

**PROJECT REPORT**

**on**

**Biodiversity Audit in Bharatiya Vidya Bhavan's Campus,  
Mumbai (Andheri West).**

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**ACADEMIC YEAR 2024 – 2025**

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## **CHAPTER 1 INTRODUCTION**

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The Bharatiya Vidya Bhavan is a campus situated in the western Mumbai, India neighborhood of Andheri West. The institution was founded in 1946, and its first president was K. M. Munshi. The Bharatiya Vidya Bhavan is a cause and a movement as well as an institution. From the beginning, its goals have been to support the foundations of Aryan culture, promote the study of all facets of Indian culture, and assist in the latter's reintegration in light of contemporary circumstances. Thus, the Bhavan serves as a hub where our traditional knowledge and contemporary intellectual goals converge to produce new literature, a new history, and a new culture. The campus is situated on forty-five acres of land. It includes organizations such as Bhavans College, SPCE, SPIT, and SPJIMR. Within campus, there is a Lord Shiva temple, a botanical garden, a lake, basketball and volleyball courts, football fields, and a nature adventure center.

India has experienced very rapid industrial expansion and urbanization in the previous few decades. Because of this, we are seeing the catastrophic depletion of natural resources, harm to ecosystems and habitats, and widespread pollution of surface and ground water resources, soil, and air, to name a few. This has almost certainly led to irreversible changes that could damage the ecosystem, hasten climate change, and cause diseases that will be challenging to treat if adequate, timely, and vigilant steps are not taken. Educational institutions continue to be essential in emerging nations like India because they promote social inclusion, economic advancement, and environmental protection, all of which have boosted the wealth of the country. The institutes are indirectly striving to attain aims for sustainable development, which are more and more significant in the modern world.

Biodiversity auditing uses existing repositories of species data to group priority species that share similar responses to conservation interventions, allowing practitioners to identify and implement regionally-optimized, evidence-based action plans. The objective of a green audit is to identify areas where an organization can improve its sustainability practices, reduce its carbon footprint, and contribute towards a cleaner and greener environment. It resembles an official government-mandated evaluation of the environmental effects on a business campus. By implementing the recommendations and guidance in the report, the organization's campus might be significantly improved.

## **CHAPTER 2 LITERATURE REVIEW**

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In order to determine the presence and distribution of the trees in the Bhavans Campus, Andheri, Mumbai, a study was carried out in May 2023. Every plant growing within the constructed campus was observed, identified, and measured for the Girth at Breast Height (GBH). The entire developed portion of the campus was arbitrarily split into the following areas:

1. Gate to SPJIMR Canteen.
2. SPIT &SPCE.
3. Workshop.
4. SPJIMR.
5. Incubator Cell, SPJIMR Mess, Bhavan's Staff Quarters.
6. Bhavan's College.
7. Bhavan's Ground.
8. Wadia School & SPJIMR Hostel.
9. SPCE Hostel.
10. Lake Area.
11. Administrative Building.
12. Bhavan's Adventure Centre.

### **2.1 SECTOR-WISE OBSERVATION:**

Data collected and classified from all the sectors are provided below in Tables 1 – 12. Scientific recognition has been granted to every known species of tree, which is listed here along with its scientific names, numerical distribution pattern, and girth.

**Table 1. Gate to SPJIMR Canteen.**

Trees Species	Girth Classes (in cms)			Total No.
	<30	30 - 50	Over 50	
<i>Acacia auriculiformis</i>	1		4	5
<i>Aesculus flava</i>	1			1
<i>Asimina triloba</i>	2		2	4
<i>Azadirachta indica</i>	4		1	5
<i>Bauhinia racemosa</i>			1	1
<i>Carica papaya</i>	4			4
<i>Chionanthus retusus</i>			1	1
<i>Citrus maxima</i>			1	1
<i>Delonix regia</i>	7	4	13	24
<i>Ficus religiosa</i>	3		9	12
<i>Jasminum grandiflorum</i>	1			1
<i>Koelreuteria paniculata</i>		2	1	3
<i>Lithocarpus edulis</i>			13	13
<i>Mangifera indica</i>	11	1	11	23
<i>Moringa oleifera</i>			2	2
<i>Musa acuminata</i>	2			2
<i>Pithecellobium dulce</i>	3		6	9
<i>Plumeria obtusa</i>	12	5	4	21
<i>Prunus virginiana</i>	1			1
<i>Saraca asoca</i>	12	6	41	59
<i>Syzygium cumini</i>		2	1	3
<i>Terminalia catappa</i>	1	1	4	6
<i>Vitex doniana</i>		1		1
<i>Zingiber officinale</i>	2	1		3
			Total=	205

