	Acanthaceae	Native	
24	Thunbergia laurifolia	Acanthaceae	Introduced	
25	Stenosiphonium russellianum	Acanthaceae	Native	
26	Andrographis echioides	Acanthaceae	Native	
27	Blepharis molluginifolia	Acanthaceae	Native	
28	Trianthema portulacastrum	Aizoaceae	Native	
29	Amaranthus Spinosus	Amaranthaceae	Introduced	Invasive
30	Celosia argentea	Amaranthaceae	Introduced	Invasive
31	Aerva lanata	Amaranthaceae	Native	
32	Gomphrena serrata	Amaranthaceae	Introduced	Invasive
33	Achyranthes aspera	Amaranthaceae	Native	
34	Alternanthera sessilis	Amaranthaceae	Native	
35	Alternanthera paronychioides	Amaranthaceae	Introduced	Invasive
36	Amaranthus viridis	Amaranthaceae	Introduced	
37	Gomphrena celosioides	Amaranthaceae	Introduced	Invasive
38	Aerva monsonia	Amaranthaceae	Native	
39	Allmania nodiflora	Amaranthaceae	Native	
40	Alternanthera echinata	Amaranthaceae	Introduced	
41	Digera muricata	Amaranthaceae	Native	
42	Pupalia atropurpurea	Amaranthaceae	Native	
43	Alternanthera philoxeroides	Amaranthaceae	Introduced	Invasive
44	Lannea coromandelica	Anacardiaceae	Native	
45	Anacardium occidentale	Anacardiaceae	Introduced	
46	Mangifera indica	Anacardiaceae	Introduced	

S. No	Scientific Name	Family	Status	Invasiveness
47	Buchanania lanzan	Anacardiaceae	Native	
48	Polyalthia longifolia	Annonaceae	Introduced	
49	Annona squamosa	Annonaceae	Introduced	
50	Annona muricata	Annonaceae	Introduced	
51	Centella asiatica	Apiaceae	Native	
52	Wrightia tinctoria	Apocynaceae	Native	
53	Plumeria rubra	Apocynaceae	Introduced	
54	Plumeria obtusa	Apocynaceae	Introduced	
55	Alstonia scholaris	Apocynaceae	Native	
56	Tylophora indica	Apocynaceae	Native	
57	Ichnocarpus sp.	Apocynaceae	Native	
58	Wattakaka volubilis	Apocynaceae	Native	
59	Calotropis gigantea	Apocynaceae	Native	
60	Carissa carandas	Apocynaceae	Native	
61	Nerium oleander	Apocynaceae	Native	
62	Plumeria alba	Apocynaceae	Introduced	
63	Oxystelma esculentum	Apocynaceae	Native	
64	Catharanthus roseus	Apocynaceae	Introduced	
65	Carissa spinarum	Apocynaceae	Native	
66	Cynanchum acidum	Apocynaceae	Native	
67	Vincetoxicum indicum	Apocynaceae	Native	
68	Ceropegia juncea	Apocynaceae	Native	
69	Rauvolfia serpentina	Apocynaceae	Native	
70	Asclepias curassavica	Apocynaceae	Introduced	Invasive
71	Ichnocarpus frutescens	Apocynaceae	Native	
72	Cascabela thevetia	Apocynaceae	Introduced	
73	Hemidesmus indicus	Apocynaceae	Native	
74	Rauvolfia tetraphylla	Apocynaceae	Introduced	
75	Allamanda blanchetii	Apocynaceae	Introduced	
76	Allamanda cathartica	Apocynaceae	Introduced	
77	Pergularia daemia	Apocynaceae	Native	
78	Gymnema sylvestre	Apocynaceae	Native	
79	Leptadenia reticulata	Apocynaceae	Native	
80	Aponogeton natans	Aponogetonaceae	Native	
81	Pistia stratiotes	Araceae	Introduced	Invasive
82	Spirodela polyrhiza	Araceae	Native	
83	Theriophonum minutum	Araceae	Native	
84	Amorphophallus sylvaticus	Araceae	Native	
85	Rhaphidophora pertusa	Araceae	Native	
86	Lemna aequinoctialis	Araceae	Introduced	Invasive
87	Cocos nucifera	Arecaceae	Native	
88	Livistona chinensis	Arecaceae	Introduced	
89	Phoenix sylvestris	Arecaceae	Native	
90	Borassus flabellifer	Arecaceae	Native	
91	Caryota mitis	Arecaceae	Introduced	
92	Roystonea regia	Arecaceae	Introduced	
93	Chrysalidocarpus lutescens	Arecaceae	Introduced	

S. No	Scientific Name	Family	Status	Invasiveness
94	Caryota urens	Arecaceae	Native	
95	Areca catechu	Arecaceae	Introduced	
96	Calamus rotang	Arecaceae	Native	
97	Corypha umbraculifera	Arecaceae	Native	
98	Phoenix loureiroi	Arecaceae	Native	
99	Pritchardia pacifica	Arecaceae	Introduced	
100	Rhapis excelsa	Arecaceae	Introduced	
101	Wodyetia bifurcata	Arecaceae	Introduced	
102	Asparagus racemosus	Asparagacea	Native	
103	Sansevieria roxburghiana	Asparagaceae	Native	
104	Urginea coromandeliana	Asparagaceae	Native	
105	Aloe vera	Asphodelaceae	Introduced	
106	Veronia cinerea	Asteraceae	Native	
107	Tridax procumbens	Asteraceae	Introduced	Invasive
108	Eclipta prostrata	Asteraceae	Introduced	Invasive
109	Ageratum conyzoides	Asteraceae	Introduced	Invasive
110	Sphagneticola trilobata	Asteraceae	Introduced	Invasive
111	Pulicaria dysenterica	Asteraceae	Introduced	
112	Blumea axillaris	Asteraceae	Native	
113	Chromolaena odorata	Asteraceae	Introduced	Invasive
114	Grangea maderaspatana	Asteraceae	Native	
115	Emilia sonchifolia	Asteraceae	Native	
116	Parthenium hysterophorus	Asteraceae	Introduced	Invasive
117	Acanthospermum hispidum	Asteraceae	Introduced	Invasive
118	Blainvillea dichotoma	Asteraceae	Introduced	
119	Blumea eriantha	Asteraceae	Native	
120	Epaltes divaricata	Asteraceae	Native	
121	Epaltes pygmaea	Asteraceae	Native	
122	Lagascea mollis	Asteraceae	Introduced	Invasive
123	Emilia sonchifolia	Asteraceae	Native	
124	Sphaeranthus indicus	Asteraceae	Native	
125	Synedrella nodiflora	Asteraceae	Introduced	Invasive
126	Vicoa indica	Asteraceae	Native	
127	Xanthium strumarium	Asteraceae	Introduced	Invasive
128	Basella alba	Basellaceae	Native	
129	Spathodea campanulata	Bignoniaceae	Introduced	
130	Kigelia africana	Bignoniaceae	Introduced	
131	Millingtonia hortensis	Bignoniaceae	Introduced	
132	Tabebuia aurea	Bignoniaceae	Introduced	
133	Tabebuia roseo-alba	Bignoniaceae	Introduced	
134	Tecoma stans	Bignoniaceae	Introduced	Invasive
135	Tabebuia heterophylla	Bignoniaceae	Introduced	
136	Handroanthus heptaphyllus	Bignoniaceae	Introduced	
137	Jacaranda mimosifolia	Bignoniaceae	Introduced	
138	Tabebuia rosea	Bignoniaceae	Introduced	
139	Crescentia cujete	Bignoniaceae	Introduced	

S. No	Scientific Name	Family	Status	Invasiveness
140	Dolichandrone falcata	Bignoniaceae	Native	
141	Tabebuia spectabilis	Bignoniaceae	Introduced	
142	Tecomaria capensis	Bignoniaceae	Introduced	
143	Bombax ceiba	Bombacaceae	Native	
144	Cordia obliqua	Boraginaceae	Native	
145	Heliotropium indicum	Boraginaceae	Introduced	Invasive
146	Cordia sebestena	Boraginaceae	Introduced	
147	Heliotropium curassavicum	Boraginaceae	Introduced	
148	Trichodesma indicum	Boraginaceae	Native	
149	Coldenia procumbens	Boraginaceae	Native	
150	Cordia dichotoma	Boraginaceae	Native	
151	Ehretia microphylla	Boraginaceae	Native	
152	Ehretia pubescens	Boraginaceae	Native	
153	Ehretia ovalifolia	Boraginaceae	Native	
154	Heliotropium bracteatum	Boraginaceae	Native	
155	Heliotropium scabrum	Boraginaceae	Native	
156	Opuntia ficus-indica	Cactaceae	Introduced	
157	Cereus repandus	Cactaceae	Introduced	
158	Opuntia stricta	Cactaceae	Introduced	
159	Opuntia dillenii	Cactaceae	Introduced	Invasive
160	Peltophorum pterocarpum	Caesalpiniaceae	Native	
161	Caesalpinia coriaria	Caesalpiniaceae	Introduced	
162	Delonix regia	Caesalpiniaceae	Introduced	
163	Tamarindus indica	Caesalpiniaceae	Native	
164	Calophyllum inophyllum	Calophyllaceae	Native	
165	Canna indica	Cannaceae	Introduced	
166	Capparis zeylanica	Capparaceae	Native	
167	Crateva adansonii	Capparaceae	Native	
168	Maerua oblongifolia	Capparaceae	Native	
169	Capparis brevispina	Capparaceae	Native	
170	Capparis divaricata	Capparaceae	Native	
171	Cadaba fruticosa	Capparaceae	Native	
172	Capparis sepiaria	Capparaceae	Native	
173	Crateva magna	Capparidaceae	Native	
174	Carica papaya	Caricaceae	Introduced	
175	Polycarpaea corymbosa	Caryophyllaceae	Native	
176	Casuarina equisetifolia	Calacterace	Introduced	Invasive
177	Maytenus emarginata	Classraceae	Native	
178	Cleome viscosa	Cleomaceae	Native	lance of the
179	Cleome rutidosperma	Cleomaceae	Introduced	Invasive
180	Cleome aspera	Cleomaceae	Native	
181	Clusia rosea	Clusia ceae	Introduced	
182	Garcinia spicata	Colobiasceae	Native	
183	Gloriosa superba	Colchicaceae	Native	
184	Iphigenia indica	Conhrotaceae	Native	
185	Combretum ovalifolium	Combretaceae	Native	

S. No	Scientific Name	Family	Status	Invasiveness
186	Terminalia catappa	Combretaceae	Native	
187	Terminalia arjuna	Combretaceae	Native	
188	Quisqualis indica	Combretaceae	Native	
189	Combretum albidum	Combretaceae	Native	
190	Combretum indicum	Combretaceae	Native	
191	Conocarpus lancifolius	Combretaceae	Introduced	
192	Terminalia bellirica	Combretaceae	Native	
193	Terminalia mantaly	Combretaceae	Introduced	
194	Commelina benghalensis	Commelinaceae	Native	
195	Commelina undulata	Commelinaceae	Native	
196	Commelina clavata	Commelinaceae	Native	
197	Murdannia striatipetala	Commelinaceae	Native	
198	Cyanotis axillaris	Commelinaceae	Native	
199	Commelina ramulosa	Commelinaceae	Introduced	
200	Aneilema nudiflorum	Commelinaceae	Native	
201	Tradescantia spathacea	Commelinaceae	Introduced	
202	Merreria tridentata	Convolvulaceae	Native	
203	Evolvulus nummularius	Convolvulaceae	Introduced	Invasive
204	Evolvulus alsinoides	Convolvulaceae	Native	
205	Ipomoea aquatica	Convolvulaceae	Native	
206	Ipomoea obscura	Convolvulaceae	Native	
207	Ipomoea pes-tigridis	Convolvulaceae	Native	
208	Ipomoea carnea	Convolvulaceae	Introduced	Invasive
209	Ipomoea pes-caprae	Convolvulaceae	Native	
210	Xenostegia tridentata	Convolvulaceae	Native	
211	Merremia emarginata	Convolvulaceae	Native	
212	Merremia hederacea	Convolvulaceae	Native	
213	Rivea hypocrateriformis	Convolvulaceae	Native	
214	Cuscuta chinensis	Convolvulaceae	Native	
215	Ipomoea kentrocaulos	Convolvulaceae	Native	
216	Jacquemontia ovalifolia	Convolvulaceae	Introduced	
217	Ipomoea hederifolia	Convolvulaceae	Introduced	
218	Alangium salvifolium	Cornaceae	Native	
219	Costus pictus	Costaceae	Native	
220	Kalanchoe pinnata	Crassulaceae	Introduced	
221	Coccinia grandis	Cucurbitaceae	Native	
222	Mukia madaresapatana	Cucurbitaceae	Native	
223	Momordica charantia	Cucurbitaceae	Native	
224	Luffa aegyptiaca	Cucurbitaceae	Native	
225	Luffa cylindrica	Cucurbitaceae	Native	
226	Coccinia cordifolia	Cucurbitaceae	Native	
227	Melothria amplexicaulis	Cucurbitaceae	Native	
228	Cucumis melo	Cucurbitaceae	Native	
229	Cyperus rotundus	Cyperaceae	Native	
230	Bulbostylis barbata	Cyperaceae	Native	
231	Cyperus distans	Cyperaceae	Native	

S. No	Scientific Name	Family	Status	Invasiveness
232	Cyperus exaltatus	Cyperaceae	Native	
233	Cyperus mindorensis	Cyperaceae	Native	
234	Fimbristylis argentea	Cyperaceae	Native	
235	Cyperus mitis	Cyperaceae	Native	
236	Cyperus alternifolius	Cyperaceae	Introduced	
237	Cyperus aristatus	Cyperaceae	Native	
238	Cyperus castaneus	Cyperaceae	Native	
239	Cyperus compressus	Cyperaceae	Native	
240	Fimbristylis monstachya	Cyperaceae	Native	
241	Kyllinga triceps	Cyperaceae	Native	
242	Mariscus pictus	Cyperaceae	Native	
243	Dillenia pentagyna	Dilleniaceae	Native	
244	Dioscorea alata	Dioscoreaceae	Native	
245	Dioscorea oppositifolia	Dioscoreaceae	Native	
246	Dioscorea pentaphylla	Dioscoreaceae	Native	
247	Drosera burmanni	Droseraceae	Native	
248	Diospyros ebenum	Ebenaceae	Native	
249	Diospyros malabarica	Ebenaceae	Native	
250	Diospyros chloroxylon	Ebenaceae	Native	
251	Maba buxifolia/Diospyros ferrea	Ebenaceae	Native	
252	Eriocaulon cinereum	Eriocaulaceae	Native	
253	Hura Crepitans	Euphorbiaceae	Introduced	
254	Acalypha indica	Euphorbiaceae	Native	
255	Micrococca mercurialis	Euphorbiaceae	Native	
256	Croton bonplandianus	Euphorbiaceae	Introduced	Invasive
257	Euphorbia hirta	Euphorbiaceae	Introduced	Invasive
258	Jatropha podagrica	Euphorbiaceae	Introduced	
259	Jatropha gossypiifolia	Euphorbiaceae	Introduced	Invasive
260	Ricinus communis	Euphorbiaceae	Introduced	Invasive
261	Chrozophora rottleri	Euphorbiaceae	Native	
262	Euphorbia maculata	Euphorbiaceae	Introduced	
263	Euphorbia antiquorum	Euphorbiaceae	Native	
264	Euphorbia glaucescens	Euphorbiaceae	Native	
265	Euphorbia milii	Euphorbiaceae	Introduced	
266	Euphorbia tirucalli	Euphorbiaceae	Introduced	
267	Euphorbia tithymaloides	Euphorbiaceae	Introduced	
268	Tragia involucrata	Euphorbiaceae	Native	
269	Vernicia fordii	Euphorbiaceae	Introduced	
270	Acalypha wilkesiana	Euphorbiaceae	Introduced	
271	Codiaeum variegatum	Euphorbiaceae	Introduced	
272	Euphorbia cristata	Euphorbiaceae	Native	
273	Euphorbia heterophylla	Euphorbiaceae	Introduced	
274	Euphorbia rosea	Euphorbiaceae	Native	
275	Microstachys chamaelea	Euphorbiaceae	Native	
276	Baliospermum montanum	Euphorbiaceae	Native	
277	Pterolobium indicum	Fabacea	Native	

