

Vasai Virar City Municipal Corporation - Tree Census



Report 2016-17



TREE CENSUS
OF
VASAI-VIRAR MUNICIPAL CORPORATION

Report prepared for
Vasai-Virar Municipal Corporation

2016-17

Prepared by

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Thanking you,

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1. EXECUTIVE SUMMARY

Tree Census of Vasai-Vasai Municipal Corporation was carried out during year 2013–2016 in 9 Prabhags of city, spread over an area of 298.08 sq. km. Geo-coordinates of each tree were recorded using GPS instruments. The extensive field work resulted into count of 14,14,462 trees. Total of 261 species of trees belonging to 59 families were reported from study area. For each tree, attributes like its Local name, Height, Age, Health condition and GPS coordinates were recorded in field. Summary in tabular form is given below:

Table1.1.1 Executive Summary

SN	Component	Result and Description
1	Number of Tree species	Total 259 species belonging to 59 families
2	Number of Individual (Trees)	Total 14,14,462 were counted in all 9 Prabhags
3	Dominant Tree species	Dominant Tree species was Supari (<i>Areca catechu</i>) with 3,95,836 individuals
4	Young Population	71 % of tree population has girth less than 50 cm
5	Healthy Tree Population	13,72,663 trees are healthy
6	Number of Native species	140 species of trees are native among 251 species
7	Native Population	78 % of tree population are native with 11,05,543 individuals
8	Invasive species	Subabhul (<i>Leucaena leucocephala</i>) is a Alein invasive species with 50,667 individuals
9	IUCN Near Threatened species	Mayurpankhi (<i>Platyclusus orientalis</i> (L.) Franco) is Near Threatened species with 443 individual. This trees are grown in most of the gardens
10	IUCN Vulnerable Species	Bivla (<i>Pterocarpus marsupium</i>), Chandan (<i>Santalum album</i>), Gulmohar (<i>Delonix regia</i>), Khaya (<i>Khaya senegalensis</i>), Nilmohar (<i>Jacaranda mimosaeifolia</i>) and Sisvi (<i>Dalbergia latifolia</i>) are Vulnerable species with 555, 40, 4146, 1787, 5 and 32 individuals respectively
11	IUCN Endangered Species	Cycas (<i>Cycas circinalis</i>) and Raktachandan (<i>Pterocarpus santalinus</i>) are Endangered species with 17 & 3
12	Maximum trees in Ownership	Maximum trees were observed in Private ownership with 11,31,598 individual
13	Maximum tree density in Prabhag	Prabhag A has maximum density with 13,745.6/km ²
13	Minimum tree density in Prabhag	Prabhag G has less tree density with 1195.76/km ²

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2. INTRODUCTION

Trees play a vital role in the Urban Ecosystem. They provide numerous benefits both tangible and intangible, to residents, visitors, and neighboring communities. Trees also play important roles in the quality of life and the sustainability of City's urban environment. Healthy urban trees can improve the local environment and lessen the impact resulting from urbanization and industry. Trees improve air quality by manufacturing oxygen and absorbing carbon dioxide (CO₂), as well as filtering and reducing airborne particulate matter such as smoke and dust. Urban trees reduce energy consumption by shading structures from solar energy and reducing the overall rise in temperature created through urban heat. Trees slow and reduce storm water runoff, helping to protect critical waterways from excess pollutants and particulates. In addition, urban trees provide critical habitat for wildlife and promote a connection to the natural world.

In addition to these direct improvements, healthy urban trees increase the overall attractiveness of a community and have been proven to increase the value of local real estate by 7 to 10%, as well as promoting shopping, retail sales, and tourism (Wolf, 2007). Trees support a more livable community, fostering psychological health and providing residents with a greater sense of place (Ulrich, 1986; Kaplan, 1989). Community trees, both public and private, soften the urban hardscape by providing a green sanctuary and making City a more enjoyable place to live, work, and play. Vasai-Virar has 13,38,756 trees playing a prominent role in the urban ecosystem of city and providing benefit to residents.

Maharashtra State Government has enacted an act "The Maharashtra (Urban Areas) Preservation of Trees Act", No. XLIV of 1975 (last amended as modified up to 9th June 2004). It was formed for preservation, protection and plantation of trees in the urban areas. As per the section of 7 (b) of the said Act, it is duty on the Tree Authority of the Municipal Corporation to carry out a census of trees in all lands within the jurisdiction once in every five years. Following this act Vasai-Virar City Municipal Corporation (VVCMC) has constituted the "Tree Authority" under the Chairmanship of Municipal Commissioner, which has responsibility to implement this act and conduct tree census in city limits.