**Table 2. SPIT &SPCE.**

Trees Species	Girth Classes (in cms)			Total No.
	<30	30 - 50	Over 50	
<i>Albizia lebbeck</i>			1	1
<i>Alstonia scholaris</i>	1	1	1	3
<i>Annona reticulata</i>		1	2	3
<i>Areca Palm</i>	3	2	5	10
<i>Artocarpus heterophyllus</i>	2		4	6
<i>Bombax ceiba</i>		2	2	4
<i>Caryota mitis</i>		1	2	3
<i>Cascabela thevetia</i>		1		1
<i>Casuarina equisetifolia</i>			5	5
<i>Chambeyronia lepidota</i>	3			3
<i>Citrus limon</i>	1			1
<i>Cocos nucifera</i>	3	5	10	18
<i>Ficus benghalensis</i>		2	3	5
<i>Garcinia indica</i>			1	1
<i>Latania lontaroides</i>	5	3	6	14
<i>Philodendron bipinnatifidum</i>	6			6
<i>Sindora echinocalyx</i>			1	1
<i>Tabernaemontana divaricata</i>		1		1
<i>Terminalia catappa</i>			3	3
<i>Veitchia Merrillii</i>	5	10		15
			Total=	104

**Table 3. Workshop**

Trees Species	Girth Classes (in cms)			Total No.
	<30	30 - 50	Over 50	
Anodendron parviflorum			4	4
Azadirachta indica	1			1
Carica papaya	9	4		13
Caryota mitis			3	3
Chorisia speciosa			1	1
Citrus limon	1			1
Cocos nucifera			1	1
Ficus benghalensis	1		2	3
Garcinia Kola Feuilles		1	1	2
Indian Kino			3	3
Jasminum sambac	2	1		3
Leucaena leucocephala			8	8
Mammea suriga		2		2
Mangifera indica	4		2	6
Markhamia lutea			1	1
Morinda citrifolia			1	1
Prosopis laevigata	1			1
Pseuderanthemum plant			1	1
Saraca asoca			16	16
Satakentia liukiuensis	1		8	9
Terminalia catappa			1	1
			Total=	81

**Table 4. SPJIMR**

Trees Species	Girth Classes (in cms)			Total No.
	<30	30 - 50	Over 50	
<i>Bauhinia variegata</i>	6	1	5	12
<i>Brownea grandiceps</i>	3			3
<i>Careya arborea</i>			1	1
<i>Cinchona pubescens</i>			1	1
<i>Ficus racemosa</i>			1	1
<i>Filicium decipiens</i>			1	1
<i>Hyophorbe lagenicaulis</i>			4	4
<i>Ixora coccinea</i>	1			1
<i>Lagerstroemia indica</i>	1			1
<i>Madhuca longifolia</i>			2	2
<i>Mimusops elengi</i>			1	1
<i>Pisonia grandis</i>	44	1	2	47
<i>Psidium guajava</i>	1			1
<i>Saraca asoca</i>	2			2
<i>Schefflera actinophylla</i>	3			3
<i>Spathodea campanulata</i>		1	2	3
<i>Tabebuia pallida</i>		1		1
<i>Tabebuia rosea</i>	1	4	4	9
			Total=	94

**Table 5. Incubator Cell, SPJIMR Mess, Bhavan's Staff Quarters**

Trees Species	Girth Classes (in cms)			Total No.
	<30	30 - 50	Over 50	
<i>Annona reticulata</i>		1		1
<i>Areca Palm</i>	12	1		13
<i>Artocarpus heterophyllus</i>			4	4
<i>Azadirachta indica</i>			3	3
<i>Bulbine abyssinica</i>	1			1
<i>Carica papaya</i>		3	4	7
<i>Caryota urens</i>		1	2	3
<i>Cocos nucifera</i>	3		13	16
<i>Couroupita guianensis</i>			1	1
<i>Ficus racemosa</i>	1	2	2	5
<i>Ficus religiosa</i>			6	6
<i>Java Plum</i>			1	1
<i>Madhuca longifolia</i>	5			5
<i>Mangifera indica</i>	4		12	16
<i>Moringa oleifera</i>			3	3
<i>Murraya koenigii</i>		1		1
<i>Musa acuminata</i>	1		4	5
<i>Myroxylon balsamum</i>		2	3	5
<i>Nerium oleander</i>	1			1
<i>Pithecellobium dulce</i>			2	2
<i>Plumeria rubra</i>	2	1		3
<i>Psidium guajava</i>		2	1	3
<i>Ravenea rivularis</i>		1		1
<i>Royal poiniciana</i>		1	5	6
<i>Saraca asoca</i>	1	2	6	9
<i>Sterculia foetida</i>	1			1
<i>Syzgium cumini</i>		1	2	3
<i>Tabernaemontana divaricata</i>	1	1		2
<i>Tamarind Indica</i>			2	2
<i>Terminalia bellirica</i>			2	2
<i>Terminalia catappa</i>			1	1
<i>Thaumatophyllum Bipinnatifidum</i>	7	4		11
			Total =	143

**Table 6. Bhavan's College.**

Trees Species	Girth Classes (in cms)			Total No.
	<30	30 - 50	Over 50	
<i>Alstonia scholaris</i>		1		1
<i>Anacardium occidentale</i>		1		1
<i>Artocarpus heterophyllus</i>			3	3
<i>Azadirachta indica</i>			2	2
<i>Bauhinia racemora</i>		1		1
<i>Chrysalidocarpus lutescens</i>			2	2
<i>Cocos nucifera</i>			42	42
<i>Dalbergia sissoo</i>	1			1
<i>Ficus racemosa</i>			1	1
<i>Jungle geranium</i>	1			1
<i>Lagerstroemia speciosa</i>			2	2
<i>Mangifera indica</i>	6	4	6	16
<i>Plumeria rubra</i>	1	10		11
<i>Pritchardia pacifica</i>		2		2
<i>Roystonea regia</i>	1		14	15
<i>Saraca asoca</i>	4		16	20
<i>Syzygium cumini</i>		2		2
<i>Tabernaemontana divaricata</i>	2			2
<i>Tamarindus indica</i>			3	3
<i>Terminalia catappa</i>	4	1	1	6
			Total=	134