S. No	Scientific Name	Family	Status	Invasiveness
278	Samanea saman	Fabaceae	Introduced	
279	Cassia roxburghii	Fabaceae	Native	
280	Leucaena latisiliqua	Fabaceae	Introduced	
281	Albizia lebbeck	Fabaceae	Native	
282	Cassia fistula	Fabaceae	Native	
283	Prosopis juliflora	Fabaceae	Introduced	Invasive
284	Adenanthera pavonina	Fabaceae	Native	
285	Pithecellobium dulce	Fabaceae	Introduced	Invasive
286	Acacia auriculiformis	Fabaceae	Introduced	Invasive
287	Acacia leucophloea	Fabaceae	Native	
288	Albizzia amara	Fabaceae	Native	
289	Bauhinia purpurea	Fabaceae	Native	
290	Bauhinia racemosa	Fabaceae	Native	
291	Erythrina variegata	Fabaceae	Native	
292	Saraca indica	Fabaceae	Native	
293	Butea monosperma	Fabaceae	Native	
294	Dichrostachys cinerea	Fabaceae	Native	
295	Cassia siamea	Fabaceae	Introduced	
296	Parkia biglandulosa	Fabaceae	Introduced	
297	Enterolobium contortisiliquum	Fabaceae	Introduced	
298	Alysicarpus ovalifolius	Fabaceae	Native	
299	Indigofera linneai	Fabaceae	Native	
300	Desmodium triflorum	Fabaceae	Native	
301	Cassia surattensis	Fabaceae	Native	
302	Clitoria ternatea	Fabaceae	Introduced	
303	Crotalaria leschenaultii	Fabaceae	Native	
304	Crotalaria retusa	Fabaceae	Native	
305	Cassia auriculata	Fabaceae	Native	
306	Cassia sophera	Fabaceae	Introduced	
307	Cassia tora	Fabaceae	Introduced	
308	Mimosa pudica	Fabaceae	Introduced	Invasive
309	Bauhinia acuminata	Fabaceae	Introduced	
310	Ceasalpinia pulcherrima	Fabaceae	Introduced	
311	Bauhinia tomentosa	Fabaceae	Introduced	
312	Gliricidia sepium	Fabaceae	Introduced	
313	Cassia javanica	Fabaceae	Introduced	
314	Acacia nilotica	Fabaceae	Native	
315	Libidibia ferrea	Fabaceae	Introduced	
316	Enterolobium cyclocarpum	Fabaceae	Introduced	
317	Neptunia pubescens	Fabaceae	Introduced	
318	Mimosa rubicaulis	Fabaceae	Native	
319	Acacia holosericea	Fabaceae	Introduced	
320	Crotalaria pumila	Fabaceae	Introduced	
321	Crotalaria verrucosa	Fabaceae	Native	
322	Abrus precatorius	Fabaceae	Native	
323	Canavalia ensiformis	Fabaceae	Introduced	

S. No	Scientific Name	Family	Status	Invasiveness
324	Pterolobium hexapetalum	Fabaceae	Native	
325	Vigna trilobata	Fabaceae	Native	
326	Brachypterum scandens	Fabaceae	Native	
327	Cajanus scarabaeoides	Fabaceae	Native	
328	Aeschynomene indica	Fabaceae	Native	
329	Senna occidentalis	Fabaceae	Introduced	Invasive
330	Senna uniflora	Fabaceae	Introduced	Invasive
331	Canavalia rosea	Fabaceae	Native	
332	Tephrosia purpurea	Fabaceae	Native	
333	Macroptilium lathyroides	Fabaceae	Introduced	Invasive
334	Alysicarpus vaginalis	Fabaceae	Native	
335	Crotalaria pallida	Fabaceae	Native	
336	Erythrina variegata	Fabaceae	Native	
337	Libidibia coriaria	Fabaceae	Introduced	
338	Leucaena leucocephala	Fabaceae	Introduced	Invasive
339	Ormocarpum sennoides	Fabaceae	Native	
340	Parkinsonia aculeata	Fabaceae	Introduced	
341	Rhynchosia minima	Fabaceae	Native	
342	Saraca asoca	Fabaceae	Native	
343	Senegalia caesia	Fabaceae	Native	
344	Senna hirsuta	Fabaceae	Introduced	Invasive
345	Tephrosia maxima	Fabaceae	Native	
346	Vachellia leucophloea	Fabaceae	Native	
347	Acacia planifrons	Fabaceae	Native	
348	Senna alata	Fabaceae	Introduced	Invasive
349	Delonix elata	Fabaceae	Introduced	
350	Pterocarpus marsupium	Fabaceae	Native	
351	Pterocarpus santalinus	Fabaceae	Native	
352	Sesbania grandiflora	Fabaceae	Introduced	
353	Crotalaria laburnifolia	Fabaceae	Native	
354	Desmodium biarticulatum	Fabaceae	Native	
355	Indigofera tinctoria	Fabaceae	Native	
356	Rhynchosia cana	Fabaceae	Native	
357	Stylosanthes mucronata	Fabaceae	Native	
358	Cassia absus	Fabaceae	Native	
359	Cassia pumila	Fabaceae	Native	
360	Crotalaria evolvuloides	Fabaceae	Native	
361	Crotalaria medicaginea	Fabaceae	Native	
362	Crotalaria prostrata	Fabaceae	Native	
363	Desmodium gangeticum	Fabaceae	Native	
364	Goniogyna hirta	Fabaceae	Native	
365	Indigofera enneaphylla	Fabaceae	Introduced	
366	Phaseolus trilobus	Fabaceae	Introduced	
367	Pseudarthria viscida	Fabaceae	Native	
368	Pycnospora hedysaroides	Fabaceae	Native	
369	Rhynchosia aurea	Fabaceae	Native	

S. No	Scientific Name	Family	Status	Invasiveness
370	Tephrosia pumila	Fabaceae	Native	
371	Zornia diphylla	Fabaceae	Native	
372	Canavalia Virosa	Fabaceae	Native	
373	Derris scandens	Fabaceae	Native	
374	Macroptilium atropurpureum	Fabaceae	Introduced	Invasive
375	Canscora heteroclite	Gentianaceae	Native	
376	Enicostema axillare	Gentianaceae	Native	
377	Exacum pedunculatum	Gentianaceae	Native	
378	Hoppea dichotoma	Gentianaceae	Native	
379	Elodea canadensis	Hydrocharitaceae	Introduced	
380	Ottelia alismoides	Hydrocharitaceae	Native	
381	Hydrolea zeylanica	Hydroleaceae	Native	
382	Curculigo orchioides	Hypoxidaceae	Native	
383	Bignonia megapotamica	Lamiaceae	Introduced	
384	Gmelina asiatica	Lamiaceae	Native	
385	Tectona grandis	Lamiaceae	Native	
386	Hyptis suaveolens	Lamiaceae	Introduced	
387	Clerodendrum inerme	Lamiaceae	Native	
388	Vitex negundo	Lamiaceae	Native	
389	Leucas aspera	Lamiaceae	Native	
390	Premna serratifolia	Lamiaceae	Native	
391	Orthosiphon aristatus	Lamiaceae	Native	
392	Anisomeles indica	Lamiaceae	Native	
393	Leonotis nepetifolia	Lamiaceae	Introduced	Invasive
394	Leucas biflora	Lamiaceae	Native	
395	Marrubium vulgare	Lamiaceae	Introduced	
396	Ocimum americanum	Lamiaceae	Native	
397	Anisomeles malabarica	Lamiaceae	Native	
398	Basilicum polystachyon	Lamiaceae	Native	
399	Coleus amboinicus	Lamiaceae	Native	
400	Ocimum tenuiflorum	Lamiaceae	Native	
401	Premna mollissima	Lamiaceae	Native	
402	Volkameria inermis	Lamiaceae	Native	
403	Leucas diffusa	Lamiaceae	Native	
404	Ocimum adscendens	Lamiaceae	Native	
405	Litsea glutinosa	Lauraceae	Native	
406	Barringtonia acutangula	Lecythidaceae	Native	
407	Couroupita guianensis	Lecythidaceae	Introduced	
408	Hugonia mystax	Linaceae	Native	
409	Lindernia dubia	Linderniaceae	Introduced	
410	Ilysanthes oppositifolia	Linderniaceae	Native	
411	Dendrophthoe falcata	Loranthaceae	Native	
412	Largerstroemia floribunda	Lythraceae	Introduced	
413	Largerstroemia speciosa	Lythraceae	Native	
414	Woodfordia fruticosa	Lythraceae	Native	
415	Punica granatum	Lythraceae	Introduced	

S. No	Scientific Name	Family	Status	Invasiveness
416	Lawsonia inermis	Lythraceae	Native	
417	Lagerstroemia indica	Lythraceae	Introduced	
418	Ammannia baccifera	Lythraceae	Native	
419	Rotala leptopetala	Lythraceae	Native	
420	Magnolia champaca	Magnoliaceae	Native	
421	Galphimia glauca	Malpighiaceae	Introduced	
422	Hiptage benghalensis	Malpighiaceae	Native	
423	Thespesia populnea	Malvaceae	Native	
424	Adansonia digitata	Malvaceae	Introduced	
425	Bombax insigne	Malvaceae	Native	
426	Pterospermum acerifolium	Malvaceae	Native	
427	Ceiba pentandra	Malvaceae	Introduced	
428	Hibiscus tiliaceus	Malvaceae	Native	
429	Corchorus aestuans	Malvaceae	Native	Invasive
430	Hibiscus rosa-sinensis	Malvaceae	Introduced	
431	Hibiscus schizopetalus	Malvaceae	Introduced	
432	Waltheria indica	Malvaceae	Introduced	Invasive
433	Grewia asiatica	Malvaceae	Native	
434	Pavonia odorata	Malvaceae	Native	
435	Abutilon indicum	Malvaceae	Native	
436	Sida acuta	Malvaceae	Introduced	Invasive
437	Sida abutilifolia	Malvaceae	Introduced	
438	Sida cordifolia	Malvaceae	Native	
439	Hibiscus micranthus	Malvaceae	Native	
440	Hibiscus vitifolius	Malvaceae	Native	
441	Urena lobata	Malvaceae	Native	
442	Pentapetes phoenicea	Malvaceae	Native	
443	Berrya cordifolia	Malvaceae	Native	
444	Melochia corchorifolia	Malvaceae	Native	
445	Sida cordata	Malvaceae	Native	
	Grewia rotundifolia/ Grewia			
446	orbiculata	Malvaceae	Native	
447	Helicteres isora	Malvaceae	Native	
448	Pterospermum suberifolium	Malvaceae	Native	
449	Grewia hirsuta	Malvaceae	Native	
450	Grewia orientalis	Malvaceae	Native	
451	Abutilon hirtum	Malvaceae	Native	
452	Malvastrum coromandelianum	Malvaceae	Introduced	Invasive
453	Melochia nodiflora	Malvaceae	Introduced	
454	Sida rhombifolia	Malvaceae	Native	
455	Sida schimperiana  Tricumfotta rhambaida a	Malvaceae	Introduced	
456	Triumfetta rhomboidea	Malvaceae	Native	lmar sires
457	Martynia annua	Martyniaceae	Introduced	Invasive
458	Memecylon umbellatum	Melastomataceae	Native	
459	Osbeckia zeylanica	Melastomataceae	Native	
460	Azadirachta indica	Meliaceae	Native	

S. No	Scientific Name	Family	Status	Invasiveness
461	Khaya senegalensis	Meliaceae	Introduced	
462	Swietenia macrophylla	Meliaceae	Introduced	
463	Swietenia mahagoni	Meliaceae	Introduced	
464	Pachygone ovata	Menispermaceae	Native	
465	Tinospora cordifolia	Menispermaceae	Native	
466	Cocculus hirsutus	Menispermaceae	Native	
467	Tiliacora acuminata	Menispermaceae	Native	
468	Nymphoides hydrophylla	Menyanthaceae	Native	
469	Paramollugo nudicaulis	Molluginaceae	Native	
470	Trigastrotheca pentaphylla	Molluginaceae	Native	
471	Mollugo oppositifolia	Molluginaceae	Native	
472	Ficus religiosa	Moraceae	Native	
473	Ficus benghalensis	Moraceae	Native	
474	Artocarpus integrifolia	Moraceae	Native	
475	Ficus amplissima	Moraceae	Native	
476	Ficus racemosa	Moraceae	Native	
477	Strebulus asper	Moraceae	Native	
478	Artocarpus heterophyllus	Moraceae	Native	
479	Ficus elastica	Moraceae	Introduced	
480	Ficus benjamina	Moraceae	Native	
481	Morus indica	Moraceae	Native	
482		Moraceae	Native	
483	Plecospermum spinosum		Native	
	Moringa oleifera	Moringaceae	Introduced	Image dive
484	Muntingia calabura	Muntingiaceae		Invasive
485	Musa × paradisiaca	Musaceae	Introduced	
486	Syzygium cumini	Myrtaceae	Native	lucius siece
487	Psidium guajava Callistemon viminalis	Myrtaceae	Introduced	Invasive
488		Myrtaceae	Introduced	lucius sinus
489	Eugenia uniflora	Myrtaceae	Introduced	Invasive
490	Eucalyptus tereticornis	Myrtaceae	Introduced	
404	Callistemon lanceolatus/			
491	Melaleuca citrina	Myrtaceae	Introduced	
492	Boerhavia diffusa	Nyctaginaceae	Native	
493	Bougainvillea spectabilis	Nyctaginaceae	Introduced	
494	Boerhavia erecta	Nyctaginaceae	Introduced	Invasive
495	Bougainvillea glabra	Nyctaginaceae	Introduced	
496	Pisonia grandis	Nyctaginaceae	Native	
497	Nymphaea alba	Nymphaeaceae	Introduced	
498	Nymphaea nouchali	Nymphaeaceae	Native	
499	Nymphaea rubra	Nymphaeaceae	Native	
500	Nymphaea pubescens	Nymphaeaceae	Native	
501	Ochna integerrima	Ochnaceae	Introduced	
502	Ochna serrulata	Ochnaceae	Introduced	
503	Ochna squarrosa	Ochnaceae	Native	
504	Nytanthes arbor-tristis	Oleaceae	Native	
505	Jasminum malabaricum	Oleaceae	Native	

S. No	Scientific Name	Family	Status	Invasiveness
506	Jasminum sambac	Oleaceae	Native	
507	Jasminum multipartitum	Oleaceae	Introduced	
508	Jasminum angustifolium	Oleaceae	Native	
509	Jasminum auriculatum	Oleaceae	Native	
510	Linociera zeylanica	Oleaceae	Native	
511	Ludwigia hyssopifolia	Onagraceae	Introduced	
512	Ludwigia adscendens	Onagraceae	Native	
513	Ludwigia perennis	Onagraceae	Native	
514	Cansjera rheedei	Opiliaceae	Native	
515	Eulophia epidendraea	Orchidaceae	Native	
516	Habenaria platyphylla	Orchidaceae	Native	
517	Spathoglottis plicata	Orchidaceae	Native	
518	Vanda tessellata	Orchidaceae	Native	
519	Vanda spathulata	Orchidaceae	Native	
520	Striga angustifolia	Orobanchaceae	Native	
521	Sopubia delphiniifolia	Orobanchaceae	Native	
522	Striga densiflora	Orobanchaceae	Native	
523	Biophytum sensitivum	Oxalidaceae	Native	
524	Pandanus tectorius	Pandanaceae	Introduced	
525	Argemone mexicana	Papaveraceae	Introduced	Invasive
526	Glricidia sepium	Papilionaceae	Introduced	
527	Pongamia pinnata	Papilionaceae	Native	
528	Turnera subulata	Passifloraceae	Introduced	Invasive
529	Turnera ulmifolia	Passifloraceae	Introduced	Invasive
530	Passiflora foetida	Passifloraceae	Introduced	Invasive
531	Pedalium murex	Pedaliaceae	Native	
532	Sesamum alatum	Pedaliaceae	Introduced	Invasive
533	Sesamum indicum	Pedaliaceae	Native	
534	Phyllanthus emblica	Phyllanthaceae	Native	
535	Phylanthus maderaspatensis	Phyllanthaceae	Native	
536	Phyllanthus reticulatus	Phyllanthaceae	Native	
537	Breynia androgyna	Phyllanthaceae	Native	
538	Flueggea leucopyrus	Phyllanthaceae	Native	
539	Phyllanthus acidus	Phyllanthaceae	Introduced	
540	Phyllanthus amarus	Phyllanthaceae	Introduced	
541	Phyllanthus maderaspatensis	Phyllanthaceae	Native	
542	Phyllanthus virgatus	Phyllanthaceae	Native	
543	Breynia retusa	Phyllanthaceae	Native	
544	Breynia vitis-idaea	Phyllanthaceae	Native	
545	Phyllanthus asperulatus	Phyllanthaceae	Introduced	
546	Securinega leucopyrus	Phyllanthaceae	Native	
547	Agyneia bacciformis	Phyllanthaceae	Native	
548	Piper betle	Piperaceae	Introduced	
549	Piper nigrum	Piperaceae	Native	
550	Peperomia pellucida	Piperaceae	Introduced	Invasive
551	Bacopa monnieri	Plantaginaceae	Native	