To carry out tree census for the city of Vasai Virar City Municipal Corporation (VVCMC), Corporation awarded this project to Terracon Ecotech[®] Pvt. Ltd. We as company have experience to conduct tree census. In past we have successfully done tree census of City's like Thane, Mumbai, Mira Bhayandar, Urun-Islampur, Kolhapur and Vasai Virar. Each tree inventoried on this project is inspected by a qualified Botanist who recorded information including species, size, condition, and current maintenance needs, as well as the geographic location. This work resulted in inventory of 13,38,756 trees within City limits. The City is located in Konkan region encompassing an area of 298.08 km² at an elevation of around average 11 meter above mean sea level, City enjoys a mild climate with an average rainfall around 91.6 inches.

Background of Vasai-Virar city:

Vasai-Virar city is situated at the latitude N 19° 47' and longitude E 72° 8'. It has an area of 298.08 km² and has an average elevation of 11 above mean sea level. The city is located in Palghar district of Maharashtra state, India. It is nestled in the tranquil laps of the Konkan region with Arabian Sea in West and Konkan low hills in East. City has a rich population of mangroves with larger patches of salt pans. In West it is blessed with many beautiful beaches. With its rich cultural diversity, the city has many Churches and Temples which date back to the Portuguese era. One of the popular tourist places in Vasai Virar city is Bassien fort (Vasai fort) which is built by the Portuguese.

Climate:

Vasai-Virar city has a moderate climate. The temperature ranges between below 17°C in winter and 33°C and above in summer. The city receives heavy rainfall from June to October due to its proximity to the Arabian Sea. Winter is not cold and ranges between 17°C to 30°C.

Hydrology:

Pelhar River is a small river that passes through Vasai. Ulas River, which passes through Thane district, has its opening in the Arabian Sea as Vasai Creek, which lies in the South of Vasai. Vaitarna River meets the Arabian Sea and passes from the north of Virar. Apart from rivers, there are numerous lakes in the city area. Pelhar lake is one of the big lakes which is located outside the urbanised area in a forested region. Nirmal lake is another big lake which lies in the urbanised region.

Objectives:

- To find out the number of trees in individual wards as per the guidelines.
- To find out the number of trees in different ownerships.
- To provide the information to VVCMC on medicinal, aesthetic, social & culturally important information.
- To give Botanical name, English name & Local name of each species found in Vasai-Virar Municipal Corporation area.

3. METHODOLOGY

Trees having woody stem and having minimum girth of 10 cm in diameter at the chest level of an average height person and height of about 3 m high were counted. Trees which fit in these criteria were inventories. Tree census was done in year 2013– 2016. Field work was done by team of qualified botanist. Data was collected from all wards of VVCMC using Juno GPS instruments. Information like Scientific Name, Common name, Girth, Height, Condition, GPS location was recorded in field itself. This data was fed into 'VrukshSharad', proprietary software of Terracon Ecotech[®] Pvt. Ltd. which is GPS based user friendly software. This software allows users to monitor & analyze tree inventory information with analytical tools and tree knowledge bank through various viewing features. Using filters, we can select data based on tree type, tree name, girth, conditions etc. as per the user requirement.

In all teams consisting of botanist, were in the field for counting the trees. During the field work, the team noted down location, housing society's name etc. and counted each individual tree, measured the girth, noted down the approximate height and age of the same. The condition of the tree whether in healthy condition, infected condition, dead or mechanically cut – were mentioned. Trees growing on the roadside, in the government plots and in the private plots were included in the census. Most of the tree identification was done in field. In case of unidentified trees, specimens were collected and identified with help of literature. Literature used for tree identification is Flora of Maharashtra (Almeida 1996, 1998, 2001, 2003 & 2009), Flora of Maharashtra (Lakshminarasimhan, P. 1996), (Singh N.P & S. Karthikeyan, 2000 & 2001), Flora of Vasai-Virar (Yadav, S. R. & M. M. Sardesai 2002). Correct plant and family names were used with the help of online plant name database like IPNI, Plant list and Tropicos.