**Table 7. Bhavan's Ground**

Trees Species	Girth Classes (in cms)			Total No.
	<30	30 - 50	Over 50	
<i>Acacia auriculiformis</i>			1	1
<i>Acacia falcata</i>		1	2	3
<i>Acacia leprosa</i>			1	1
<i>Araucaria heterophylla</i>			1	1
<i>Areca catechu</i>			1	1
<i>Azadirachta indica</i>	4	4	3	11
<i>Bauhinia picta</i>			1	1
<i>Carica papaya</i>	1			1
<i>Caryota mitis</i>	4	3	6	13
<i>Cocos nucifera</i>		1	18	19
<i>Couroupita guianensis</i>		2	1	3
<i>Ficus amplissima</i>			1	1
<i>Ficus benghalensis</i>			2	2
<i>Lagerstroemia speciosa</i>			2	2
<i>Leucaena leucocephala</i>		1		1
<i>Mangifera indica</i>	3	1	6	10
<i>Peltophorum pterocarpum</i>			3	3
<i>Persea macrantha</i>	2			2
<i>Pithecellobium dulce</i>			1	1
<i>Saraca asoca</i>	9	3	2	14
<i>Syzygium aqueum</i>	1			1
<i>Syzygium cumini</i>		1	1	2
<i>Terminalia catappa</i>		1	1	2
			Total =	96

**Table 8. Wadia School & SPJIMR Hostel.**

Trees Species	Girth Classes (in cms)			Total No.
	<30	30 - 50	Over 50	
<i>Acacia auriculiformis</i>			1	1
<i>Acacia falcata</i>		1	2	3
<i>Acacia leprosa</i>			1	1
<i>Araucaria heterophylla</i>			1	1
<i>Areca catechu</i>			1	1
<i>Azadirachta indica</i>	4	4	3	11
<i>Bauhinia picta</i>			1	1
<i>Carica papaya</i>	1			1
<i>Caryota mitis</i>	4	3	6	13
<i>Cocos nucifera</i>		1	18	19
<i>Couroupita guianensis</i>		2	1	3
<i>Ficus amplissima</i>			1	1
<i>Ficus benghalensis</i>			2	2
<i>Lagerstroemia speciosa</i>			2	2
<i>Leucaena leucocephala</i>		1		1
<i>Mangifera indica</i>	3	1	6	10
<i>Peltophorum pterocarpum</i>			3	3
<i>Persea macrantha</i>	2			2
<i>Pithecellobium dulce</i>			1	1
<i>Saraca asoca</i>	9	3	2	14
<i>Syzygium aqueum</i>	1			1
<i>Syzygium cumini</i>		1	1	2
<i>Terminalia catappa</i>		1	1	2
			Total =	96

**Table 9. SPCE Hostel.**

Trees Species	Girth Classes (in cms)			Total No.
	<30	30 - 50	Over 50	
<i>Alstonia scholaris</i>			1	1
<i>Annona squamosa</i>	2			2
<i>Aralia elata</i>	1		1	2
<i>Azadirachta indica</i>			3	3
<i>Casuarina equisetifolia</i>			3	3
<i>Cocos nucifera</i>			6	6
<i>Delonix regia</i>			4	4
<i>Ficus religiosa</i>			7	7
<i>Hibiscus rosa-sinensis</i>	12			12
<i>Mangifera indica</i>	1		2	3
<i>Mimusops elengi</i>	1			1
<i>Psidium guajava</i>			1	1
<i>Saraca Asoka</i>			11	11
<i>Syzygium cumini</i>			2	2
<i>Tamarindus indica</i>			3	3
<i>Terminalia catappa</i>			2	2
<i>Thespesia populnea</i>			5	5
			Total=	68