S. No	Scientific Name	Family	Status	Invasiveness
552	Scoparia dulcis	Plantaginaceae	Introduced	Invasive
553	Limnophila indica	Plantaginaceae	Native	
554	Angelonia salicariifolia	Plantaginaceae	Introduced	
555	Plumbago zeylanica	Plumbaginaceae	Native	
556	Bambus vulgaris	Poaceae	Introduced	
557	Axonopus compressus	Poaceae	Introduced	Invasive
558	Bambusa balcooa	Poaceae	Native	
559	Bambusa bambos	Poaceae	Native	
560	Chrysopogon fulvus	Poaceae	Native	
561	Chloris barbata	Poaceae	Native	
562	Chrysopogon zizanioides	Poaceae	Native	
563	Cymbopogon flexuosus	Poaceae	Native	
564	Cynodon dactylon	Poaceae	Native	
565	Dactyloctenium aegyptium	Poaceae	Native	
566	Echinochloa colonum	Poaceae	Native	
567	Eleusine indica	Poaceae	Native	
568	Eragrostis riparia	Poaceae	Native	
569	Eragrostis tenella	Poaceae	Native	
570	Eragrostis viscosa	Poaceae	Native	
571	Heteropogon contortus	Poaceae	Native	
572	Oplismenus burmanni	Poaceae	Native	
573	Perotis indica	Poaceae	Native	
574	Saccharum spontaneum	Poaceae	Native	
575	Urochloa reptans	Poaceae	Native	
576	Apluda aristata	Poaceae	Native	
577	Aristida funiculata	Poaceae	Native	
578	Aristida setacea	Poaceae	Native	
579	Cenchrus setigerus	Poaceae	Native	
580	Eragrostiella bifaria	Poaceae	Native	
581	Polygala chinensis	Polygalaceae	Native	
582	Polygala javana	Polygalaceae	Native	
583	Coccoloba uvifera	Polygonaceae	Introduced	
584	Antigonon leptopus	Polygonaceae	Introduced	Invasive
585	Polygonum plebeium	Polygonaceae	Native	
586	Pontederia crassipes	Pontederiaceae	Introduced	Invasive
587	Portulaca oleracea	Portulacaceae	Introduced	Invasive
588	Portulaca grandiflora	Portulacaceae	Introduced	
589	Portulaca quadrifida	Portulacaceae	Native	
590	Ceratopteris thalictroides	Pteridaceae	Native	
591	Putranjiva roxburghii	Putranjivaceae	Native	
592	Drypetes sepiaria	Putranjivaceae	Native	
593	Naravelia zeylanica	Ranunculaceae	Native	
594	Ziziphus mauritiana	Rhamnaceae	Native	
595	Ziziphus jujuba	Rhamnaceae	Introduced	
596	Ziziphus oenopolia	Rhamnaceae	Native	
597	Ventilago madraspatana	Rhamnaceae	Native	

S. No	Scientific Name	Family	Status	Invasiveness
598	Ziziphus xylopyrus	Rhamnaceae	Native	
599	Ixora pavetta	Rubiaceae	Native	
600	Morinda citrifolia	Rubiaceae	Native	
601	Oldenlandia umbellata	Rubiaceae	Native	
602	Canthium dicoccum	Rubiaceae	Native	
603	Benkara malabarica	Rubiaceae	Native	
604	Pavetta indica	Rubiaceae	Native	
605	Mussaenda philippica	Rubiaceae	Introduced	
606	Hamelia patens	Rubiaceae	Introduced	
607	Morinda pubescens	Rubiaceae	Native	
608	Oldenlandia corymbosa	Rubiaceae	Native	
609	Coffea wightiana	Rubiaceae	Native	
610	Ixora parviflora	Rubiaceae	Introduced	
611	Gardenia latifolia	Rubiaceae	Native	
612	Tarenna asiatica	Rubiaceae	Native	
613	Spermacoce ocymoides	Rubiaceae	Native	
614	Spermacoce hispida	Rubiaceae	Native	
615	Spermacoce articularis	Rubiaceae	Native	
616	Gardenia jasminoides	Rubiaceae	Introduced	
617	lxora coccinea	Rubiaceae	Native	
618	Mussaenda erythrophylla	Rubiaceae	Introduced	
619	Neolamarckia cadamba	Rubiaceae	Native	
620	Pentas lanceolata	Rubiaceae	Introduced	
621	Canthium didymum	Rubiaceae	Native	
622	Canthium parviflorum	Rubiaceae	Native	
623	Xeromphis spinosa	Rubiaceae	Native	
624	Oldenlandia herbaceae	Rubiaceae	Native	
625	Mitracarpus hirtus	Rubiaceae	Introduced	Invasive
626	Limonia acidissima	Rutaceae	Native	
627	Atalantia monophylla	Rutaceae	Native	
628	Glycosmis mauritiana	Rutaceae	Native	
629	Murraya panniculata	Rutaceae	Native	
630	Aegle marmelos	Rutaceae	Native	
631	Bergera koenigii	Rutaceae	Native	
632	Citrus × limon	Rutaceae	Introduced	
633	Citrus medica	Rutaceae	Introduced	
634	Clausena anisata	Rutaceae	Native	
635	Pamburus missionis	Rutaceae	Native	
636	Zanthoxylum asiaticum	Rutaceae	Native	
637	Chloroxylon swietenia	Rutaceae	Native	
638	Glycosmis cochinchinensis	Rutaceae	Introduced	
639	Flacourtia indica	Salicaceae	Native	
640	Santalum album	Santalaceae	Introduced	
641	Sapindus trifoliatus	Sapindaceae	Native	
642	Lepisantus tetraphylla	Sapindaceae	Native	
643	Cardiospermum halicacabum	Sapindaceae	Native	

iveness	Status	Family	Scientific Name	S. No
	Native	Sapindaceae	Dodonaea viscosa	644
	Native	Sapindaceae	Filicium decipiens	645
	Native	Sapindaceae	Sapindus emarginatus	646
	Native	Sapindaceae	Schleichera trijuga	647
	Native	Sapindaceae	Allophylus serratus	648
	Native	Sapotaceae	Madhuca longifolia	649
	Native	Sapotaceae	Mimusops elengi	650
	Native	Sapotaceae	Manilkara hexandra	651
	Introduced	Sapotaceae	Manilkara zapota	652
	Native	Sapotaceae	Palaquim ellipticum	653
	Introduced	Solanaceae	Datura metel	654
	Introduced	Solanaceae	Solanum anguivi	655
	Introduced	Solanaceae	Physalis minima	656
	Native	Solanaceae	Solanum surattense	657
	Native	Solanaceae	Solanum trilobatum	658
	Native	Solanaceae	Solanum virginianum	659
	Introduced	Solanaceae	Cestrum diurnum	660
sive		Solanaceae	Physalis angulata	661
	Native	Solanaceae	Solanum incanum	662
sive		Solanaceae	Solanum torvum	663
sive		Solanaceae	Cestrum nocturnum	664
	Native	Solanaceae	Solanum nigrum	665
	Introduced	Sterculiaceae	Guazuma ulmifolia	666
	Native	Sterculiaceae	Sterculia foetida	667
	Native	Sterculiaceae	Pterospermum canescens	668
	Introduced	Strelitziaceae	Ravenala madagascariensis	669
	Introduced	Talinaceae	Talinum fruticosum	670
	Native	Thymelaeaceae	Wikstroemia indica	671
sive	Introduced	Typhaceae	Typha angustifolia	672
	Native	Ulmaceae	Holoptelea integrifolia	673
sive	Introduced	Urticaceae	Pilea microphylla	674
	Native	Verbenaceae	Premna latifolia	675
	Native	Verbenaceae	Gmelina arborea	676
	Native	Verbenaceae	Vitex altissima	677
sive	Introduced	Verbenaceae	Lantana camara	678
sive	Introduced	Verbenaceae	Stachytarpheta jamaicensis	679
	Native	Verbenaceae	Phyla nodiflora	680
	Introduced	Verbenaceae	Duranta plumieri	681
	Introduced	Verbenaceae	Stachytarpheta indica	682
	Native	Violaceae	Pigea enneasperma	683
	Native	Vitaceae	Cissus vitiginea	684
	Native	Vitaceae	Cissus quadrangularis	685
	Introduced	Zingiberaceae	Alpinia galana	686
sive		Zygophyllaceae	Tribulus terrestris	687
	Introduced	Zygophyllaceae	Guaiacum officinale	688
siv	Introduced Introduced Native Introduced Introduced Native Native Native Introduced Introduced Introduced	Verbenaceae Verbenaceae Verbenaceae Verbenaceae Verbenaceae Violaceae Violaceae Vitaceae Vitaceae Zingiberaceae Zygophyllaceae	Lantana camara Stachytarpheta jamaicensis Phyla nodiflora Duranta plumieri Stachytarpheta indica Pigea enneasperma Cissus vitiginea Cissus quadrangularis Alpinia galana Tribulus terrestris	678 679 680 681 682 683 684 685 686

Table 6: Butterflies recorded from Chennai (Indicator 6)

S. No.	Common Name	Scientific Name	Family
		Gomalia elma	· ·
1	African Marbled Skipper		Hesperiidae
2	Brown Awl	Badamia exclamationis	Hesperiidae
3	Bush Hopper	Ampittia dioscorides	Hesperiidae
4	Chestnut Bob	lambrix salsala	Hesperiidae
5	Common Banded Awl	Hasora chromus	Hesperiidae
6	Grass Demon	Ancistroides folus	Hesperiidae
7	Indian palm bob	Suastus gremius	Hesperiidae
8	Indian Skipper	Spialia galba	Hesperiidae
9	Pointed ciliate blue	Anthene lycaenina	Hesperiidae
10	Rice swift	Borbo cinnara	Hesperiidae
11	Small Branded Swift	Pelopidas mathias	Hesperiidae
12	Tricoloured Flat	Coladenia indrani	Hesperiidae
13	White Banded Awl	Hasora taminatus	Hesperiidae
14	African Babul Blue	Azanus jesous	Lycaenidae
15	Apefly	Spalgis epius	Lycaenidae
16	Bright babul blue	Azanus ubaldus	Lycaenidae
17	Common Cerulean	Jamides celeno	Lycaenidae
18	Common guava blue	Virachola isocrates	Lycaenidae
19	Common Mime	Papilio clytia	Lycaenidae
20	Common pierrot	Castalius rosimon	Lycaenidae
21	Common Shot silverline	Spindasis ictis	Lycaenidae
22	Dark Cerulean	Jamides bochus	Lycaenidae
23	Dark Grass Blue	Zizeeria karsandra	Lycaenidae
24	Forget Me Not	Catochrysops strabo	Lycaenidae
25	Gram Blue	Euchrysops cnejus	Lycaenidae
26	Indian Common line blue	Prosotas nora	Lycaenidae
27	Indian Red Flash	Rapala iarbus	Lycaenidae
28	Indian sunbeam	Curetis thetis	Lycaenidae
29	Indian Tailless line blue	Prosotas dubiosa	Lycaenidae
30	Large Oak Blue	Arhopala amantes	Lycaenidae
31	Lime Blue	Chilades lajus	Lycaenidae
32	Monkey puzzle	Rathinda amor	Lycaenidae
33	Opaque Six Line Blue	Nacaduba beroe	Lycaenidae
34	Oriental Grass Jewel	Freyeria putli	Lycaenidae
35	Pea Blue	Lampides boeticus	Lycaenidae
36	Plains Cupid	Chilades pandava	Lycaenidae
37	Small cupid	Chilades parrhasius	Lycaenidae
38	Tiny Grass Blue	Zizula hylax	Lycaenidae
39	Zebra blue	Leptotes plinius	Lycaenidae
40	Angled Castor	Ariadne ariadne	Nymphalidae
41	Black Rajah	Charaxes solon	Nymphalidae
42	· · · · · · · · · · · · · · · · · · ·		
42	Blue pansy	Junonia orithiya	Nymphalidae
	Brown king crow	Euploea klugii	Nymphalidae
44	Chestnut streaked sailer	Neptis jumbah	Nymphalidae
45	Chocolate pansy	Junonia iphita	Nymphalidae
46	Common Bushbrown	Mycalesis perseus	Nymphalidae

S. No.	Common Name	Scientific Name	Family
47	Common castor	Ariadne merione	Nymphalidae
48	Common Evening Brown	Melanitis leda	Nymphalidae
49	Common leopard	Phalanta phalantha	Nymphalidae
50	Common Sailer	Neptis hylas	Nymphalidae
51	Danaid eggfly	Hypolimnas misippus	Nymphalidae
52	Double branded crow	Euploea sylvester	Nymphalidae
53	Glassy tiger	Parantica aglea aglea	Nymphalidae
54	Great Eggfly	Hypolimnas bolina	Nymphalidae
55	Grey Pansy	Junonia atlites	Nymphalidae
56	Joker	Byblia ilithyia	Nymphalidae
57	Lemon pansy	Junonia lemonias	Nymphalidae
58	Painted Lady	Vanessa cardui	Nymphalidae
59	Peacock pansy	Junonia almana	Nymphalidae
60	Plain tiger	Danaus chrysippus	Nymphalidae
61	Tamil bush brown	Mycalesis subdita	Nymphalidae
62	Tawny Coster	Acraea terpsicore	Nymphalidae
63	Yellow pansy	Junonia hierta	Nymphalidae
64	Blue Mormon	Papilio polymnestor	Papilionidae
65	Commom Palmfly	Elymnias caudata	Papilionidae
66	Common banded peacock	Papilio crino	Papilionidae
67	Common blue bottle	Graphium sarpedon	Papilionidae
68	Common Jay	Graphium doson	Papilionidae
69	Common lime butterfly	Papilio demoleus	Papilionidae
70	Common mormon	Papilio polytes polytes	Papilionidae
71	Common rose	Pachliopta aristolochiae	Papilionidae
72	Indian Wanderer	Pareronia hippia	Papilionidae
73	Lesser Grass Blue	Zizina otis	Papilionidae
74	Lime Swallowtail	Papilio demoleus	Papilionidae
75	Narrow banded bluebottle	Graphium teredon	Papilionidae
76	Orange-crowned Cupid	Everes lacturnus syntala	Papilionidae
77	Pale grass blue	Pseudozizeeria maha	Papilionidae
78	Plum judy	Abisara echerius prunosa	Papilionidae
79	Southern Birdwing	Troides minos	Papilionidae
80	Spot sword tail	Graphium nomius	Papilionidae
81	Striped albatross	Appias libythea	Papilionidae
82	Tailed jay	Graphium agamemnon	Papilionidae
83	Tamil yeoman	Cirrochroa thais thais	Papilionidae
84	Chocolate Albatross	Appias lyncida	Peridae
85	Common emigrant	Catopsilia pomona	Peridae
86	Common Albatross	Appias albina	Pieridae
87	Common grass yellow	Eurema hecabe	Pieridae
88	Common gull	Cepora nerissa	Pieridae
89	Common jezebel	Delias eucharis	Pieridae
90	Common wanderer	Pareronia hippia	Pieridae
91	Crimson Tip	Colotis danae	Pieridae
-		Hebomoia glaucippe	. Terrade
92	Great Orange tip	austrialis	Pieridae
93	Little Orange Tip	Colotis etrida	Pieridae
75	Little Grange rip	colotis ciriud	. icridae

S. No.	Common Name	Scientific Name	Family
94	Mottled emigrant	Catopsilia pyranthe	Pieridae
95	Pioneer white	Belenois aurota	Pieridae
96	Plain Orange Tip	Colotis aurora	Pieridae
97	Psyche	Leptosia nina	Pieridae
98	Small Grass Yellow	Eurema drona rubella	Pieridae
99	Small Salmon Arab	Colotis amata	Pieridae
100	Three spot grass yellow	Eurema blanda	Pieridae
101	White orange tip	lxias marianne	Pieridae
102	Yellow orange tip	lxias pyrene	Pieridae

Table 7: Fish recorded from the Arabian Sea and the wetlands of Chennai (Indicator 7)

S. No.	Common Name	Scientific Name	Family	
1	Yellowfin surgeonfish	Acanthurus xanthopterus	Acanthuridae	
2	Humpback unicornfish	Naso brachycentron	Acanthuridae	
3	Bonefish	Albula vulpes	Albulidae	
4	Pelagic thresher	Alopias pelagicus	Alopiidae	
5	Commerson's Glassy Perchlet	Ambassis commersoni	Ambassidae	
6	Climbing Perch	Anabas testudineus	Anabantidae	
7	Indian Shortfin Eel	Anguilla bicolor	Anguillidae	
8	Dwarf Panchax	Aplocheilus parvus	Aplocheilidae	
9	Hamilton's catfish	Arius arius	Ariidae	
10	Small-eyed Catfish	Arius jella	Ariidae	
11	Spotted Catfish	Arius maculatus	Ariidae	
12	Long whiskers catfish	Mystus gulio	Bagridae	
13	Hound needlefish	Tylosurus crocodilus	Belonidae	
14	Dwarf Gouramy	Colisa lalia	Belontiidae	
15	Threespot Gouramy	Trichogaster trichopterus	Belontiidae	
16	Yellowback fusilier	Caesio xanthonota	Caesionidae	
17	Blackbanded trevally	Seriolina nigrofasciata	Carangidae	
18	Blacktip trevally	Caranx heberi	Carangidae	
19	Indian threadfish	Scyris indica	Carangidae	
20	Giant trevally	Caranx ignobilis	Carangidae	
21	Golden trevally	Gnathanodon speciosus	Carangidae	
22	Talang queenfish	Scomberoides commersonnianus	Carangidae	
23	Yellowstripe scad	Selaroides leptolepis	Carangidae	
24	Mackerel scad	Decapterus macrellus	Carangidae	
25	Shrimp scad	Alepes djedaba	Carangidae	
26	Torpedo scad	Megalaspis cordyla	Carangidae	
27	Yellowtail scad	Atule mate	Carangidae	
28	Black pomfret	Parastromateus niger	Carangidae	
29	Tille Trevally	Caranax tille	Carangidae	