Data from all the instruments was collected and analysed using software and fed into VrukshSharad. It has features of plotting trees with accurate location information according to user selection. Its tree related knowledge bank and multiple tools gives the flexibility to perform tree related analysis and research at the click of a button on one platform. Data uploaded can be viewed on various layers, such as satellite images, road or base maps. It can also measure the distance of a tree from any given feature such as roads, building or landmark. This feature can help in planning urban projects.

4. OBSERVATIONS

Tree Census was done in 9 Prabags within city limits. Count of each tree species of all 9 Prabhags are represented in following tables with respect to its distribution in different Ownerships.

Table 4.1: Species and Ownership wise tree count of Prabhag - A

SN	Local Name	Government	Others	Park	Private	Roadside	Grand Total
1	Supari	1096	31299	5	305294	7	337701
2	Naral	506	6165	4	48505	93	55273
3	Amba	27	1042	3	6613	33	7718
4	Kala Umber	32	1378		4294	79	5783
5	Subabhul	15	835	1	4108	55	5014
6	Kharoti	12	828		3818	14	4672
7	Phanas	3	374		3705	5	4087
8	Akashneem		646		2969	10	3625
9	Shevga	18	315		2440	30	2803
10	Asupalav (D)	21	285	94	2238	63	2701
11	Bhend	1	412		1736	39	2188
12	Tad	29	779		1318	11	2137
13	Dhatriphal	35	452		1512	6	2005
14	Chinch	6	299		1422	33	1760
15	Sitaphal	15	200	2	1325	10	1552
16	Peru	6	135		927	12	1080
17	Jambhul	13	170	2	793	12	990
18	Kadipatta		68		880		948
19	Karanj	4	196		589	153	942
20	Bottle Palm	509	2	4	316	53	884
21	Sonchapha		17		806	2	825
22	Bitti		17		791	2	810
23	Kaduneem	16	69	4	653	43	785
24	Sonmohar	6	46	3	303	409	767
25	Jamb		116		612	2	730
26	Umber	14	115		501	27	657
27	Deshibadam	20	50	4	473	80	627
28	Bor	11	179		358	23	571
29	Bherli Mad	4	101		444	11	560
30	Australian Babhul	14	57	1	367	91	530
31	Asupalav (S)	5	58	1	425	24	513
32	Bhokar	2	102		364		468
33	Ramphal		57		357	1	415

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SN	Local Name	Government	Others	Park	Private	Roadside	Grand Total
34	Singapur Cherry	6	182		182	26	396
35	Suru	19	21	5	303	2	350
36	Chiku	2	36		305	2	345
37	Rai Avla		46		289	5	340
38	Pimpal	23	52	4	200	43	322
39	Otamb		43		269		312
40	Jungli badam		29		266	4	299
41	Gulmohar	14	25	3	176	42	260
42	Parijatak		29		192	7	228
43	Rain tree	6	31		131	55	223
44	Saptparni	9	2		115	89	215
45	Benjamin Tree		1		160	46	207
46	Vilayati Chinch	1	100		90	10	201
47	Papanas		26		168		194
48	Christmas tree		10	3	127	2	142
49	Pangara		16		111		127
50	Kanchan		2		123	1	126
51	Sag		24		100		124
52	Limbu		11		109	2	122
53	Chapha	6	4		84	13	107
54	Charcoal Tree	3	21		73		97
55	Tabebuia Rosea				84		84
56	Bel		7		75		82
57	Shindi	3	30		48		81
58	Nilgiri	1	15		62	1	79
59	Giripushpa	2	22		49	2	75
60	Babhul	1	39	1	26	5	72
61	Ambada	3	1		65		69
62	Dalimb		4		62	1	67
63	Vad	2	16	2	38	5	63
64	Pichkari		4		50	6	60
65	Umbrella tree		34		20	1	55
66	Agasti				53	1	54
67	Avla	1	3		49		53
68	Bartondi (P)		1		44		45
69	Tuti		1		42		43
70	Unidentified	1	27		11	4	43
71	Bottle Brush				42		42
72	Katesavar	2	7		33		42
73	Vavla		4		38		42
74	Kaju		4		34	2	40
75	Lokhandi	1	17		21		39