**Table 10. Lakeside**

Trees Species	Girth Classes (in cms)			Total No.
	<30	30 - 50	Over 50	
<i>Albizia Odoratissima</i>			3	3
<i>Alstonia Marcophylla</i>			1	1
<i>Areca Palm</i>		8	5	13
<i>Ashoka</i>		5		5
<i>Bambusa vulgaris</i>	4	11		15
<i>Bauhinia racemosa</i>	1	1		2
<i>Brahea</i>		10	2	12
<i>Caesalpinia Coriaria</i>	6			6
<i>Callistemon viminalis</i>	4			4
<i>Calophyllum Inophyllum</i>			2	2
<i>Calophyllum Inophyllum</i>			2	2
<i>Caryota Mitis</i>	1	4		5
<i>Ceiba pentandra</i>			2	2
<i>Ceiba pentanra</i>	5			5
<i>Celodendrum Splendens</i>	6			6
<i>Clinostigma</i>	15			15
<i>Cocos nucifera</i>		2	10	12
<i>Cryptocarya Vulgaris</i>	5			5
<i>Delonix regia</i>			3	3
<i>Ficcius lyrata</i>	7			7
<i>Filicium decipiens Fern</i>	5			5
<i>Gardenia gummifera</i>		5		5
<i>Golden Shower</i>		1		1
<i>Gustavia Superba</i>	1			1
<i>Hibiscus Tiliaceus</i>	5			5
<i>Honey Locust</i>	1			1
<i>Lager Stroemia</i>		2	7	9
<i>Leucaena leucocephala</i>			2	2
<i>Licuala Grandis</i>	7			7
<i>Limonia Acidissima</i>		3		3
<i>Livistona speciosa</i>	15	6	8	29
<i>Magnolia champaca</i>	12			12
<i>Mangifera indica</i>	1	2	1	4
<i>Manilkara zapota</i>	2			2
<i>Musa Paradisiaca L.</i>			6	6
<i>Nushgreen Gular</i>	2			2

Ocimum Basilicum	3			3
Paulownia Kawakami			3	3
Platymiscium	4			4
Plumeria	8			8
Pterocarpus santalinus			1	1
Quassia Indica	1			1
Rhapis Excelsa	4			4
Sterculia foetida			3	3
Terminalia Bellirica	5			5
Terminalia catappa	2		3	5
Terminalia elliptica willd	6			6
Thespeia Populnea Hibiscus	3			3
Thungbergia Grandiflora	2			2
Vitex Lucens		6		6
			Total=	273

**Table 11. Adventure Center**

Trees Species	Girth Classes (in cms)			Total No.
	<30	30 - 50	Over 50	
<i>Anacardium occidentale</i>	1			1
<i>Artocarpus heterophyllus</i>	1			1
<i>Caryota</i>	1		12	13
<i>Castilla elastica</i>			1	1
<i>Casuarina equisetifolia</i>	1		3	4
<i>Ceiba pentandra</i>			4	4
<i>Cocos nucifera</i>			2	2
<i>Couroupita guianensis</i>			1	1
<i>Dalbergia lanceolaria</i>			1	1
<i>Delonix regia</i>			9	9
<i>Elaeocarpus ganitrus</i>	1			1
<i>Ficus benghalensis</i>			1	1
<i>Ficus glomerata</i>	3		1	4
<i>Ficus racemosa</i>	1			1
<i>Ficus religiosa</i>	1			1
<i>Lagerstroemia speciosa</i>			5	5
<i>Mangifera indica</i>	4			4
<i>Morinda citrifolia</i>	5			5
<i>Murraya koenigii</i>	1			1
<i>Ochroma</i>	2			2
<i>Peltophorum pterocarpum</i>			1	1
<i>Peltophorum pterocarpum</i>			1	1
<i>Quercus humboldti</i>	1			1
<i>Samanea saman</i>	1	1	1	3
<i>Saraca asoka</i>			2	2
<i>Spathodea campanulata</i>	1			1
<i>Syzygium cumini</i>	1			1
<i>Terminalia catappa</i>	1		5	6
<i>Trachycarpus princeps</i>	4			4
			Total=	82

**Table 12. Administrative Building**

Trees Species	Girth Classes (in cms)			Total No.
	<30	30 - 50	Over 50	
Areca Palm	5			5
Artocarpus altilis			1	1
Ashoka	10		2	12
Azadirachta indica	2	2	2	6
Bahasa Indonesia		1		1
Cocos nucifera	1		4	5
Ficus religiosa			1	1
Litsea Bindoniana			2	2
Mangifera indica	4	1	1	6
Streblus aspar		1	1	2
Syzygium cumini			1	1
Tamarindus indica			1	1
Terminalia catappa			1	1
			Total=	44

## CHAPTER 3 Results

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Based on the survey conducted the various species were tabulated and based on that the biodiversity index is calculated using following formula:-

$$D = 1 - \frac{\sum n(n-1)}{N(N-1)}$$

D-diversity index

N- Total no. of individual species

n- No. of individual species

**Table 13 Bio-diversity Index**

Trees Species	Girth Classes (in cms)			Total No. (n)	n(n-1)
	<30	30 - 50	Over 50		
Acacia auriculiformis	1		5	6	30
Acacia falcata		1	2	3	6
Acacia leprosa			1	1	0
Aesculus flava	1			1	0
Albizia lebbeck			1	1	0
Albizia Odoratissima			3	3	6
Alstonia Marcophylla			1	1	0
Alstonia scholaris	1	2	2	5	20
Anacardium occidentale	1	1		2	2
Annona reticulata	1	2	2	5	20
Annona squamosa	2			2	2
Anodendron parviflorum			4	4	12
Aralia elata	1		1	2	2
Araucaria heterophylla			1	1	0
Areca catechu			1	1	0
Areca Palm	20	11	10	41	1640
Artocarpus altilis			1	1	0
Artocarpus heterophyllus	3		11	14	182
Asimina triloba	2		2	4	12
Azadirachta indica	11	6	16	33	1056