S. No.	Common Name	Scientific Name	Family	
30	Yellowfin Jack	Caranax ignobilis	Carangidae	
31	Banded Scad	Caranax sexfaciatus	Carangidae	
32		Alepes sp.	Carangidae	
33	Bigeye trevally	Caranx sexfasciatus	Carangidae	
34	Spinner shark	Carcharhinus brevipinna	Carcharhinidae	
35	Spadenose shark	Scoliodon laticaudus	Carcharhinidae	
36	Vagabond butterflyfish	Chaetodon vagabundus	Chaetodontidae	
37	Milkfish	Chanos chanos	Chanidae	
38	Striped Snakehead	Channa striatus	Channidae	
39	Spotted Snakehead	Channa punctatus	Channidae	
40	Dorab wolf-herring	Chirocentrus dorab	Chirocentridae	
41	Mozambique tilapia	Oreochromis mossambica	Cichlidae	
42	Nile tilapia	Oreochromis niloticus	Cichlidae	
43	Mozambique tilapia	Oreochromis mossambicus	Cichlidae	
44	Orange Chromide	Etroplus maculatus	Cichlidae	
45	Kelee Shad	Hilsa kelee	Clupeidae	
46	Bloch's Gizzard Shad	Nematalosa nasus	Clupeidae	
47	White Sardine	Escualosa thoracata	Clupeidae	
48	Common dolphinfish	Coryphaena hippurus	Coryphaenidae	
49	Swamp Barb	Puntius chola	Cyprinidae	
50	Flying Barb	Esomus danricus	Cyprinidae	
51	Kalabans	Labeo dero	Cyprinidae	
52	Catla	Gibelion catla	Cyprinidae	
53	Rosy Barb	Puntius conchonius	Cyprinidae	
54	Spotfin or Swamp Barb	Puntius sophore	Cyprinidae	
55		Puntius sharmai	Cyprinidae	
56	Indian Carplet	Amblypharyngodon microlepis	Cyprinidae	
57	Blackline Rasbora	Rasbora daniconius	Cyprinidae	
58	Sharpnose stingray	Maculabatis gerrardi	Dasyatidae	
59	Bengal whipray	Brevitygon imbricata	Dasyatidae	
60	Honeycombed Stingray	Dasyatis uarnak	Dasyatidae	
61		Taeniura sp.	Dasyatidae	
62	Indian ocean blue-spotted maskray	Neotrygon indica	Dasyatidae	
63	Longspined porcupine fish	Diodon holocanthus	Diodontidae	
64	Indian oil sardine	Sardinella longiceps	Dorosomatidae	
65	Goldstripe sardinella	Sardinella gibbosa	Dorosomatidae	
66	Spotted sicklefish	Drepane punctata	Drepaneidae	
67	Rainbow sardine	Dussumieria acuta	Dussumieriidae	

S. No.	Common Name	Scientific Name	Family
68	Ladyfish	Elops saurus	Elopidae
69	Tenpounder	Elops machnata	Elopidae
70	Indian anchovy	Stolephorus indicus	Engraulidae
71	Malabar thryssa	Thryssa malabarica	Engraulidae
72	Moustached Thryssa	Thryssa mystax	Engraulidae
73	Banded Drepane	Drepane longimana	Ephippidae
74	Swordfish	Cephalopholis formosa	Epinephelidae
75	Malabar grouper	Epinephelus malabaricus	Epinephelidae
76	Striped grouper	Epinephelus latifasciatus	Epinephelidae
77	Bluelined hind	Cephalopholis formosa	Epinephelidae
78	Orange-spotted grouper	Epinephelus coioides	Epinephelidae
79	Manyspotted flyingfish	Cheilopogon spilopterus	Exocoetidae
80	Red cornetfish	Fistularia petimba	Fistulariidae
81	Common silver belly	Gerres subfasciatus	Gerreidae
82	Longfin mojarra	Pentaprion longimanus	Gerreidae
83	Whipfin Mojarra	Gerres filamentosus	Gerreidae
84	Common Mojarra	Gerres oyena	Gerreidae
85	Silvery Mojarra	Gerres poeti	Gerreidae
86	Wide nose guitarfish	Glaucostegus obtusus	Glaucostegidae
87	Tank Goby	Glossogobius giurus	Gobiidae
88	Longtail butterfly ray	Gymnura poecilura	Gymnuridae
89	Dusky rubberlip	Plectorhinchus chubbi	Haemulidae
90	Indian Ocean oriental sweetlips	Plectorhinchus vittatus	Haemulidae
91	Saddle grunt	Pomadasys maculatus	Haemulidae
92	Stinging Catfish	Heteropneustes fossilis	Heteropneustidae
93	Sailfish	Istiophorus platypterus	Istiophoridae
94	Two-spot razorfish	Iniistius bimaculatus	Labridae
95	False trevally	Lactarius lactarius	Lactariidae
96	Barramundi	Lates calcarifer	Latidae
97	Deep pugnose ponyfish	Secutor ruconius	Leiognathidae
98	Orange-fin ponyfish	Photopectoralis bindus	Leiognathidae
99	Toothed ponyfish	Gazza minuta	Leiognathidae
100	Splendid ponyfish	Eubleekeria splendens	Leiognathidae
101	Common ponyfish	Leiognathus equulus	Leiognathidae
102	Pugnose Ponyfish	Secutor insidiator	Leiognathidae
103	Pink ear emperor	Lethrinus lentjan	Lethrinidae
104	Spangled emperor	Lethrinus nebulosus	Lethrinidae
105	Tripletail	Lobotes surinamiensis	Lobotidae
106	Common bluestripe snapper	Lutjanus kasmira	Lutjanidae
107	Yellowstreaked snapper	Lutjanus lemniscatus	Lutjanidae
108	Blubberlip snapper	Lutjanus rivulatus	Lutjanidae

S. No.	Common Name	Scientific Name	Family
109	Mangrove red snapper	Lutjanus argentimaculatus	Lutjanidae
110	Indian snapper	Lutjanus madras	Lutjanidae
111	Pinjalo	Pinjalo pinjalo	Lutjanidae
112	Indo-pacific tarpon	Megalops cyprinoides	Megalopidae
113	Moonfish	Mene maculata	Menidae
114	Devil fish	Mobula mobular	Mobulidae
115	Unicorn leatherjacket filefish	Aluterus monoceros	Monacanthidae
116	Flathead grey mullet	Mugil cephalus	Mugilidae
117	Goldspot mullet	Liza parsia	Mugilidae
118	Borneo mullet	Liza macrolepis	Mugilidae
119	Tade grey mullet	Liza tade	Mugilidae
120	Flathead grey mullet	Mugil cephalus	Mugilidae
121	Indian goatfish	Parupeneus indicus	Mullidae
122	Goldband goatfish	Upeneus moluccensis	Mullidae
123	Yellow Goatfish	Upeneus sulphureus	Mullidae
124	Daggertooth pike conger	Muraenesox cinereus	Muraenesocidae
125	Chinese numbfish	Narcine lingula	Narcinidae
126	Japanese threadfin bream	Nemipterus japonicus	Nemipteridae
127	Golden threadfin bream	Nemipterus virgatus	Nemipteridae
128		Ophichthus microcephalus	Ophichthidae
129	Rice-paddy eel	Pisodonophis boro	Ophichthidae
130	Three spotted flounders	Pseudorhombus triocellatus	Paralichthyidae
131	Big-scale bullseye	Pempheris multiradiata	Pempheridae
132	Bartail flathead	Platycephalus indicus	Platycephalidae
133	Gray eel-catfish	Plotosus canius	Plotosidae
134	Guppy	Poecila reticulata	Poeciliidae
135	Guppy	Poecilia reticulata	Poeciliidae
136	Mosquitofish	Gambusia affinis	Poeciliidae
137	Four-finger threadfin/Indian Salmon	Eleutheronema tetradactylum	Polynemidae
138	Common threadfin	Polydactulus plebius	Polynemidae
139	Bluering angelfish	Pomacanthus annularis	Pomacanthidae
140	Black Sweetlip	Plectorhynchus nigrus	Pomadasyidae
141	Indian ilisha	Ilisha melastoma	Pristigasteridae
142	Indian halibut	Psettodes erumei	Psettodidae
143	Cobia	Rachycentron canadum	Rachycentridae
144	Smoothback guitarfish	Rhinobatos lionotus	Rhinobatidae
145	Grey Guitarfish	Rhinobatos obtusus	Rhinobatidae
146	Blue-barred parrotfish	Scarus ghobban	Scaridae
147	Spotted scat	Scatophagus argus	Scatophagidae
148	Kathala croaker	Kathala axillaris	Sciaenidae

S. No.	Common Name	Scientific Name	Family
149	Hooghly croaker	Panna heterolepis	Sciaenidae
150	Indian mackerel	Rastrelliger kanagurta	Scombridae
151	Indo-pacific king mackerel	Scomberomorus guttatus	Scombridae
152	Narrow-banded spanish mackerel	Scomberomorus commerson	Scombridae
153	Kawakawa	Euthynnus affinis	Scombridae
154	Skipjack tuna	Katsuwonas pelamis	Scombridae
155	Yellowfin tuna	Thunnus albacares	Scombridae
156	Devil firefish	Pterois miles	Scorpaenidae
157	Streaky spinefoot	Siganus javus	Siganidae
158	Silver Sillago	Sillago sihama	Sillaginidae
159	Shark Catfish	Wallago attu	Siluridae
160	Commerson's sole	Dagetichthys commersonnii	Soleidae
161	White-margined sole	Dagetichthys marginatus	Soleidae
162	Goldlined seabream	Rhabdosargus sarba	Sparidae
163	Blackfin barracuda	Sphyraena qenie	Sphyraenidae
164	Banded Barracuda	Sphyraena jello	Sphyraenidae
165	Scalloped hammerhead shark	Sphyrna lewini	Sphyrnidae
166	Silver pomfret	Pampus argenteus	Stromateidae
167	Orangebanded stingfish	Choridactylus multibarbus	Synanceiidae
168	Indian lizardfish	Synodus indicus	Synodontidae
169	Painted grinner	Trachinocephalus trachinus	Synodontidae
170	Jarbua terapon	Terapon jarbua	Terapontidae
171	Small-scaled banded grunter	Terapon puta	Terapontidae
172	Stellate puffer	Arothron stellatus	Tetraodontidae
173	Lunartail puffer	Lagocephalus lunaris	Tetraodontidae
174	Variable torpedo ray	Torpedo sinuspersici	Torpedinidae
175	Tripod Fish	Triacanthus brevirostris	Triacanthidae
176	Short-nosed Tripod Fish	Triacanthus biaculeatus	Triacanthidae
177	Big-eye houndshark	lago omanensis	Triakidae
178	Savalai hairtail	Lepturacanthus savala	Trichiuridae
179	Dollfus' stargazer	Uranoscopus guttatus	Uranoscopidae

## Table 8: Mammals recorded from the city of Chennai (Indicator 8)

S. No.	Common Name	Scientific Name	Family
1	Small Indian Mongoose	Herpestes auropunctatus	Herpestidae
2	Bonnet Macaque	Macaca radiata	Cercopithecidae
3	Palm civet/Toddy cat	Paradoxurus hermaphroditus	Vivveridae
4	Spotted deer	Axis axis	Cervidae
5	Three-striped Palm Squirrel	Funambulus palmarum	Sciuridae
6	Black Rat	Rattus rattus	Muridae
7	Indian gerbil	Tatera indica	Muridae

S. No.	Common Name	Scientific Name	Family
8	Greater bandicoot rat	Bandicota indica	Muridae
9	Greater false vampire bat	Megaderma lyra	Megadermatidae
10	Greater Asiatic yellow house bat	Scotophilus heathii	Vespertilionidae
11	Indian Pipistrelle	Pipistrellus coromandra	Vespertilionidae
12	Indian Flying-fox	Pteropus giganteus	Pteropodidae
13	Indian Jackal	Canis aureus	Canidae
14	Blackbuck	Antilope cervicapra	Bovidae
15	Indian hare	Lepus nigricollis	Leporidae
16	Jungle Cat	Felis chaus	Felidae
17	Domestic cat	Felis catus	Felidae
18	Indian grey mongoose	Herpestes edwardsi	Herpestidae
19	Indian crested porcupine	Hystrix indica	Hystricidae
20	Domestic dog	Canis lupus familiaris	Canidae
21	Indian Pangolin	Manis crassicaudata	Manidae

## ANNEXURE 3 – PARKS UNDER THE ADMINISTRATION OF GCC

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
1	1	1	Thalankuppam slum tenements park	350	GCC
2	1	2	Anna Park	1537	GCC
3	1	2	Nehru nagar Ulaganathan Park	1275	GCC
4	1	3	Tsunami Quarters (Park-4)	1640	Outsourced Parks
5	1	3	Road side Park at A S Nagar between 1 st & 2 nd street Opposite to Pilikan amman koil	395	GCC
6	1	3	Road side Park at A S Nagar between 2nd & 3rd street Opposite to Pilikan amman koil	394	GCC
7	1	3	Tsunami Quarters (Park-11)	4738	Outsourced Parks
8	1	5	Srirangam New town (Sakthipuram)	3659	Outsourced Parks
9	1	5	Hansa Garden	1412	Outsourced Parks
10	1	5	MRF Thiruvottiyur - wimco nagar	4987	Outsourced Parks
11	1	7	Park at Ashok Avenue	844	GCC
12	1	7	Park at HANSA GEMS	1702	GCC
13	1	7	Glass Factory road	1384	GCC
14	1	11	Shanmuganar Park	2200	GCC
15	2	15	Manali New Town, Block No.29	1704	GCC
16	2	15	Manali New Town, Block No.63 (Edayanchavadi)	717	GCC
17	2	15	Manali New Town, Block No.65 (Edayanchavadi)	778	GCC
18	2	15	Ponniamman Nagar in DN - 15, Z - 02	736	GCC
19	2	15	Manali New Town, Block No.26 (Edayanchavadi) in Dn - 15	4623	Outsourced Parks
20	2	15	Manali new Town 54th Block 44th Street park CPS 6in Dn - 15	2050	Outsourced Parks
21	2	15	Thulasi Nagar in Dn - 15	2250	Outsourced Parks
22	2	16	Manali New Town, Block No.90 (Sadayankuppam)	721	GCC
23	2	16	Manali New Town, Block no.134&135 (Sadayankuppam)	985.54	GCC
24	2	16	Manali New Town, Block No.78 (Sadayankuppam)	303	GCC
25	2	16	Manali New Town Kanniammanpet Park	340	GCC
26	2	16	Manali new Town Block 100 &101Street Park CPS 2 in Dn - 16	1640	Outsourced Parks
27	2	16	Manali New Town, Block No.52 (Sadayankuppam) CPS 4in Dn - 16	1190	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
28	2	16	Manali New Town sadayankuppam phase II Park in Dn - 16	3693	Outsourced Parks
29	2	16	R.L Nagar in Dn - 16	2055	Outsourced Parks
30	2	17	Tirupathi Devasthanam Nagar Park	1280	GCC
31	2	17	Gnayaru High Road, (Near Division 17 Office)	300	GCC
32	2	17	Thiyagi vishwanathadass Nagar in DN - 17	1872	Outsourced Parks
33	2	17	V.S Mani Nagar in DN - 17	8990	Outsourced Parks
34	2	18	Vimalapuram II street park	511	GCC
35	2	18	CPCL 4th street park-Part-1	225	GCC
36	2	18	Andarkuppam Redhills High Road (Andarkuppam park) in DN - 18	2482	Outsourced Parks
37	2	18	Neduchezyan Street(CPCL park) in DN - 18	1975	Outsourced Parks
38	2	18	CPCL Layout 3rd Street park in DN - 18	4410	Outsourced Parks
39	2	19	MMDA 34th street	251.3	GCC
40	2	19	Kamarajar Salai	832	GCC
41	2	19	MMDA 2nd Main Road in DN - 19	16362.05	Outsourced Parks
42	2	19	CPCL Layout, 3rd Main road, Junction of Manali Kosappur Highways & 200ft road in DN - 19	551	Outsourced Parks
43	2	19	CPCL Layout, 12th street Manjambakkam in DN - 19	449	Outsourced Parks
44	2	19	Gokulam Street in DN - 19	800	Outsourced Parks
45	2	20	Chinna Mathur Road	1925	GCC
46	2	21	Jalagandamariamman koil Street	616	GCC
47	2	15	Manali New town 40th Block	1070.49	GCC
48	2	15	Manali New town 40th Block	2073.71	GCC
49	2	17	Gnayaru High Road (Near Division 17 Office)	300	GCC
50	2	19	MMDA 2nd Main Road	16362.05	GCC
51	3	23	Gurusanthi Nagar	958.91	Outsourced Parks
52	3	23	Macro Marvel 1st Cross Street	1008	Outsourced Parks
53	3	23	Macro Marvel 2nd Cross Street	504	Outsourced Parks
54	3	23	Macro Marvel Phase III	1093	Outsourced Parks
55	3	24	V.S. Mani Nagar 3rd Street Park-4	580	GCC
56	3	24	Ambattur Redhills Road Park	3000	Outsourced Parks
57	3	24	Silver Sky Park	2286	Outsourced Parks
58	3	24	V.S. Mani Nagar 3rd Street	3383	Outsourced Parks
59	3	30	Radiance Appartment park	1185	GCC
60	3	24	Gangatharan Street	840	Outsourced Parks
61	3	24	Sri Balaji Nagar Park -1 OSR Land	1150	GCC
62	3	24	Sri Balaji Nagar Park -3 OSR Land	1683	GCC