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Others	Park	Private	Roadside	Grand Total
76	Bakul	1	4	1	29	3	38
77	Bahava		7	1	24	3	35
78	Kakad	1	2		31		34
79	Bakneem	5	10		17	1	33
80	Mayurpankhi	2		1	28	1	32
81	Shemat	1	3		27		31
82	Mogli Erand		11		19		30
83	Tamalpatra		6		24		30
84	Kala Kuda		1		26		27
85	Ritha		4		22	1	27
86	Khirni		6		20		26
87	Kashid	1	8		12	4	25
88	Apta		3		21		24
89	Putranjiva		1		23		24
90	Dhaman		4		18		22
91	Id Limbu				22		22
92	Savar	2	9		10		21
93	Asana		5		14		19
94	Kokam		3		15		18
95	Anjir		11		6		17
96	Kalamb	1			16		17
97	Kadamb		2		8	6	16
98	Khejdi				16		16
99	Dikemali		5		10		15
100	Shankasur		2		10	3	15
101	Silver Oak				15		15
102	Litchi				14		14
103	Tetu				14		14
104	Ain		4		9		13
105	Chenduphul				4	9	13
106	Mahogani				13		13
107	Palas		1	1	11		13
108	Chandan				12		12
109	Kailashpati		1		11		12
110	Narikel		1		11		12
111	Pink Tabebuia	1	1		9	1	12
112	Cassia Javanica				11		11
113	Jaiphal				11		11
114	Kumkum				11		11
115	Vilayati Babhul				10	1	11
116	Fan Palm		3		6		9
117	Kavti Chapha				9		9

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SN	Local Name	Government	Others	Park	Private	Roadside	Grand Total
118	Ratangunj		2		5	2	9
119	Humb				8		8
120	Indian Rubber Tree				8		8
121	Moha		4		4		8
122	Nirphanas		1		7		8
123	Sausage Tree		1		7		8
124	Surangi				8		8
125	Ran Chiku				7		7
126	Sher				7		7
127	Arjun		5	1			6
128	Bilambi		2		4		6
129	Fern tree				6		6
130	Kuda		1		5		6
131	Mamphal		3		3		6
132	Shivan		2		4		6
133	All Spice Tree				5		5
134	Ankul	5					5
135	Datrang				3	1	4
136	Karvat				4		4
137	Lal Jamb				4		4
138	Lettuce Tree				4		4
139	Samudraphal				4		4
140	Shami				4		4
141	Avocado				3		3
142	Dev Babhul				3		3
143	F tsiela		1		1	1	3
144	Khair		1		2		3
145	Shirish				1	2	3
146	Taman				3		3
147	Ashok				2		2
148	Beheda		2				2
149	Chinai Mendhi		2				2
150	Dandus				2		2
151	Gulabi Jamb				2		2
152	Karambol				2		2
153	Khaya				2		2
154	Payar			1	1		2
155	Petari				2		2
156	Scarlet Cordia		1			1	2
157	Undi				2		2
158	Varas				2		2
159	Calabash Tree				1		1

SN	Local Name	Government	Others	Park	Private	Roadside	Grand Total
160	Cassia Renigera				1		1
161	Chapha (O)				1		1
162	Dhavda		1				1
163	Gondni					1	1
164	Kanak champa				1		1
165	Kunti				1		1
166	Markhamia				1		1
167	Nana				1		1
168	Sisam				1		1
169	Star apple tree				1		1
170	Vaivarna		1				1
171	Yellow silk cotton tree				1		1
	Grand Total	2566	47959	152	406575	1851	459103