Bahasa Indonesia		1		1	0
<i>Bambusa vulgaris</i>	4	11		15	210
<i>Bauhinia picta</i>			1	1	0
<i>Bauhinia racemora</i>	1	2	1	4	12
<i>Bauhinia variegata</i>	6	1	5	12	132
<i>Bombax ceiba</i>		2	2	4	12
<i>Brahea</i>		10	2	12	132
<i>Brownea grandiceps</i>	3			3	6
<i>Bulbine abyssinica</i>	1			1	0
<i>Caesalpinia Coriaria</i>	6			6	30
<i>Callistemon viminalis</i>	4			4	12
<i>Calophyllum Inophyllum</i>			4	4	12
<i>Careya arborea</i>			1	1	0
<i>Carica papaya</i>	14	7	4	25	600
<i>Caryota mitis</i>	6	8	23	37	1332
<i>Caryota urens</i>		1	2	3	6
<i>Cascabela thevetia</i>		1		1	0
<i>Castilla elastica</i>			1	1	0
<i>Casuarina equisetifolia</i>	1		12	13	156
<i>Ceiba pentantra</i>	5		6	11	110
<i>Celodendrum Splendens</i>	6			6	30
<i>Chambeyronia lepidota</i>	3			3	6
<i>Chionanthus retusus</i>			1	1	0
<i>Chorisia speciosa</i>			1	1	0
<i>Chrysalidocarpus lutescens</i>			2	2	2
<i>Cinchona pubescens</i>			1	1	0
<i>Citrus limon</i>	2			2	2
<i>Citrus maxima</i>			1	1	0
<i>Clinostigma</i>	15			15	210
<i>Cocos nucifera</i>	8	8	115	131	17030
<i>Couroupita guianensis</i>	5	3	3	11	110
<i>Cryptocarya Vulgaris</i>	5			5	20
<i>Dalbergia lanceolaria</i>			1	1	0
<i>Dalbergia sissoo</i>	1			1	0
<i>Delonix regia</i>	7	4	29	40	1560
<i>Dypsis lutescens</i>			2	2	2
<i>Elaeocarpus ganitrus</i>	1			1	0
<i>Erythrina variegata</i>			1	1	0
<i>Ficcius lyrata</i>	7			7	42
<i>Ficus amplissima</i>			1	1	0

<i>Ficus benghalensis</i>	1	2	8	11	110
<i>Ficus glomerata</i>	3		1	4	12
<i>Ficus racemosa</i>	2	2	4	8	56
<i>Ficus religiosa</i>	4		26	30	870
<i>Filicium decipiens</i> Fern	5		1	6	30
<i>Garcinia indica</i>			1	1	0
<i>Garcinia Kola Feuilles</i>		1	1	2	2
<i>Gardenia gummifera</i>		5		5	20
<i>Golden Shower</i>		1		1	0
<i>Gustavia Superba</i>	1			1	0
<i>Hibiscus rosa-sinensis</i>	12			12	132
<i>Hibiscus Tiliaceus</i>	5			5	20
<i>Honey Locust</i>	1			1	0
<i>Hyophorbe lagenicaulis</i>			4	4	12
<i>Indian Kino</i>			3	3	6
<i>Ixora coccinea</i>	1			1	0
<i>Jasminum grandiflorum</i>	1			1	0
<i>Jasminum sambac</i>	2	1		3	6
<i>Java Plum</i>			1	1	0
<i>Jungle geranium</i>	1			1	0
<i>Koelreuteria paniculata</i>		2	1	3	6
<i>Lagerstroemia</i>		2	7	9	72
<i>Lagerstroemia indica</i>	1			1	0
<i>Lagerstroemia speciosa</i>	3		9	12	132
<i>Latania lontaroides</i>	5	3	6	14	182
<i>Leucaena leucocephala</i>		1	11	12	132
<i>Licuala Grandis</i>	7			7	42
<i>Limonia Acidissima</i>		3		3	6
<i>Lithocarpus edulis</i>			13	13	156
<i>Litsea Bindoniana</i>			2	2	2
<i>Livistona speciosa</i>	15	6	8	29	812
<i>Madhuca longifolia</i>			2	2	2
<i>Madhuca longifolia</i>	5			5	20
<i>Magnolia champaca</i>	12			12	132
<i>Mammea suriga</i>		2		2	2
<i>Mangifera indica</i>	32	10	32	74	5402
<i>Manilkara zapota</i>	2			2	2
<i>Markhamia lutea</i>			1	1	0
<i>Millettia pinnata</i>		1	1	2	2
<i>Mimusops elengi</i>	1		1	2	2