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
63	3	24	VS mani Nagar south side OSR Land Park	234	GCC
64	3	24	VS mani Nagar North side OSR Land Park	918	GCC
65	3	25	Sivasakthi Nagar	1168	GCC
66	3	25	RC Flats Arul Nagar	350	GCC
67	3	25	Thattankulam Road (Private Maintenance)	1647	Adoption
68	3	25	KVT (PHASE I) PARK AT V.S MANI NAGAR	369.4	GCC
69	3	25	KVT Phase II at VS Mani Nagar	1442.2	Outsourced Parks
70	3	25	KVT Phase III at VS Mani Nagar	2500	Outsourced Parks
71	3	25	VRD Nagar 1st Street	3375	Outsourced Parks
72	3	25	Ring Road Housing Sector	1775	Outsourced Parks
73	3	26	Park at Assisi Nagar 10th Street	1800	GCC
74	3	27	Park at Meenambal Avenue (Sasthri Nagar)	864.68	GCC
75	3	27	Padmagiri Nagar Phase II	6524	Outsourced Parks
76	3	27	Krishna Nagar	1200	Outsourced Parks
77	3	27	Padmagiri Nagar Phase I	4340	Outsourced Parks
78	3	27	B.P. Nagar	531.76	Outsourced Parks
79	3	28	RC Flats	350	GCC
80	3	28	GNT Road CASA GRAND	1639.59	Adoption
81	3	28	KKR Nagar 1st Main Road	4315	Outsourced Parks
82	3	28	KKR Garden 2nd Main Road	4035	Outsourced Parks
83	3	29	VGP Nagar Main Road	1000	GCC
84	3	29	Selvam Nagar Extension	743	GCC
85	3	29	Thanikachalam Nagar B Blk 5/2 Cr St	1221	Outsourced Parks
86	3	29	Thanikachalam Nagar 80 Feet Road	680	Outsourced Parks
87	3	29	Selvam Nagar 2nd Main Road	373	Outsourced Parks
88	3	29	Mahathma Gandhi Street	237	Outsourced Parks
89	3	30	RC Flats PRH Road	1450	Outsourced Parks
90	3	30	Park at Thanigachalam nagar 3rd street	1156	Outsourced Parks
91	3	30	Canal Park at BG Road	550	Outsourced Parks
92	3	30	Secretarite Colony Main Road	1210	Outsourced Parks
93	3	31	Padmavathy Nagar 6th Street	472.35	Outsourced Parks
94	3	31	Padmavathy Nagar 7th Street	2397	Outsourced Parks
95	3	31	Jai Maruthi nagar west side	852	GCC
96	3	31	Padmavathy Nagar Ext. 5th St	973	Outsourced Parks
97	3	31	Srinivasa Nagar Main Road	925	Outsourced Parks
98	3	31	Collector Nagar Main Road	1638	Outsourced Parks
99	3	25	KVT (PHASE I) PARK AT V.S MANI NAGAR	369.4	SHG
100	3	31	Thirumalai Srinivasa Nagar	1014	Outsourced Parks
101	3	31	Sowmiya Nagar	1267	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
102	3	31	Sathyamoorthy Nagar Co-Op. Society	2700	Outsourced Parks
103	3	31	Ranga Avenue Park	2782	GCC
104	3	31	Srinivasa Nagar 2nd Street Park	1189	Outsourced Parks
105	3	31	Jaimaruthi Nagar East side Park	660	Outsourced Parks
106	3	32	Park at SIS Captown Mettur Link road	254	GCC
107	3	32	Arrow New City (Thangal Karai Salai)	1243	Outsourced Parks
108	3	32	Sri Lakshmi Nagar	2790	Outsourced Parks
109	3	32	Selvakumaran nagar	2472	GCC
110	3	32	Sri Lakshmi Amman Nagar	1183	Outsourced Parks
111	3	32	DG Nagar	1288	Outsourced Parks
112	3	33	Teachers Colony 4th Cr St	1369	Outsourced Parks
113	3	33	Teachers Colony 6th Main Road	732	Outsourced Parks
114	4	34	Cauvery Nagar Park	1250	GCC
115	4	36	Indra Gandhi Nagar Park	1296	GCC
116	4	34	Union Carbide Colony 9th street	1125	Outsourced Parks
117	4	34	Binny Nagar main Road	855.17	Outsourced Parks
118	4	34	Binny Nagar Main Road	735.46	Outsourced Parks
119	4	34	Union Carbide Colony 14th street	937.3	Outsourced Parks
120	4	34	VenkateswarabColony 5th street	814.72	Outsourced Parks
121	4	35	Krishna street	1032.95	Outsourced Parks
122	4	35	Muthamizh Nagar 9th street	995	Outsourced Parks
123	4	35	Hansa Grdern GNT Road	980	Outsourced Parks
124	4	36	TV Nagar 5th street	443.22	Outsourced Parks
125	4	36	Vasugi Nagar	1283	Outsourced Parks
126	4	36	14th cross street	576	Outsourced Parks
127	4	36	MR Nagar	1553	Outsourced Parks
128	4	36	Sharmanagar 1st main Road	1994.79	Outsourced Parks
129	4	36	Sharmanagar 3rd main Road	666.4	Outsourced Parks
130	4	37	Mullai nagar burial ground	12740	Outsourced Parks
131	4	37	Sasirekamma nagar	654.84	Outsourced Parks
132	4	37	Jawahar street	1361.86	Outsourced Parks
133	4	37	Kannadasan nagar 7th block	459.24	Outsourced Parks
134	4	37	Vivekanantha street	290.58	Outsourced Parks
135	4	37	Ambedkar nagar	460.8	Outsourced Parks
136	4	37	Srinivasan Street	383.64	Outsourced Parks
137	4	37	Gandhi street	467.5	Outsourced Parks
138	4	37	Lingesan street	400.01	Outsourced Parks
139	4	37	MKB nagar 13th cross street	1832	Outsourced Parks
140	4	37	MKB nagar 16th east cross street	1645.92	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
141	4	37	MKB nagar 4th cross street	724.68	Outsourced Parks
142	4	38	Patel nagar	4298	Outsourced Parks
143	4	39	Thanthai Periyar Park street	3200	Outsourced Parks
144	4	40	Tsunami Nagar B Block	832	GCC
145	4	40	Tsunami Nagar M Block	1539	GCC
146	4	40	Prince Village Phase -1 at Elaya street	3450	Outsourced Parks
147	4	40	Elaya Park at Elaya Street	5915	Outsourced Parks
148	4	40	Thiruvallurvar Nagar 1st Main Road	2165	Outsourced Parks
149	4	40	Brindhavan Park at cross Road	565	Outsourced Parks
150	4	40	Prince Village Phase -2 at Elaya street	2451	Outsourced Parks
151	4	41	MGR Nagar	1170	GCC
152	4	42	Jeeva Park	1177	GCC
153	4	41	Nehru Nagar Park at 14th street	3050	Outsourced Parks
154	4	42	Rettai Kuzhi park at Rettai Kuzhi Street	1000	Outsourced Parks
155	4	42	Thiyagaraya Park at T.H.Road	1101	Outsourced Parks
156	4	43	Kasimedu Burial Ground	1732.4	GCC
157	4	48	Telugu Chetty Street	478	GCC
158	4	43	CDH Park	5620	Outsourced Parks
159	4	43	SN Chetty street	464.43	Outsourced Parks
160	4	44	Sathyavani Muth nagar	957	Outsourced Parks
161	4	45	Sanjay Nagar	2026	GCC
162	4	45	Vyasar Nagar	320	GCC
163	4	45	Kasthuri bai Gandhi nagar park	700	Outsourced Parks
164	4	45	Stephenson Lane park	1240	Outsourced Parks
165	4	45	Desiganandhapuram	495	Outsourced Parks
166	4	46	Moorthinagar Street Park	2620	GCC
167	4	47	Bharathi Nagar Housing Board	1914	GCC
168	4	46	Moorthi nagar street	957	Outsourced Parks
169	4	47	Amma Eco Park at CB Road	4647	Outsourced Parks
170	5	49	I Dreams (near 3rd Rajarathinam street)	474	GCC
171	5	49	Sivagamiammal park	164	GCC
172	5	50	Sundaramoorthy Park	221	GCC
173	5	50	Annual Maintance Park at NRT Bridge,	7325	Outsourced Parks
174	5	50	Annual Maintance Kamaraj Park at	1836	Outsourced Parks
			Sooriyanarayana Chetty		
175	5	52	Basement Park MC Road	454	GCC
176	5	52	Anna Park	25197	GCC
177	5	53	Mint Model City Park	2365	GCC

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
178	5	53	Annual Maintance park at Wall Tax Road (Old Andhra bus stand park)	2070	Outsourced Parks
179	5	53	Mint flyover Park, Basin Bridge Road	9018	GCC
180	5	54	Annual Maintance Park at Sivananam Park,	3090	Outsourced Parks
181	5	56	Terrace Garden Park	3500	GCC
182	5	57	Annual Maintance Park at Sri Ramulu Park	2260	Outsourced Parks
183	5	58	Doveton Clock Towers Park	500	GCC
184	5	58	Thirumalai Park	765	GCC
185	5	58	Dinathanthi Office Near Park	1292	GCC
186	5	58	My Ladies Park	17552	GCC
187	5	58	Ragavendra Park	4160	GCC
188	5	58	Jermiah Park	983	GCC
189	5	59	Sivanandha Salai	500	GCC
190	5	60	Sathya Nagar Park	1554.32	GCC
191	5	60	Secretariate Park	60775	Outsourced Parks
192	5	61	Annual Maintance Park at Mayor Sundar Roa Park	3289	Outsourced Parks
193	5	61	Annual Maintance Park at Ethiraj Lane Park,	1565	Outsourced Parks
194	5	62	Annual Maintance Park at May Day Park	7939	Outsourced Parks
195	5	63	Adithanar Salai Park, D'	186	GCC
196	5	63	Annual Maintance Park at Raheja Park	2100	Outsourced Parks
197	6	64	Thirumalai Nagar Park	370	GCC
198	6	64	Rajaji Nagar Rohini Park	353	GCC
199	6	64	Srinivasan Nagar 3rd Cross Street Park	336	GCC
200	6	64	Mohammed Hussain Colony Park	255	GCC
201	6	64	Mahaveer Nagar Park	237	GCC
202	6	64	P.U. Shanmugam Park	186.24	GCC
203	6	64	Janakiram Reddy Colony Park in Dn-64, Un-15,	225	Outsourced Parks
204	6	64	R.K Senthili Nagar 10th cross street Park cy in Dn-64, Un-15,	168	Outsourced Parks
205	6	64	V.V Nagar Park in Dn-64, Un-15,	1450	Outsourced Parks
206	6	64	Senthil Nagar 13th cross street Park in Dn-64, Un-15,	425	Outsourced Parks
207	6	64	R.K.Syndicate Nagar Park in Div-64,Unit-15,	167	Outsourced Parks
208	6	64	Mayor Chittibabu park	4150	GCC
209	6	67	Thiru-vi-ka nagar 8th street park	540	GCC
210	6	65	Thiruveethiamman Koil Pond Park	5625	GCC
211	6	65	Thenpalani Nagar TVK Park	275	GCC
212	6	65	Thenpalani Nagar VOC Park	235	GCC
213	6	65	Poombughar Nagar Park in Div-65,Unit-15,	1032	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
214	6	65	Anjugam Nagar Park Div-65,Unit-15,	258	Outsourced Parks
215	6	65	Haridoss Pond Park in Div-65,Unit-15,	4370	Outsourced Parks
216	6	66	Park at Sakthivel nagar 2nd cross street in Dn 66,Unit 16,	1129	Outsourced Parks
217	6	67	Kennedy Square park at Kennedy Square 2nd North Street in Dn 67, Unit 16,	1186	Outsourced Parks
218	6	67	KKR Avenue park at Pallavan Salai in Dn 67, Unit -16,	1827	Outsourced Parks
219	6	67	George Colony Park	1784	Outsourced Parks
220	6	67	Annual Maintenance of kalaignar karunanidhi Park at SRP Koil Street (North) in Dn 67,Unit 16,	695	Outsourced Parks
221	6	67	Hussain park at Paper Mills Road in Dn 67,Unit 16,	1509	Outsourced Parks
222	6	68	Jawahar nagar 5th main road in Dn 68,Unit 16,	2989	Outsourced Parks
223	6	68	Periyar nagar 20th street in Dn 68,Unit 16,	2238	Outsourced Parks
224	6	68	Park at Jawahar nagar 2nd circular road in Dn 68,Unit 16,	1173	Outsourced Parks
225	6	69	Ananthan Park at Thanthonriyamman kovil street in Dn 69,Unit 15,	750	Outsourced Parks
226	6	69	GKM colony 24A pond park	10250	GCC
227	6	70	Venkateswara Nagar 1st Park	180	GCC
228	6	70	Ragavan Street Park	102	GCC
229	6	71	Kannabiram Koil Street	1400	GCC
2	6	71	Gandhi Park, M.H. Road	2095	CMRL
231	6	71	Rajiv Gandhi Park at Perambur High road in Dn 71,Unit 17, (Area of park-1723 sqm)	1723	Outsourced Parks
232	6	71	Vadivel 2nd cross Street Park in Dn71,Unit 17, Area of park-1375 sqm)	1375	Outsourced Parks
233	6	71	Murasolimaran park (North) at Perambur High road (North) in Division 71,Unit 17, (Area of park- 10100sqm)	10100	Outsourced Parks
234	6	73	Quiad-e-millet Park	330	GCC
235	6	74	Krishnadoss road Park	1200	GCC
236	6	73	New OSR Park for the period of one year at New Ferrance Road in Div-73, Unit-17A,(Area = 5154 Sq.m)	5154	Outsourced Parks
237	6	73	Wadia Park at New Ferrance Road in Div-73,Unit-17A,	1800	Outsourced Parks
238	6	73	kalaignar karunanidhi park at perambur barracks road in dn73,unit-17,	450	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
239	6	74	Murasolimaran park (South) at Perambur High road (South) in Dn 74,Unit 17A,	9000	Outsourced Parks
240	6	75	Otteri Tropical Dry Ever Green Forest (Herbal Park)	42068	Outsourced Parks
241	6	76	Patel park at Chellappa street in dn-76,unit-17,	2204	Outsourced Parks
242	6	76	Bakthavachalam Park at Angalamman koil street in Dn-76,	560	Outsourced Parks
243	6	76	Conronsmith Park at CS nagar park street in Div- 76,Unit-17	7848	Outsourced Parks
244	6	76	selvapathy Park at strahans road in Dn-76, Zone-6	2350	Outsourced Parks
245	6	77	New TPF Park at Basin Elephant Gate Road in Div- 77, Unit-17,Zone-6	1550	Outsourced Parks
246	6	77	Amma Park at Basin Elephant Gate Road in Div- 77,Unit-17	6500	Outsourced Parks
247	6	77	New OSR Park at K.P. PARK in Div-77, Unit-17.	1898	Outsourced Parks
248	7	79	LENIN NAGAR PARK	999	Outsourced Parks
249	7	79	RAM NAGAR PARK	720.22	Outsourced Parks
250	7	79	GANDHI NAGAR PARK	776	Outsourced Parks
251	7	79	LAKSHMI AMMAN NAGAR PARK	557.64	Outsourced Parks
252	7	79	THAMARAI KULAM PARK	12223	Outsourced Parks
253	7	80	THANGAL ERI PARK	12058	Outsourced Parks
254	7	80	Bharathi Nagar park	550	GCC
255	7	81	THIRUVENKADAM NAGAR PARK	3080	Outsourced Parks
256	7	81	KRISHNAPURAM PARK	2086	Outsourced Parks
257	7	81	SECRETRIAT COLONY PARK	365	Outsourced Parks
258	7	82	TATA COMMUNICATION PARK	8483	Outsourced Parks
259	7	82	DUGAR PARK,	1064	Outsourced Parks
260	7	82	NARAYANAN NAGAR PARK	491.51	Outsourced Parks
261	7	82	VANAN KULAM POND PARK	1396.76	Outsourced Parks
262	7	82	MENAMBEDU THANGAL POND PARK	7000	Outsourced Parks
263	7	83	Alliance Appartments (Kandigai)	4140.13	Adoption
264	7	83	SRI RANGA GARDEN PARK	786.24	Outsourced Parks
265	7	83	SUBBU LAKSHMI NAGAR PARK	1407	Outsourced Parks
266	7	83	NETHAJI NAGAR POND PARK	1645.85	Outsourced Parks
267	7	83	SASTHA NAGAR PARK	580	Outsourced Parks
268	7	83	THAMARAI KULAM POND PARK	15000	Outsourced Parks
269	7	83	HINDUSTAN NAGAR PARK	2027	Outsourced Parks
270	7	83	SIVALINGA PURAM POND PARK	2347.71	Outsourced Parks
271	7	83	PERUMAL KOIL POND PARK	1908.02	Outsourced Parks
272	7	83	Madhanakuppam Pond	28436	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
273	7	84	KR NAGAR PARK	1751	Outsourced Parks
274	7	84	TNHB 61ST STREET PARK	6783.02	Outsourced Parks
275	7	84	GANGAI AMMAN KOIL STREET PARK	412	Outsourced Parks
276	7	85	Kochar Park	1197.92	Adoption
277	7	85	RAIL VIHAR OSR PARK 2	684	Outsourced Parks
278	7	85	RAIL VIHAR OSR PARK 1	2996	Outsourced Parks
279	7	86	TNHB OSR land, Athipattu (Miyawakki)	2803.73	GCC
280	7	86	ICICI BANK PARK	1319	Outsourced Parks
281	7	86	INDIA LAND PARK	4070	Outsourced Parks
282	7	86	CTH ROAD PARK (OPP TO KOCHAR)	1116	Outsourced Parks
283	7	86	GOTHAVARI PARK	1071	Outsourced Parks
284	7	86	VGN SHANTHI NAGAR PARK	4010	Outsourced Parks
285	7	86	CHELLIAMMAN NAGAR PARK	835	Outsourced Parks
286	7	86	SINDU NATHI PARK	2600	Outsourced Parks
287	7	86	CHELLIAMMAN KOIL POND PARK	8622	Outsourced Parks
288	7	86	GOPAL SAMY STREET PARK	440	Outsourced Parks
289	7	86	VGN SHANTHI NAGAR COSMOPOLIS PARK	2989	Outsourced Parks
290	7	86	VGN SHANTHI NAGAR AT HARLOTON STREET	2699	Outsourced Parks
291	7	86	VGN SHANTHI NAGAR BRENT PARK	2795	Outsourced Parks
292	7	86	THAMIRABARANI STREET PARK OPP NEW CENTURY HOSPITAL STREET	1268.8	Outsourced Parks
293	7	86	THAMIRABHARANI STREET PARK JN OF CAUVERY STREET	1085.7	Outsourced Parks
294	7	86	TNHB PARK AT VANAGARAM MAIN ROAD	2803.73	Outsourced Parks
295	7	86	TT Mathew Road	100.00	GCC
296	7	88	Lokmaniya Thilagar street park	1083.78	GCC
297	7	87	TNHB 4TH STREET PARK	1283	Outsourced Parks
298	7	88	MILLIENIUM PARK	14700	Outsourced Parks
299	7	88	C.T.H. ROAD PARK Near Saravana stores	1872	SHG
300	7	88	B - SECTOR PARK	2343	Outsourced Parks
301	7	88	C - SECTOR PARK	3136	Outsourced Parks
302	7	88	AP PLOT PARK	960	Outsourced Parks
303	7	89	GOLDEN COLONY	4292	Outsourced Parks
304	7	89	TVS COLONY	1776	Outsourced Parks
305	7	89	OFFICERS COLONY	1153.49	Outsourced Parks
306	7	89	AKSHAYA COLONY	1320	Outsourced Parks
307	7	89	TVS AVENUE MAIN ROAD	2059	Outsourced Parks
308	7	89	COLLECTOR NAGAR	2920	Outsourced Parks
309	7	89	Madurai veeran street park	860.25	GCC