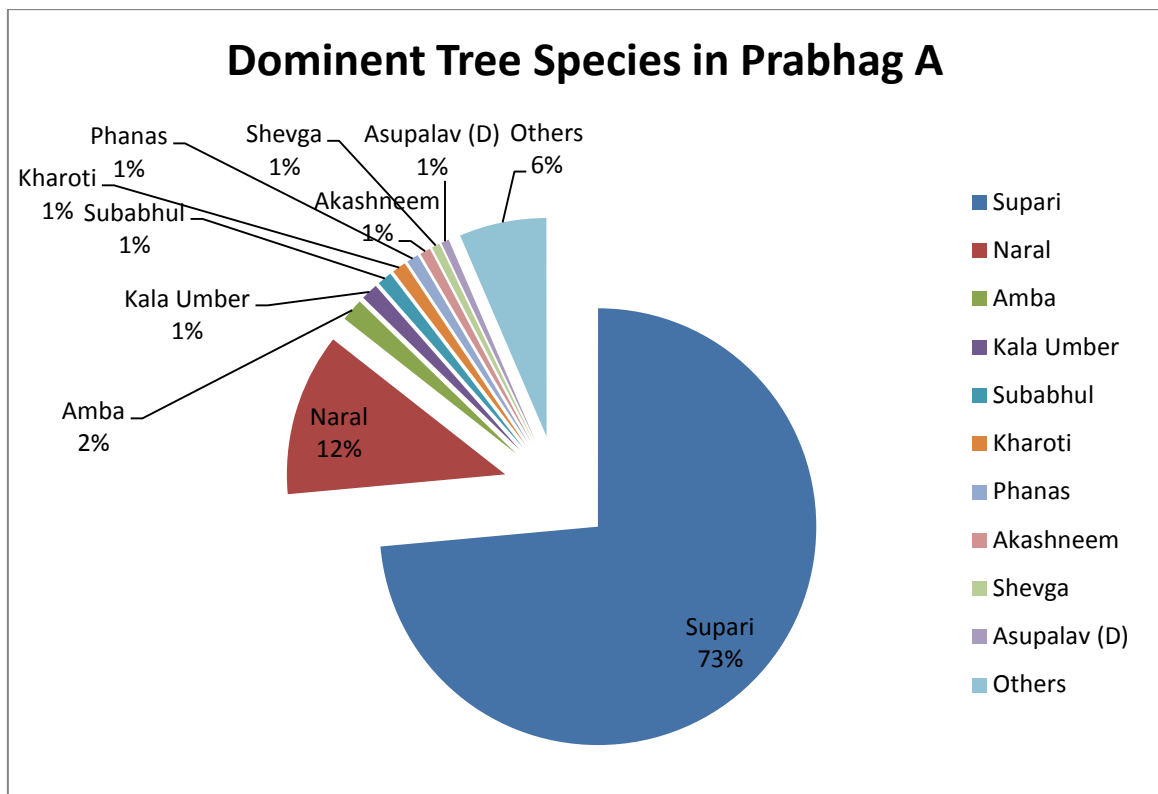


Figure 4.1 Ten dominant tree species in Prabhag – A

Table 4.2: Species and Ownership wise tree count of Prabhag – B

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
1	Sag	3		4885	206	1734	267	7095
2	Naral			106	1	1576	91	1774
3	Asupalav (D)			283	24	1206	62	1575
4	Amba	5		490	25	753	108	1381
5	Giripushpa	5		381	318	400	16	1120
6	Mogli Erand			256	7	441	72	776
7	Subabhul	3	2	402	6	284	44	741
8	Sitaphal	1		95	6	539	5	646
9	Shevga	1		142	8	442	31	624
10	Katesavar			371	33	164	20	588
11	Dhaman			274	59	190	6	529
12	Bartondi (P)			305	96	52	62	515
13	Kala Umber		3	115	55	315	25	513
14	Kaduneem	1		88		363	39	491
15	Kuda			327	53	48	5	433
16	Chinch	3		106	31	225	43	408
17	Tad			53	14	325	13	405
18	Asana			206	23	175		404
19	Ain			374	11	12	5	402
20	Australian Babhul		1	287	17	88	9	402
21	Bor	2	1	152	10	206	30	401
22	Palas		1	202	41	10	97	351
23	Jambhul	1		80	12	205	38	336
24	Peru	1		39	2	267	15	324
25	Beheda			177	72	11		260
26	Supari			57		200		257
27	Deshibadam	1		33	9	178	27	248
28	Kaju	3	2	66	24	136	13	244
29	Bhend			33		207	2	242
30	Umber			57	9	135	40	241
31	Kharoti			35	7	164	4	210
32	Shemat	2		78	8	101	1	190
33	Phanas			15		152	15	182
34	Chari					175		175
35	Shindi			15	3	64	92	174
36	Karanj			67	13	81	1	162
37	Ankul			117	22	5	15	159
38	Saptparni			1		45	109	155
39	Chiku		1	90		55	5	151
40	Rain Tree			28	1	98	23	150