<i>Morinda citrifolia</i>	5		1	6	30
<i>Moringa oleifera</i>			5	5	20
<i>Murraya koenigii</i>	2	1		3	6
<i>Musa acuminata</i>	3		4	7	42
<i>Musa Paradisiaca L.</i>			6	6	30
<i>Mussaenda erythrophylla</i>	30			30	870
<i>Myroxylon balsamum</i>		2	3	5	20
<i>Nerium oleander</i>	1			1	0
<i>Nushgreen Gular</i>	2			2	2
<i>Ochroma</i>	2			2	2
<i>Ocimum Basilicum</i>	3			3	6
<i>Peltophorum pterocarpum</i>			8	8	56
<i>Persea macrantha</i>	2			2	2
<i>Philodendron bipinnatifidum</i>	6			6	30
<i>Pisonia grandis</i>	44	1	2	47	2162
<i>Pithecellobium dulce</i>	3		9	12	132
<i>Platymiscium</i>	4			4	12
<i>Plumeria obtusa</i>	20	5	4	29	812
<i>Plumeria rubra</i>	3	11		14	182
<i>Pritchardia pacifica</i>		2		2	2
<i>Prosopis laevigata</i>	1			1	0
<i>Prunus virginiana</i>	1			1	0
<i>Pseuderanthemum</i> plant			1	1	0
<i>Psidium guajava</i>	3	2	5	10	90
<i>Pterocarpus santalinus</i>			1	1	0
<i>Quassia Indica</i>	1			1	0
<i>Quercus humboldti</i>	1			1	0
<i>Ravenea rivularis</i>		1		1	0
<i>Rhapis Excelsa</i>	4			4	12
<i>Royal poiniciana</i>		1	8	9	72
<i>Roystonea regia</i>	1		14	15	210
<i>Samanea saman</i>	1	1	1	3	6
<i>Saraca asoca</i>	39	16	101	156	24180
<i>Satakentia liukiuensis</i>	1		8	9	72
<i>Schefflera actinophylla</i>	3			3	6
<i>Sindora echinocalyx</i>			1	1	0
<i>Spathodea campanulata</i>	1	1	2	4	12
<i>Sterculia foetida</i>	1		3	4	12
<i>Streblus aspar</i>		1	1	2	2
<i>Syzygium aqueum</i>	1			1	0

Syzygium cumini	1	6	7	14	182
Tabebuia pallida		1		1	0
Tabebuia rosea	1	4	4	9	72
Tabernaemontana divaricata	3	2		5	20
Tamarindus indica			11	11	110
Terminalia bellirica	5		2	7	42
Terminalia catappa	8	3	24	35	1190
Terminalia elliptica willd	6			6	30
Thaumatophyllum Bipinnatifidum	7	4		11	110
Thespeia Populnea Hibiscus	3		5	8	56
Thunbergia Grandiflora	2			2	2
Trachycarpus princeps	4			4	12
Veitchia Merrillii	5	10		15	210
Vitex doniana		1		1	0
Vitex Lucens		6		6	30
Zingiber officinale	2	1		3	6
			Total=	1391	64312

The total number of trees in bhavans campus is 1391 and the biodiversity index is found to be 0.9667. A Simpson's diversity index value of 0.97 indicates a high level of biodiversity in the given data. The index ranges from 0 to 1, where 0 represents no diversity (all individuals belong to a single species) and 1 represents maximum diversity (all species are equally abundant). A value close to 1 suggests a balanced and diverse ecosystem with a variety of species present. In this case, the high diversity index indicates that the Bhavan's Campus has a rich and diverse tree species composition.

### 3.1 TREE COMPOSITION AND GIRTH DISTRIBUTION

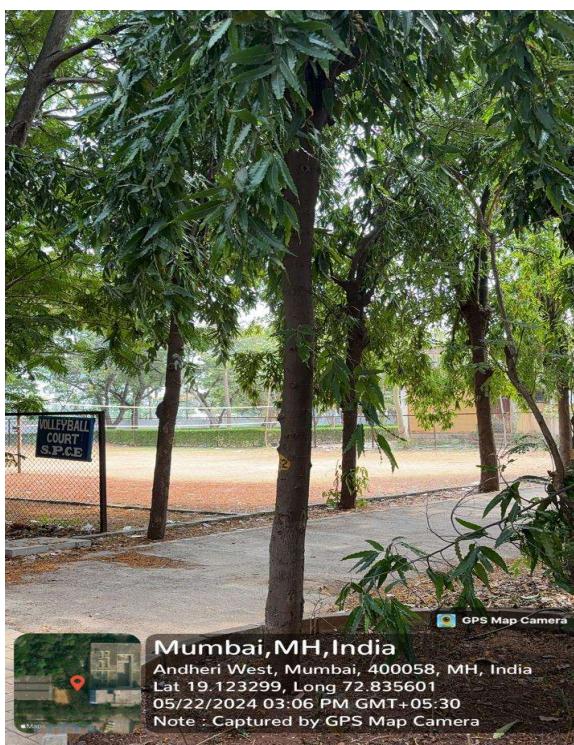
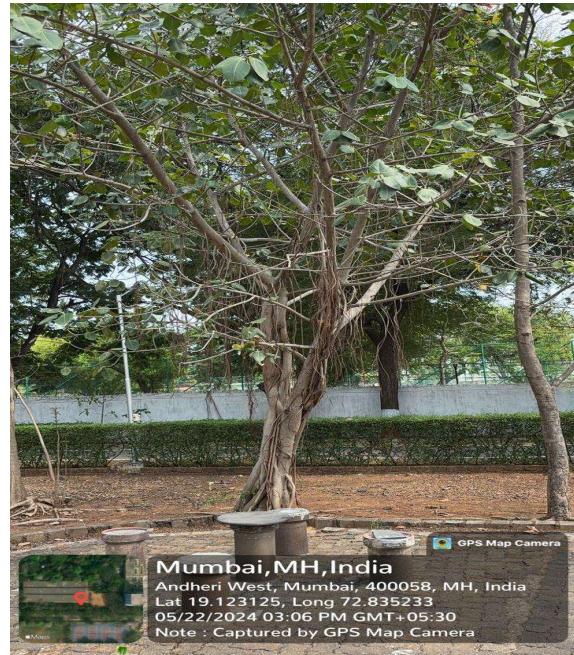
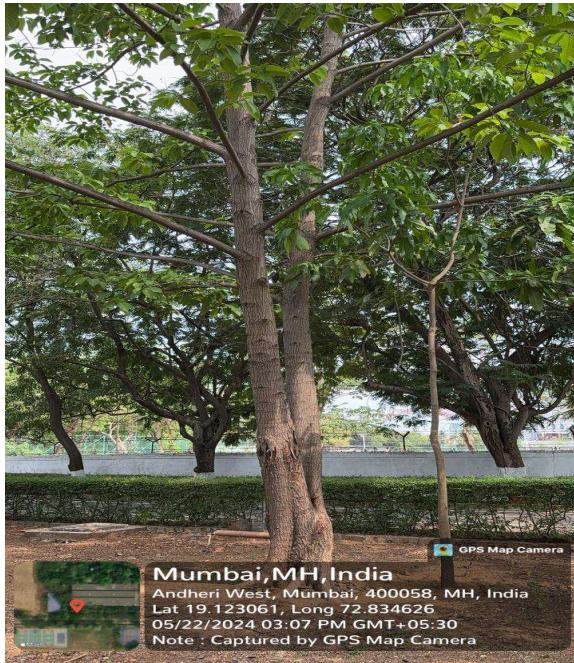
The present biodiversity report aims to provide an overview of the tree population in the designated area. Through meticulous surveys and data collection, it has been determined that a total of 1,351 trees representing 155 distinct species inhabit this region.