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
310	7	89	TVS Avenue 34th street park	341.91	GCC
311	7	89	Jeevan Bheema Nagar 1st gate	573.25	Adoption
312	7	90	Pace Parana park	1066.00	Adoption
313	7	90	Maple Orchid Park	905.00	Adoption
314	7	90	TNHB FLATS (THIRUMANAGALAM MAIN ROAD)	1100	Outsourced Parks
315	7	90	HIG Flats OSR land park	243.69	GCC
316	7	90	EMARALD FLATS	1952	Outsourced Parks
317	7	90	ONGC PARK	4907.96	Outsourced Parks
318	7	90	WELCOME COLONY BLOCK NO- 49-A	630	Outsourced Parks
319	7	90	SANTHAM COLONY	1419.46	Outsourced Parks
320	7	90	GOLDEN JUBLEE	2826	Outsourced Parks
321	7	90	TNHB FLATS ( PADI KUPPAM MAIN ROAD )	655.46	Outsourced Parks
322	7	90	ASIAD COLONY	3180	Outsourced Parks
323	7	90	Welcome Colony	988.00	GCC
324	7	90	Welcome Colony	524.90	GCC
325	7	90	SANTHAM COLONY	744.00	GCC
326	7	90	SANTHAM COLONY	1260.00	GCC
327	7	90	SANTHAM COLONY	831.45	GCC
328	7	90	Welcome Colony	480.00	GCC
329	7	90	Welcome Colony	864.92	GCC
330	7	90	Padikuppam main road Old Ben Foundation	905.70	GCC
331	7	90	Padikuppam main road Pace parana	148.01	GCC
332	7	90	Golden Jubilee Flats near Annai Flats	63.00	GCC
333	7	91	TRI STAR PARK	961	Outsourced Parks
334	7	91	MOGAPPAIR ERI SCHEME 8TH CROSS STREET	2279.4	Outsourced Parks
335	7	91	JESWANTH NAGAR PHASE- II	1900	Outsourced Parks
336	7	91	AIBEA NAGAR	1300	Outsourced Parks
337	7	91	MOGAPPAIR ERI SCHEME 1ST MAIN ROAD	976	Outsourced Parks
338	7	91	MOGAPPAIR ERI SCHEME 6TH MAIN ROAD	1201.24	Outsourced Parks
339	7	91	6TH BLOCK 8TH STREET	561.08	Outsourced Parks
340	7	91	MOGAPPAIR ERI SCHEME 15TH CROSS STREET	452	Outsourced Parks
341	7	91	MOGAPPAIR WEST BUS STAND	3463	Outsourced Parks
342	7	91	JESWANTH NAGAR PHASE- I	1590	Outsourced Parks
343	7	92	VEERAMAMUNIVAR STREET PARK	1075	Outsourced Parks
344	7	92	VENUGOPAL STREET PARK	398.82	Outsourced Parks
345	7	92	VARUN APPARTMENT PARK	688	Outsourced Parks
346	7	92	EB PARK	11455	Outsourced Parks
347	7	92	MANGAL ERI PARK	19500	Outsourced Parks
348	7	92	VGN RAKSHA PARK	638	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
349	7	92	CHURCH ROAD PARK	1000	Outsourced Parks
350	7	93	VEERAMAMUNIVAR STREET PARK	1200	Outsourced Parks
351	7	93	RAIL NAGR	1290	Outsourced Parks
352	7	93	MMM Hospital park	1300	Adoption
353	7	93	OV Joseph park	1200	GCC
354	7	90	VGN Park Padikuppam village	1437	Adoption
355	7	90	VGN Park Padikuppam village	432	Adoption
356	8	97	Pachaikal Veeraswamy Street, Ayanavaram, Chennai - 23.	928	GCC
357	8	99	Bank Manickam Park, Purasaiwalkam	350	GCC
358	8	100	Bashyam Park, Junction of Taylors road & Halls Road, Kilpauk, Chennai - 10.	430	GCC
359	8	100	Air india park, Harleys Lane, Kilpauk, Chennai - 10.	184	GCC
360	8	100	Kences Park at EVR Lane, Kilpauk, Chennai - 10.	1473	GCC
361	8	100	Prof.Subramaniam Park, Prof. Subramaniam Street, Kilpauk, Chennai - 10.	306	GCC
362	8	103	Tas Chellaiah Road, Anna Nagar, Chennai - 40.	100	GCC
363	8	107	Nelson Manickam Road (115),Aminjikarai	412.39	GCC
364	8	107	Nelson Manickam Road (Krishna building 116),Aminjikarai	173.6	GCC
365	8	108	Mayor Ramanathan Salai (Near TB Hospital), Chetpet, Chennai - 31.	69	GCC
366	8	99	True Value Homes, Bricklin Road, Purasaiwalkam	336	Adoption
367	8	99	True Value Homes, Bricklin Road, Purasaiwalkam	3215.9	Adoption
368	8	99	Arihant road, Bricklin Road, Purasaiwalkam	1380	Adoption
369	8	103	AD-Block Park 3rd Street, Anna Nagar, Chennai - 40.	3676.6	Adoption
370	8	107	Nelson Manickkam Road near MGM Health Care	604	Adoption
371	8	108	Mayor Ramanathan Salai Eastern Side, Chetpet, Chennai - 31.	244	Adoption
372	8	94	SIDCO NAGAR 4TH MA ROAD	1918	Outsourced Parks
373	8	95	THIRU NAGAR 13TH BLOCK 11TH STREET PARK	7895	Outsourced Parks
374	8	96	UNITED DIA NAGAR (JEEVA PARK)	612.5	Outsourced Parks
375	8	96	KONNUR HIGH ROAD PARK	1000	Outsourced Parks
376	8	98	TNHB, AYANAVARAM, NR SOLAIAMMAN KOIL	911	Outsourced Parks
377	8	99	NEHRU PARK	7137	Outsourced Parks
378	8	101	G-BLOCK PARK	3489	Outsourced Parks
379	8	101	SCATTG PARK	11160	Outsourced Parks
380	8	101	Inner Circular road	378.75	Outsourced Parks
381	8	102	C-BLOCK PARK	2847	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
382	8	102	2 ND MA ROAD PARK	877.5	Outsourced Parks
383	8	102	BOGANVILLA PARK	8192	Outsourced Parks
384	8	103	7TH MA ROAD PARK	324	Outsourced Parks
385	8	103	AL-BLOCK 14TH MA ROAD PARK	3960	Outsourced Parks
386	8	104	I-BLOCK 2ND STREET PARK	2186	Outsourced Parks
387	8	104	I-BLOCK 38TH STREET PARK	1939	Outsourced Parks
388	8	104	W-BLOCK 'C' SECTOR 2ND STREET PARK	3106	Outsourced Parks
389	8	104	15TH MA ROAD (BPCL), RANGANATHAN GARDEN PARK	3711	Outsourced Parks
390	8	104	RBI 'Z' BLOCK PARK	2844	Outsourced Parks
391	8	104	Metro Zone	4 ACRE	Outsourced Parks
392	8	106	MMDA COLONY R BLOCK PARK	1200	Outsourced Parks
393	8	107	METAL FACTORY ROAD PARK	1486.8	Outsourced Parks
394	8	108	MAYOR SATHYAMURTHY SALAI PARK	3728	Outsourced Parks
395	8	97	VELLALA STREET ,AYANAVARAM	3106.5	Outsourced Parks
396	8	101	DR.VISWESWARAYA TOWER PARK AT 3RD MA ROAD, ANNA NAGAR	57927	Outsourced Parks
397	9	109	West Namachivayapuram Park	1322.75	GCC
398	9	109	Gil Nagar Park Shanmuganar Road	3167.44	Outsourced Parks
399	9	110	Independence Day Park Valluvar Kottam High Road	3920	Outsourced Parks
400	9	110	Anna Park Valluvar Kottam	139.45	Outsourced Parks
401	9	110	Harington Road Park	1070	Outsourced Parks
402	9	111	Ko Su Mani Park	312	GCC
403	9	111	Haddows Road Park	3200	Adoption
404	9	111	College Road Park (Near Sankar Nethralaya)	300	Adoption
405	9	111	College Road Park (Scope International)	2339.2	Adoption
406	9	111	Smith Road Park	100	Adoption
407	9	111	Binny Road - Spencer Plaza Park	4575.3	Adoption
408	9	111	Dhamotharan Street park	1450	GCC
409	9	111	Badri Road Park	2347	Outsourced Parks
410	9	111	Whites Road Park	4248	Outsourced Parks
411	9	111	Nungambakkam 4th Lane Park	5000	Outsourced Parks
412	9	111	College Lane Park	5000	Outsourced Parks
413	9	111	Rutland Gate 2nd Street Park	445	Outsourced Parks
414	9	112	Anbalagan Poonga Trust Puram 6th Cross Street	700	Outsourced Parks
415	9	112	Chirta Park Railway Barder Road Street	900	Outsourced Parks
416	9	113	Sharma Park Habibullah Road	1200	Outsourced Parks
417	9	113	Charri Park	650	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
418	9	113	Periyar Park	5000	Outsourced Parks
419	9	113	Kodambakkam High Road Park	2000	Outsourced Parks
420	9	114	Traffic Park Near Napier Bridge	4137	Adoption
421	9	114	Kamaraja Road Anna Memorial Park	12417	Outsourced Parks
422	9	116	Dr. Annie Besant Park	2000	GCC
423	9	118	Thiru.Vi.Ka Park SPS Street	1740	Outsourced Parks
424	9	118	G.N.Muthai Park	3000	Outsourced Parks
425	9	119	CIT Colony 5th Cross St Park	1355	Outsourced Parks
426	9	119	Parthasarathy Park V.M Street	675	Outsourced Parks
427	9	121	Thiruvalluvar Park	290	GCC
428	9	121	City Center - Nainar Road Park	1500	Outsourced Parks
429	9	122	Turnsbulls Park	8100	Outsourced Parks
430	9	123	Nageswara Rao Park	10000	Outsourced Parks
431	9	123	Karunanidhi Park	1800	Outsourced Parks
432	9	123	Raja Annamalaipuram 7th main Road park	1450	Outsourced Parks
433	9	124	Kalvari Street Park	872	Outsourced Parks
434	9	114, 116, 125, 120 & 121	Marina Beach park (lawn 1 -4 )	45472.14	Outsourced Parks
435	9	125	Loop Road Park (Nochikuppam)	821.05	Outsourced Parks
436	9	126	Model Sensory Park and Garden	1529.5	GCC
437	9	126	Pattinapakkam Loop Road Park	3000	Outsourced Parks
438	9	126	Lazar Church Road Park	1684	Outsourced Parks
439	10	127	SAF Games Village OSR 13 Park, between B&C block	432	GCC
440	10	127	SAF Games Village OSR 14 Park	486	GCC
441	10	127	SAF Games Village Park 01	863	Outsourced Parks
442	10	127	SAF Games Village Park 02	4616	Outsourced Parks
443	10	127	SAF Games Village Park 03	633	Outsourced Parks
444	10	127	SAF Games Village Park 04	677	Outsourced Parks
445	10	127	SAF Games Village Park 05	577	Outsourced Parks
446	10	127	SAF Games Village Park 06	1137	Outsourced Parks
447	10	127	SAF Games Village Park 07	577	Outsourced Parks
448	10	127	SAF Games Village Park 08	1249	Outsourced Parks
449	10	127	SAF Games Village Park 09	708	Outsourced Parks
450	10	127	SAF Games Village Park 10	1307	Outsourced Parks
451	10	127	SAF Games Village Park 11	895	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
452	10	127	SAF Games Village Park 12	476	Outsourced Parks
453	10	127	Jai Nagar Park 1 & 2	10532	Outsourced Parks
454	10	127	West Natesan Park (RoadsidePark)	600	Outsourced Parks
455	10	127	Thaisha Park	6080	Outsourced Parks
456	10	127	Natesan Nagar Park	4059	Outsourced Parks
457	10	128	Vembuliamman Koil street	1475	Adoption
458	10	128	Annaji Nagar 2nd Main Road Park	1451.5	Outsourced Parks
459	10	128	Lambert Nagar II Main Road Park	900	Outsourced Parks
460	10	128	New Colony 5th cross street	896	Outsourced Parks
461	10	129	NSK Lane Park	620	GCC
462	10	129	Navalar Street Park	360	Outsourced Parks
463	10	129	Bhaskar Colony Park	2560	Outsourced Parks
464	10	129	Abusali Road Park	2540	Outsourced Parks
465	10	129	Arcot Road Park	2300	Outsourced Parks
466	10	129	Pillaiyar Koil Street Park	960	Outsourced Parks
467	10	129	Arunachalam salai (Kumaran colony 4th street Park)	1736	Outsourced Parks
468	10	130	Arcot Road Park , Near Forum Mall	5818.4	Adoption
469	10	132	Corporation colony, Kalaignar Park	2666.46	Outsourced Parks
470	10	133	Panagal Park	6000	Outsourced Parks
471	10	133	Jeeva Park	4582	Outsourced Parks
472	10	133	Natesan Park	10532	Outsourced Parks
473	10	132	Anna walkers Park UIC Colony ,	1663	Outsourced Parks
474	10	135	15th Sector , 98th street Park	335	Outsourced Parks
475	10	135	53rd Street Park	585	Outsourced Parks
476	10	135	12th Avenue Park	1451.5	Outsourced Parks
477	10	135	1st Avenue Park	2666.46	Outsourced Parks
478	10	135	14th Sector Park	4723	Outsourced Parks
479	10	136	Rani Anna Nagar Park	955	Outsourced Parks
480	10	136	Sivan Park	10992	Outsourced Parks
481	10	136	Kannigapuram Park	2442.5	Outsourced Parks
482	10	136	4th Sector Park	2940	Outsourced Parks
483	10	137	8th Sector Park	2075	Outsourced Parks
484	10	137	11th Sector Park	3985	Outsourced Parks
485	10	137	Erikarai Street Park-1	4760	Outsourced Parks
486	10	137	12th SECTOR Park	1953	Outsourced Parks
487	10	137	Erikarai Park, Nesapakkam (Park cum Play ground)	3600	Outsourced Parks
488	10	138	Anna mainroad park (K K nagar)	750	GCC