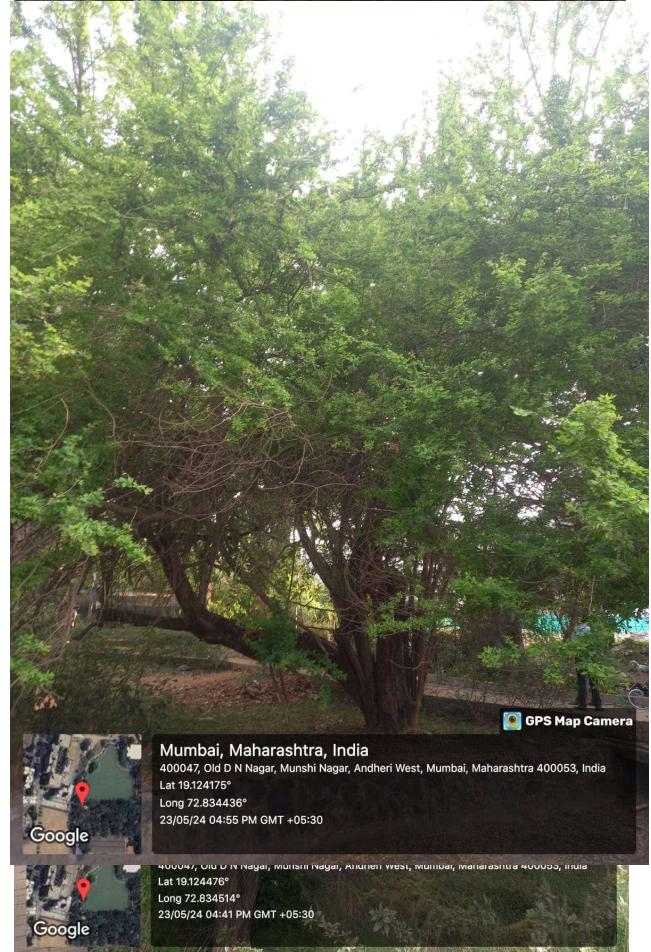
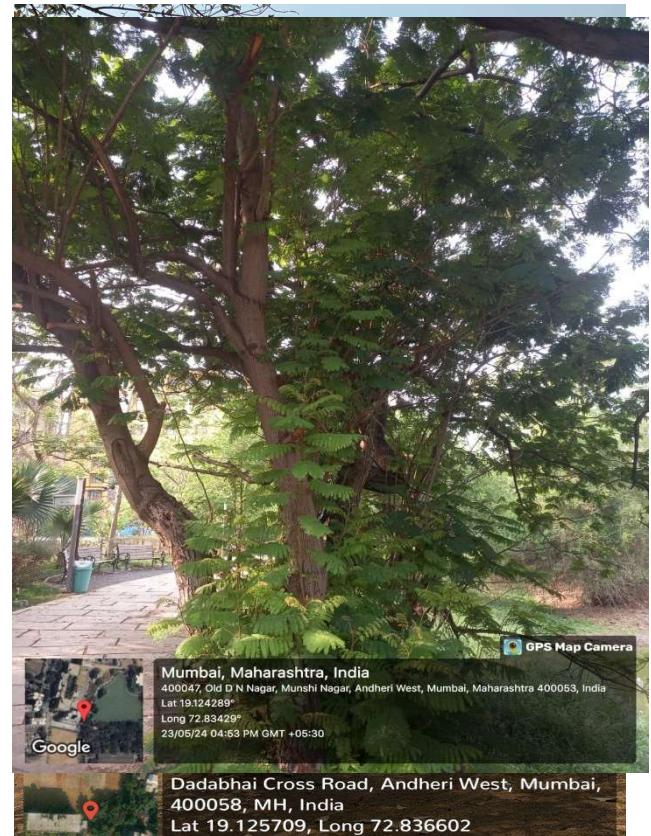
**Table - 14. Girth Distribution**