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
489	10	138	Bharathidasan Colony 5th Street Park	830	Outsourced Parks
490	10	138	Bharathidasan Colony 6th Street Park	2464	Outsourced Parks
491	10	139	Jafferkhanpet Main Road	500	Outsourced Parks
492	10	140	Ellaiamman Koil Street Park	8005	Outsourced Parks
493	10	140	Amma Park	2250	Outsourced Parks
494	10	141	CIT Nagar 3rd Main Road Park	4144	Outsourced Parks
495	10	142	West Jones Road Park	1183.44	GCC
496	10	142	Thadi Rathinam Street Park	591.25	GCC
4	10	130	Trellis Park (Previously adopted by Trellis south flat owners association)	2024.25	CMRL
498	11	143	DABC Gokulam Phase I, Sakthi nagar main road	1181.7	Adoption
499	11	143	Chanakiyan main road	8866.5	Adoption
500	11	143	Chanakiyan main road	3857.9	Adoption
501	11	143	"DABC Mithilam , Sakthi nagar main road Park"	518	Adoption
502	11	143	"DABC Gokulam Phase III , Sakthi nagar main road Park"	394	Adoption
503	11	143	"DABC Gokulam Phase II, Sakthi nagar main road Park"	3150	Adoption
504	11	143	"DABC Abinayam Phase II, Sakthi nagar 2nd Avenue Park"	1516	Adoption
505	11	143	Fomra , Sakthi nagar II Avenue Park	344	Adoption
506	11	143	"Abinayam Phase III , Sriram nagar main road Park"	770	Adoption
507	11	143	"DABC Aishwaryam Phase II , DABC main road"	1188	Adoption
508	11	143	"DABC Aishwaryam Phase I, DABC main road Park"	255	Adoption
509	11	143	"VGN la Parisienne , 4th main road Phase I Park"	1269	Adoption
510	11	143	Jain Sundarban , Gurusamy Salai Park	2384	Adoption
511	11	143	Akshaya homes , Gurusamy Salai Park	740	Adoption
512	11	143	VGN Minerva, Gurusamy Salai Park - 1	1211	Adoption
513	11	143	VGN Minerva ,Gurusamy Salai Park - 2	1792	Adoption
514	11	143	VGN Minerva ,Gurusamy Salai Park - 3	1400	Adoption
515	11	143	"City Lights Meadows , Andalammal Street park Park"	2522	Adoption
516	11	143	Indira splender ,Uniuon road park	508	Adoption
517	11	143	"Kegyes Apoorva , Gangai amman koil street Park"	233	Adoption

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518	11	143	Jain Nakchatra , Perumal koil Park	4209	Adoption
519	11	143	"Galaxy apartments , Phase I II main road Park"	468	Adoption
520	11	143	Sensory Park for Disabled children at Sakthi nagar main road	1188	Outsourced Parks
521	11	143	New park at TNHB Mogappair west main road.	2519	Adoption
522	11	143	Nolambur Phase-1, 7th main road	974.21	Outsourced Parks
523	11	143	Nolambur Phase-1,3rd main road	4242.37	Outsourced Parks
524	11	143	Nolambur Phase-1,9th main road (new)	1051.7	Outsourced Parks
525	11	143	Nolambur Phase-II, 7th Cross Street	3421.57	Outsourced Parks
526	11	143	Nolambur Phase-II, 3rd Cross Street	1682.14	Outsourced Parks
527	11	143	Nolambur Phase-1,6th main road	641.4	Outsourced Parks
528	11	143	Nolambur Phase-II, 13th Cross Street	2205	Outsourced Parks
529	11	143	Nolambur Phase-1,9th main road (Old)	1465	Outsourced Parks
530	11	143	Nolambur Channel Road	1117.53	Outsourced Parks
531	11	143	Nolambur Phase-I, 13th Cross Street	977.71	Outsourced Parks
532	11	143	Nolambur MCK Layout	1075.67	Outsourced Parks
533	11	143	Nolambur Phase-1, 1st main road	941.73	Outsourced Parks
534	11	143	Nolambur Phase-I, 6th Cross Street	216.79	Outsourced Parks
535	11	143	VGN Monte carlo, Garden Street	925.22	Outsourced Parks
536	11	143	VGN Monte carlo, Park Street	3326.76	Outsourced Parks
537	11	143	VOC salai Park	902.23	Outsourced Parks
538	11	143	S&P garden 8th Street	402.52	Outsourced Parks
539	11	143	S&P garden 2nd cross Street	1888	GCC
540	11	143	5th block, Kamarajar salai	429	GCC
541	11	143	Phase - I, 2nd Main road	463	GCC
542	11	143	S&P garden 1st main road	1406	GCC
543	11	144	VGP Amudha Nagar park	586	Outsourced Parks
544	11	144	7th Block main road, MMDA colony	577	GCC
545	11	145	Arulmighu Meenakshiamman nagar park	250	GCC
546	11	147	Bharathi Nagar 3rd Street	1130	Outsourced Parks
547	11	147	Pallavan Nagar Park	996.9	Outsourced Parks
548	11	147	Aringar Anna Park	1375.47	Outsourced Parks
549	11	147	Ganga Nagar 3rd main road	630	GCC
550	11	149	Alsa Park at Arcot Road	1512	Outsourced Parks
551	11	149	Ceebros Park at Neithal Street	1630	Outsourced Parks
552	11	149	Varadha Park at Brindhavan Nagar	2498.27	Outsourced Parks
553	11	149	Brindhavan Nagar Park	510	Outsourced Parks
554	11	149	Thiru vi ka Park at Gandhi Road	2415	Outsourced Parks

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555	11	149	Thanthai Periyar Nagar Park at Fathima Nagar	2730	Outsourced Parks
556	11	150	Karambakkam 1st Street, Karambakkam-Porur, Ch-116	323.37	Adoption
557	11	150	Chettiyar Agaram, (SPR Building), Porur, Ch-116	3700	Adoption
558	11	150	Agni fairy land	1740	Adoption
559	11	150	Sri Parasnath Nagar Park	2007	Outsourced Parks
560	11	150	Ponni Amman Koil Street Park	5070	Outsourced Parks
561	11	150	Maruthi Nagar Phase - 1&2 Park	2676	Outsourced Parks
562	11	150	Maharashi Teachers colony	452	GCC
563	11	150	Karunya nagar park	692	GCC
564	11	150	Maruthi Nagar Phase - 3 Park	1339	Outsourced Parks
565	11	150	Metro Nagar 4th Avenue	1112	Outsourced Parks
566	11	150	Subagiri Park	520	Outsourced Parks
567	11	151	Mount Poonamallee Road (Near Saravana Stores), Porur, Ch-116	1220.2	Adoption
568	11	151	TCG PARK , Mount Poonamallee Road	2503.3	Adoption
569	11	151	Mount Poonamallee Road (Near Mugalivakkam Signal), Mugaliwakkam, Ch-125	5670.7	Adoption
570	11	151	Sabari Nagar Park	927	Outsourced Parks
571	11	151	BBC Apartment	850	Adoption
572	11	151	Lakshmi Nagar Park 40ft road	998.3	Outsourced Parks
573	11	153	Sterling Avenue Main Road Park	722.13	Outsourced Parks
574	11	153	Udaya Nagar Park	650	Outsourced Parks
575	11	153	Kanniappan Salai Park	796.7	Outsourced Parks
576	11	153	Ramasamy Nagar Park	1033.26	Outsourced Parks
577	11	153	Ramakrishna Nagar Park	753.47	Outsourced Parks
578	11	154	Giri Nagar Park	706.23	Outsourced Parks
579	11	154	Tamil Nagar	750	GCC
580	11	154	Kurunji Nagar Park	832	Outsourced Parks
581	11	155	Ashwini amrasha Park	1765.16	Adoption
582	11	155	Marvel approva Park	1109.5	Adoption
583	11	155	TNHB Quarters Park	76.04	Outsourced Parks
584	11	155	Thiruvalluvar Salai	3127	Outsourced Parks
585	11	155	Eswaran Nagar Park (3rd street)	487.5	Outsourced Parks
586	11	155	Bharathi salai park	674.15	Outsourced Parks
587	11	155	Azhagapuri Nagar 6th Avenue	738.29	Outsourced Parks
588	11	155	KP Nagar Park	487.5	Outsourced Parks
589	11	155	Senthamil nagar park	380	Outsourced Parks
590	11	155	Jai Balaji Nagar Park	409	Outsourced Parks

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591	11	155	Rayala Nagar Park	1402.29	Outsourced Parks
592	12	156	SHUBASRI NAGAR EXTN 5 STREET CHILDRENS PARK	448.16	Outsourced Parks
593	12	156	MIYAWAKI FOREST AT BLOOMING GARDEN	1350	Outsourced Parks
594	12	156	ANNAI VELANKANNI PH-1,5TH STREET PARK	1282.4	Outsourced Parks
595	12	156	SSL GREEN PARK	523.6	Outsourced Parks
596	12	156	KALAIMAGAL NAGAR PARK	4690	Outsourced Parks
597	12	156	VND AVENUE VAIGAI PARK	2237.42	Outsourced Parks
598	12	156	SABARI NAGAR 1ST MAIN ROAD CHILDRENS PARK	701.5	Outsourced Parks
599	12	156	KUMUTHAM NAGAR PARK	2201.63	Outsourced Parks
600	12	156	MARYGOLD STREET PARK	1432.2	Outsourced Parks
601	12	156	VISWANATHAN PALANI PARK	599.04	Outsourced Parks
602	12	156	SABARI NAGAR 2ND MAIN ROAD PARK	941.5	Outsourced Parks
603	12	156	ANNAIVELANKANNI PH-1,2ND STREET PARK	1310.4	Outsourced Parks
604	12	156	AGS COLONY PH-3 PARK	2622	Outsourced Parks
605	12	156	SABARI NAGAR 5TH STREET PARK	437.5	Outsourced Parks
606	12	156	DEVADOSS STREET PARK	1176	Outsourced Parks
607	12	156	THIRUVALLUVAR NAGAR NATHAMUNI STREET PARK	4806.78	Outsourced Parks
608	12	156	RAJESWARI AVENUE SINDHU SALAI PARK	1900.15	Outsourced Parks
609	12	156	MADHA NAGAR 2ND MAIN ROAD PARK	1780	Outsourced Parks
610	12	156	KUNDRATHUR MAIN ROAD PARK	1112.03	Outsourced Parks
611	12	156	SANTHOSH NAGAR RAMACHANDRAN STREET PARK	4886.72	Outsourced Parks
612	12	156	ANNAI VELANKANANI NAGAR PH-2 MAIN ROAD PARK	2200	Outsourced Parks
613	12	156	Ramamoorthy avenue saroji street	1241	Outsourced Parks
614	12	156	SHANTHI NIKETHAN STREET PARK	410	Outsourced Parks
615	12	157	CRR PURAM L&T COLONY PARK	3174.1	Outsourced Parks
616	12	157	MACRO MARVEL	1272	Outsourced Parks
617	12	157	RIVER VIEW COLONY PH-I	2347	Outsourced Parks
618	12	157	RIVER VIEW COLONY PH-II	1917	Outsourced Parks
619	12	157	RIVER VIEW COLONY PH-III	1159	Outsourced Parks
620	12	157	BEL NAGAR	1434	Outsourced Parks
621	12	157	KAVYA GARDEN	1891	Outsourced Parks
622	12	157	NAVEEN'S	1135	Outsourced Parks
623	12	157	Sethulakshmi street	837	Outsourced Parks
624	12	158	SUNDAR NAGAR	495.9	Outsourced Parks

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625	12	160	NEW STREET	1467	Outsourced Parks
626	12	161	MURUGAN NAGAR	255	Outsourced Parks
627	12	161	JEEVAN NAGAR	263	Outsourced Parks
628	12	161	OFFICERS COLONY 1ST STREET PARK	1414	Outsourced Parks
629	12	161	TNGO COLONY	1234	Outsourced Parks
630	12	162	THILLAIGANGA NAGAR 33RD STREET	330	Outsourced Parks
631	12	162	THIRUVALLUVAR NAGAR 1ST STREET	609.12	Outsourced Parks
632	12	162	THIRUVALLUVAR NAGAR 3RD STREET	405.01	Outsourced Parks
633	12	162	NEHRU STREET PARK	1209	Outsourced Parks
634	12	162	Appasamy bannial street MKN street	1078.35	Outsourced Parks
635	12	162	Moorison 5th street	188	Outsourced Parks
636	12	163	SHANTHI NAGAR 3RD STREET	520	Outsourced Parks
637	12	163	SURENDRA NAGAR 3RD STREET	443.22	Outsourced Parks
638	12	164	NANGANALLUR 29TH STREET	353.76	Outsourced Parks
639	12	165	SOUTH SECTOR II ND STREET	799	Outsourced Parks
640	12	165	BALAJI NAGAR	717.8	Outsourced Parks
641	12	165	LAKSHMI NAGAR	243.04	Outsourced Parks
642	12	165	BHARATH NAGAR	1235.2	Outsourced Parks
643	12	165	NETHAJI PARK	410.4	Outsourced Parks
644	12	166	ANNA STREET PARK	995.07	Outsourced Parks
645	12	167	VIJAY AVENUE	153	Outsourced Parks
646	12	167	HINDU COLONY 26TH STREET PARK	270	Outsourced Parks
647	12	167	NANGANALLUR 100FEET ROAD SIDE PARK	520	Outsourced Parks
648	12	167	INDEPENDENCE DAY PARK	4552.96	Outsourced Parks
649	12	167	SBI BANK MAIN COLONY PARK	144.04	Outsourced Parks
650	12	167	VOLTAS COLONY 1ST STREET	1450.13	Outsourced Parks
651	12	167	LAKSHMI NAGAR 7TH STREET	1714.07	Outsourced Parks
652	12	167	LAKSHMI NAGAR 4TH STAGE	704	Outsourced Parks
653	12	167	KANNIGA COLONY	342.75	Outsourced Parks
654	12	167	CIVIL AVIATION COLONY PARK	1707.89	Outsourced Parks
655	12	167	NANGANALLUR 46TH STREET	535.37	Outsourced Parks
656	12	167	KANNAN NAGAR 1ST MAIN ROAD	458.64	Outsourced Parks
657	12	167	JAIN STAFF COLONY	379.17	Outsourced Parks
658	12	167	MMTC COLONY , ESWARAN KOVIL STREET	317.34	Outsourced Parks
659	12	167	VOLTAS COLONY 3RD STREET	896.06	Outsourced Parks
660	12	167	KANNAN NAGAR 1ST CROSS STREET	480.75	Outsourced Parks
661	12	167	EAST MAIN ROAD PARK	358.53	Outsourced Parks
662	13	168	Olimbiya Tech Park	3415.3	Adoption
663	13	168	Thamarai Tech Park	1687.8	Adoption

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
664	13	168	ITC Park	1200	Adoption
665	13	168	Temple stop Park	450	Adoption
666	13	168	Central Execise Colony	856.33	Outsourced Parks
667	13	168	Customs colony	749.32	Outsourced Parks
668	13	168	Labour Colony	1388.77	Outsourced Parks
669	13	169	Velachery Main Road	148	GCC
670	13	169	LDG Road side park	152	GCC
671	13	169	Chinnamalai Park (Halda)	1577	Outsourced Parks
672	13	170	Kottur Garden 1st Cr. St., Infinity Park	2526	GCC
673	13	170	Trin Angle Park	250	GCC
674	13	170	NSK Park	103	GCC
675	13	170	Kottur Villa	214	Adoption
676	13	170	Chitra Nagar Park	1803.38	Outsourced Parks
677	13	170	Dhandayuthapani Park	1448.45	Outsourced Parks
678	13	170	Senior Citizen Park	582.37	Outsourced Parks
679	13	171	Jain Saagarika, Sathyadev Avenue	610	GCC
680	13	171	Somerset Greenways Hotel, Sathyadev avenue	784.37	GCC
681	13	171	The Lords Park Sathyadev Avenue	433.2	Adoption
682	13	171	TVH Belicia Tower, MRC Nagar extn	1047.74	Adoption
683	13	171	Chaitanya Park, Janaki Avenue Extn	269.42	GCC
684	13	171	Ceebros MRC Nagar (174)	2325.07	Adoption
685	13	171	Leela Palace Park Sathyadev Avenue	623.25	GCC
686	13	171	Karpagam Avenue 1st street, Raheja Regency	322.6	GCC
687	13	171	Kamaraj Salai (Dharmambal Park)	2156	Outsourced Parks
688	13	171	M.R.C Nagar Extn.	3392	Outsourced Parks
689	13	171	Krishnapuri Main Road	1089	Outsourced Parks
690	13	171	Vasantha Avenue	1392	Outsourced Parks
691	13	171	RK Nagar 2nd Street	1450	SHG
692	13	171	Kesavaperumal Puram East Avenue	1055	Outsourced Parks
693	13	171	Kesavaperumal Puram central Avenue	732	Outsourced Parks
694	13	171	MRC Nagar South Beach Avenue	1782	Outsourced Parks
695	13	172	Pandian Street (Pheonix Mall Park)	6655.94	Outsourced Parks
696	13	172	City Limit Road (Secretariate Colony Park)	2721.54	Outsourced Parks
697	13	173	Indira Nagar 26th Cr. Street	875	GCC
698	13	173	Rajiv gandhi road,	24300	Adoption
699	13	173	Adyar river bank, Kotturpuram	20215	GCC
700	13	173	Indira Nagar 4th Cross Street	6309.5	Outsourced Parks
701	13	173	Kamaraj Nagar 4th West Street	1865.6	Outsourced Parks
702	13	173	Kamaraj Nagar 13th West Street	707	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
703	13	173	Kamaraj Nagar 2nd West Street	1352	Outsourced Parks
704	13	174	Padmanabha Nagar 5th Street Park	1546	Outsourced Parks
705	13	174	Besant Nagar 14th street	600	GCC
706	13	174	Dr Muthulakshmi Salai (Aavin Park)	3872	Outsourced Parks
707	13	175	LH Nagar IV cross street Park	574	Outsourced Parks
708	13	175	New NGO Colony II main road Park	2032	Outsourced Parks
709	13	175	TNHB Colony 4th Street	789	Outsourced Parks
710	13	175	Mahalakshmi Nagar 1st Main Road	600	Outsourced Parks
711	13	176	AGS Colony 5th Cross Street	1518	Outsourced Parks
712	13	176	AGS Colony 4th Main Road	1339	Outsourced Parks
713	13	176	AGS Colony 4th Cross Street	1323	Outsourced Parks
714	13	176	Gangai Nagar 2nd Main Road	627	Outsourced Parks
715	13	176	MRTS Park	4500	Outsourced Parks
716	13	177	Bhethel Avenue Main Road	1728	Outsourced Parks
717	13	177	Thiruvalluvar Park	453.7	Outsourced Parks
718	13	177	Bharathiyar Park	969.54	Outsourced Parks
719	13	177	V.G.P. Selva Nagar 4th main road	2780	Outsourced Parks
720	13	177	Subramaniam Colony	2678	Outsourced Parks
721	13	177	V.G.P. Selva Nagar 2nd main road	3027.6	Outsourced Parks
722	13	178	Ramanujam IT City, Taramani	1200	Adoption
723	13	178	Ascendas Park	24300	Adoption
724	13	178	CSIR Road, Taramani, Chennai-113	24300	Adoption
725	13	178	World Bank Park	2250	Adoption
726	13	178	MGR Flim City Road	1340	Adoption
727	13	178	Kanagam, Nehru street,	1555.93	Outsourced Parks
728	13	178	Ramagiri Nagar 1st Street	1385.2	Outsourced Parks
729	13	179	M.G.R. Street	1340	Outsourced Parks
730	13	179	Tiger Varathachari Road Park	237	Outsourced Parks
731	13	179	CGE colony	990	Outsourced Parks
732	13	179	Yamuna Street Park	457	Outsourced Parks
733	13	179	Gangai Street (Arupadai Veedu)	3365	Outsourced Parks
734	13	180	"Thiruvalluvar Nagar I Avenue, Thiruvanmiyur, Ch-41"	2596	Adoption
735	13	180	Thiruvalluvar Nagar II main road	1397.19	Outsourced Parks
736	13	180	Thiruvalluvar Nagar 43rd Cross Street	877.29	Outsourced Parks
737	13	180	AIBEA Nagar (Devandra Nagar)	519.52	Outsourced Parks
738	13	180	Thiruvalluvar Nagar VII Cross Street	2054.32	Outsourced Parks
739	13	180	Valmigi Nagar - 69th Cross Street	909	Outsourced Parks
740	13	180	Journalist Colony	1730	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
741	13	180	1st Seaward Road	1131.07	Outsourced Parks
742	13	180	Kannappa Nagar	525.27	Outsourced Parks
743	13	178	IIT Reseach Park	4967	Adoption
744	14	181	Rajiv Gandhi Salai true value homes park	1696.28	Adoption
745	14	181	Rajiv Gandhi Salai prince info tech park	1564.34	Adoption
746	14	181	Rajiv Gandhi Salai HCL	544	Adoption
747	14	181	Karpagambal Nagar 3rd Street	668	Outsourced Parks
748	14	181	Netco colony	930.1	Outsourced Parks
749	14	182	Lakshmi tech ( Near apollo proton)	1440	Adoption
750	14	182	OMR Apollo Hospital Park	664.1	Adoption
751	14	182	Thiruvalluvar street	2312	Outsourced Parks
752	14	182	Ramappa nagar 1st cross street	1120	Outsourced Parks
753	14	182	CBI Colony 2nd main road	4366	Outsourced Parks
754	14	182	Anna nedunsalai ferrai house park	5008	Outsourced Parks
755	14	182	Anna nedunsalai twin court park	397.52	Outsourced Parks
756	14	182	MGR Salai (Ramaniyam Kudirupu)	1680	Outsourced Parks
757	14	182	Sathyamoorthy road Lakshmanan Nagar	1519.48	Outsourced Parks
758	14	182	Anna Nedunsalai, Jain House	2027.25	Outsourced Parks
759	14	182	RMZ	2682	Outsourced Parks
760	14	183	kandasamy Nagar 3rd street	772.88	Outsourced Parks
761	14	183	Govindhan Nagar 1st street (Poomalai Street	307.4	Outsourced Parks
762	14	183	Vgp layout 4th main road	4280	Outsourced Parks
763	14	183	Palavakka ECR (amara) park	493	Outsourced Parks
764	14	184	Rajiv Nagar 1st Main Road Doshi flat park	1332	Adoption
765	14	184	Panchayat road jain anumitha flat park	317.26	Adoption
766	14	184	Corporation road park	1732	Adoption
767	14	184	Omathurai park	500	Outsourced Parks
768	14	184	Thirumalai nagar Park	4670	Outsourced Parks
769	14	184	Vengateswara nagar park	1658	Outsourced Parks
770	14	184	Rajiv nagar	3300	Outsourced Parks
771	14	184	Anna nedunchalai (Periyar Park)	1382	Outsourced Parks
772	14	184	Telephone nagar 2nd cross street	4647	Outsourced Parks
773	14	185	Lakshmi nagar 10th street	225	Outsourced Parks
774	14	186	Balaji nagar extn south	690	Outsourced Parks
775	14	186	lyyan thiruvalluvar park	1245.28	Outsourced Parks
776	14	186	Balaji nagar 19th street	5098	Outsourced Parks
777	14	186	Ags colony 2nd Street	1776.63	Outsourced Parks
778	14	186	Annai therasa 14th street	1648.52	Outsourced Parks
779	14	186	Epr nagar	1324	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
780	14	186	Hindu colony 2nd Main Road park	650	Outsourced Parks
781	14	186	Velachery Innering Road	9000	Adoption
782	14	187	Park square colony park	856.13	Outsourced Parks
783	14	187	Karhtikeyapuram 6th street	861	Outsourced Parks
784	14	187	Mahatma ganthi park	841	Outsourced Parks
785	14	182	OMR Appollo Proton	1062	Adoption
786	14	188	Rajalakshmi nagar 1st Main Road	1219.6	Outsourced Parks
787	14	188	Anna nagar 5th main road	359.39	Outsourced Parks
788	14	188	Dr Ramamoorthy nagar park 1st Main Road	1399.07	Outsourced Parks
789	14	188	JV Nagar	856.13	Outsourced Parks
790	14	188	Ram Nagar 8th cross street	1176.96	Outsourced Parks
791	14	184	WTC park	4278	Adoption
792	14	188	Naickar Kuttai Mahalakshmi Nagar Main Road	4170	Outsourced Parks
793	14	188	Senthil Nagar Main Road	1068.59	Outsourced Parks
794	14	189	Kamakoti Nagar 6th Street North	2970	Outsourced Parks
795	14	189	Jones foundation east (near Max worth Nagar)	1038.58	Adoption
796	14	189	Jones foundation west (near Max worth Nagar)	861.18	Adoption
797	14	189	Astalakshmi avenune	2590	Outsourced Parks
798	14	189	VGP shanthi nagar	2160	Outsourced Parks
799	14	189	Arumugam nagar	768	Outsourced Parks
800	14	189	IIT colony 3rd main road	3468.65	Outsourced Parks
801	14	189	Kamakotti nagar 1st main road	6383	Outsourced Parks
802	14	189	Thamaraikulam park	5570	Outsourced Parks
803	14	189	Herbal park	1687	Outsourced Parks
804	14	189	Chettinadu housing park1	120	Outsourced Parks
805	14	189	Chettinadu housing park3	532	Outsourced Parks
806	14	191	Casagrand tranquil	1573	Adoption
807	14	189	Kamakotti Nagar 9th cross Street,	1838	Outsourced Parks
808	14	189	Rajesh nagar	666.75	Outsourced Parks
809	14	191	Casagrand tranquil	456	Adoption
810	14	191	Jayachandran nagar 5th main road	1934	Outsourced Parks
811	14	191	Jayachandran nagar 1st main road	5880	Outsourced Parks
812	14	191	Muthu Nagar park	4618	GCC
813	14	191	Krishna Nagar Park	184.44	GCC
814	14	191	Selene Estate	5642	Outsourced Parks
815	14	191	Jayachandran 1st Street Pond Park	5824	GCC
816	14	190	Ambal Nagar Pond Park	5900	GCC
817	14	191	G Square	3663	GCC
818	15	192	Raja nagar park in Dn.192	1844.82	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
819	15	192	Workers Estate park in Dn.192	877.96	Outsourced Parks
820	15	193	Sakthi Nagar Main Road park	1230	Outsourced Parks
821	15	193	"Vinayaga nagar park, Vinayaga nagar 1st main road"	772	Outsourced Parks
822	15	193	200 Feet Road (Radial Road)	1361.44	Adoption
823	15	193	Ananda nagar 5th cross street in Dn.193	2637	Outsourced Parks
824	15	193	Balamurugan Garden Park in Dn.193	4419	Outsourced Parks
825	15	193	Customs Colony Main road in Dn.193	3375	Outsourced Parks
826	15	193	R.E.Nagar main road in Dn.193	840	Outsourced Parks
827	15	193	Sri Sai nagar Park in Dn.193	7316	Outsourced Parks
828	15	194	Anna Enclave	536	Outsourced Parks
829	15	194	VGP layout park in Dn.194	1486	Outsourced Parks
830	15	195	Guindy Engineering college park	1470	Outsourced Parks
831	15	195	Foundry Street park	520.48	Outsourced Parks
832	15	195	Bharathiyar Nagar	1136.39	Adoption
833	15	195	Kamarajar Street	2323.24	Adoption
834	15	195	Rajiv Gandhi Road (Old Mahabalipuram Road)	624.99	Adoption
835	15	195	Rajiv Gandhi Road (Old Mahabalipuram Road)	1417	Adoption
836	15	195	Krishna Nagar Kumaran Kudil 3rd Cross Street	960.18	Adoption
837	15	195	Rajiv Gandhi Road (Old Mahabalipuram Road)	2128	Adoption
838	15	195	Sowdeeswari nagar (creek street) in Dn.195	2084	Outsourced Parks
839	15	195	Sowdeeswari nagar (CTS O.M.R) in Dn.195	3824	Outsourced Parks
840	15	195	Secretariat colony 1st Main Road in Dn.195	17102	Outsourced Parks
841	15	195	PTC Quarters Park in Dn.195	1416	Outsourced Parks
842	15	195	Chandrasekaran avenue park in Dn.195	4580	Outsourced Parks
843	15	195	Sakthi srinivasa road in Dn.195	3385	Outsourced Parks
844	15	196	Shakthi Garden	2417.39	Adoption
845	15	196	Shakthi Garden	624.99	Adoption
846	15	196	Annai Indira nagar 1st Main Road in Dn.196	4097	Outsourced Parks
847	15	196	Kannagi Nagar 2nd Cross Street in Dn.196	1600	Outsourced Parks
848	15	196	Kannagi Nagar 7th Cross Street in Dn.196	1150	Outsourced Parks
849	15	196	Kannagi Nagar 10th Cross Street in Dn.196	2000	Outsourced Parks
850	15	196	Kannagi Nagar 9th Main Road in Dn.196	1460	Outsourced Parks
851	15	196	Thiruvallur street Park	301	Outsourced Parks
852	15	197	"Bakthi Vedantha salai park, Akkarai Village Main Street (Near Iskan Temple)"	2860	Outsourced Parks
853	15	197	East Coast Road	4699	Adoption
854	15	197	East Coast Road	2161.43	Adoption
855	15	197	East Coast Road	5746	Adoption

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
856	15	197	VGP 2 nd main road (Sea cliff Main Road) in Dn.197	2452.64	Outsourced Parks
857	15	197	VGP 2nd main road (mahaveerar street) park in Dn.197	1406.66	Outsourced Parks
858	15	197	VGP south mainroad (NRI Layout park)	2401	Outsourced Parks
859	15	198	Aringer Anna Street	1675	Outsourced Parks
860	15	198	Rajiv Gandhi Road (Old Mahabalipuram Road)	1155.96	Adoption
861	15	198	Eswaran Street	131	Adoption
862	15	198	River View Residency 4th Street	4620.7	Adoption
863	15	198	Rajiv Gandhi Salai Park (Paypal)	2147.8	Adoption
864	15	198	Eswaran Street Muthamil Nagar (Near Casa crandy)	1233	Adoption
865	15	198	Reverview 6th street (Near Casa Crandy)	208	Adoption
866	15	198	Rajiv Gandhi Salai Park (Prestige)	1123.78	Adoption
867	15	198	School 1st Street (Near Decan Building)	228.6	Adoption
868	15	198	Eswaran Street	488.04	Adoption
869	15	198	Kamala Nagar Main Road (Near ASV)	2448.45	Adoption
870	15	198	Devaraj nagar 2nd main road park in Dn.198	3391	Outsourced Parks
871	15	198	Rajiv Gandhi Salai, Tecci Park in Dn.198	2086	Outsourced Parks
872	15	198	Rajiv Gandhi Salai, Dollar Park in Dn.198	1496.54	Outsourced Parks
873	15	198	Sadagoppan Street in Dn.198	1679.63	Outsourced Parks
874	15	198	New kumarannagar 2nd main road in Dn.198	4857	Outsourced Parks
875	15	198	Nehru Street Park	731.57	Outsourced Parks
876	15	199	Shozhanganallur Link Street	1030	Adoption
877	15	199	Prithyangara Koil Street	3668	Adoption
878	15	199	Prithyangara Koil Street	2015	Adoption
879	15	199	Model School Road	1756	Adoption
880	15	199	Kumarasamy Nagar Main Road (Open Ground)	1571.9	Adoption
881	15	199	Rajiv Gandhi Road (Old Mahabalipuram Road)	1199.39	Adoption
882	15	199	Rajiv Gandhi Road (Old Mahabalipuram Road)	471.11	Adoption
883	15	199	Rajiv Gandhi Salai Park (Citadens Hotel)	695	Adoption
884	15	199	Rajiv Gandhi Salai (Appasamy)	1740	Adoption
885	15	199	Elcot Avenue 1st street in Dn.199	1157	Outsourced Parks
886	15	199	Kumarasamy Nagar Central Park West in Dn.199	1619	Outsourced Parks
887	15	199	Kumarasamy Nagar Main Road North Park in Dn.199	1719.8	Outsourced Parks
888	15	199	Kumarasamy Nagar 6th street in Dn.199	3066	Outsourced Parks
889	15	199	Neduncheliyan street in Dn.199	1370	Outsourced Parks
890	15	199	TNHB B6 ROAD in Dn.199	8482.75	Outsourced Parks

S. No.	Zone	Div	Name of the park	"Area in Sqm"	"Parks maintianed by Adoption/ GCC/ Outsourcing"
891	15	199	TNHB C6 ROAD in Dn.199	903	Outsourced Parks
892	15	199	TNHB E12 ROAD in Dn.199	2420.29	Outsourced Parks
893	15	199	TNHB E17 ROAD in Dn.199	1230	Outsourced Parks
894	15	199	PONDICHERRY PATTAI ROAD in Dn.199	1114	Outsourced Parks
895	15	199	TNHB C7 road Park	643	Outsourced Parks
896	15	199	TNHB A road Park	396.26	Outsourced Parks
897	15	199	KK salai link road Park	1030	Outsourced Parks
898	15	199	Balaji nagar Mainroad Park	1740	Outsourced Parks
899	15	200	Rajiv Gandhi Road park (Near Times of India)	2400	Outsourced Parks
900	15	200	Nookampalaiyam Link Road (Near Elegant pinnacle apartment)	1079.48	Outsourced Parks
901	15	200	Nookampalaiyam Link Road (Near Microchip technology)	510	Outsourced Parks
902	15	200	Nookampalaiyam Link Road	282	Adoption
903	15	200	Rajiv Gandhi Road (Old Mahabalipuram Road)	1780.45	Adoption
904	15	200	TNSCB 1st main road in Dn.200	4420	Outsourced Parks
905	15	200	TNSCB 2nd main road in Dn.200	1783.58	Outsourced Parks
906	15	200	TNSCB 33rd cross street in Dn.200	835.38	Outsourced Parks
907	15	200	Sri Janani Homes Phase-I Park	940	Outsourced Parks
908	15	200	Jansen Srikrithi, Janani Homes Park	1352	Outsourced Parks







City Biodiversity Index – Chennai



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