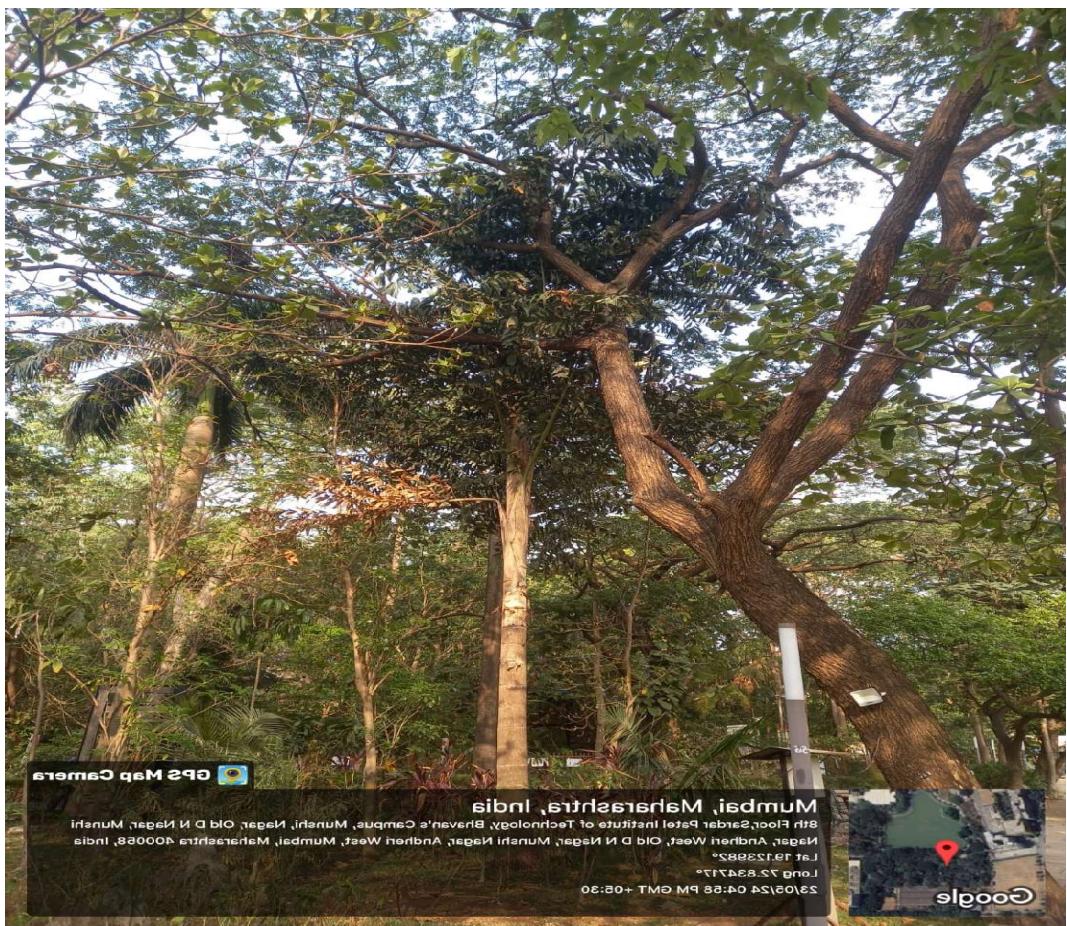
Girth (cm)	<30	30 - 50	Over 50
No. of Trees	513	207	671
Percentage %	36.88	14.88	48.24

The girth distribution analysis reveals intriguing patterns, as approximately 36.88% of the trees possess a girth below 30cm, signifying their relatively young age or recent growth. Additionally, 14.88% of the trees fall within the 30-50cm girth category, indicating a moderate level of maturity. Remarkably, the majority of the tree population, comprising 48.24%, boasts a girth exceeding 50cm, symbolizing their advanced age and robust growth. These findings underscore the rich and diverse ecosystem in this area, highlighting the significance of maintaining and protecting the precious biodiversity it harbors.

## ANNEXURE A: GEOTAG PICTURES







GPS Map Camera

Mumupsi, Maharashtra, India

8th Floor, Sardar Patel Institute of Technology, Biravas, Gombe, Neral, Nasik 422008, India

Neral, Nasik 422008.

Lat 19.132823,

Long 73.893211.

23/05/24 04:28 PM GMT +05:30



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