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SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
41	Apta		2	90	5	38	14	149
42	Gulmohar			11	10	74	53	148
43	Singapur Cherry			85		28	22	135
44	Tetu			95	32	2	1	130
45	Bottle Palm					92	29	121
46	Petari			35	25	43		103
47	Chapha		1	4		76	19	100
48	Vilayati Chinch	1		44		45	2	92
49	Pimpal			23		60	7	90
50	Rai Avla	1		2		75	11	89
51	Kakad			30	1	47	9	87
52	Asupalav (S)					85		85
53	Parijatak	1		1		76	4	82
54	Benjamin Tree					76	5	81
55	Humb			77			2	79
56	Kanchan			28		6	43	77
57	Nilgiri			38	5	33		76
58	Sonmohar			12		58	2	72
59	Bhokar			16		55		71
60	Vavla		1	26		25	15	67
61	Kadipatta			2		60	1	63
62	Shivan			43	1	15	2	61
63	Sisam			21	4	31	5	61
64	Vad	1		12	2	40	6	61
65	Akashneem			6		53	1	60
66	Suru			30		28	2	60
67	Jamb					56	1	57
68	Bitti			2		46	6	54
69	Limbu			1		49	2	52
70	Khair		2	32		11	5	50
71	Christmas Tree			11		37		48
72	Bahava			30	1	5	11	47
73	Arjun			1		42		43
74	Avla			31		10	2	43
75	Babhul		1	5	1	32	2	41
76	Pangara					33	2	35
77	Moha				2	29		31
78	Tendu			1		28		29
79	Bel			9	2	15	2	28
80	Sonchapha					15	12	27
81	Kadamb			18		6	2	26

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
82	Atrun				1	24		25
83	Charcoal Tree			2		13	8	23
84	Shirish			22	1			23
85	Unidentified			12	10	1		23
86	Ramphal					22		22
87	Kavas			20		1		21
88	Shankasur				4	17		21
89	Dalimb					19		19
90	Kumkum			9		3	7	19
91	Mayurpankhi					19		19
92	Ganapaty tree			1	17			18
93	Bakul			5		10		15
94	Kailashpati			9		1	5	15
95	Khirni			1		13		14
96	Samudraphal			7	1	2	4	14
97	Bhorsal			12				12
98	Sukanu					12		12
99	Ambada			3		5	3	11
100	Naringi			11				11
101	Ritha					11		11
102	Jungli Badam					8	2	10
103	Kokam			4		3	3	10
104	Otamb					10		10
105	Bakneem			2		7		9
106	Kahandol			6	1	2		9
107	Savar	1		1		5	2	9
108	Haldu			8				8
109	Kala kuda						8	8
110	Kumb			8				8
111	Shendri			8				8
112	Barbedos cherry			7				7
113	Dalbergia paniculata			7				7
114	Indian Rubber Tree			3		4		7
115	Bibba			6				6
116	Dandus			6				6
117	F. tsiela					3	3	6
118	Kashid			4		1	1	6
119	Lokhandi			1		5		6
120	Bherli Mad					5		5
121	Karvat			5				5

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
122	Nirphanas					2	3	5
123	Putranjiva					5		5
124	Ratangunj					5		5
125	Silver Oak			1		4		5
126	Bottle Brush					4		4
127	Dalchini			1			3	4
128	Kanak champa			4				4
129	Karmal			3	1			4
130	Lettuce Tree					4		4
131	Paar			4				4
132	Tamalpatra					4		4
133	Vilayati Babhul			3		1		4
134	All spice tree			2			1	3
135	F. benjamina				3			3
136	Mahua			2		1		3
137	Phalsa			3				3
138	Taman			2			1	3
139	Acacia mangium						2	2
140	Anjir					2		2
141	Bartondi c			2				2
142	Bondara			2				2
143	Chenduphul					2		2
144	Id Limbu					2		2
145	Kalamb			1		1		2
146	Khaya					2		2
147	Narikel					2		2
148	Papanas					2		2
149	Pichkari					1	1	2
150	Scarlet Cordia					2		2
151	Tabebuia rosea			2				2
152	Tabernaemontana heyn			2				2
153	Yellow silk cotton tree			2				2
154	Acacia horrida						1	1
155	Albizia lucidior					1		1
156	Alu			1				1
157	Ashok					1		1
158	Chapha (O)					1		1
159	Charoli					1		1
160	Ficus virens						1	1
161	Jambha			1				1

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
162	Kajra			1				1
163	Litchi					1		1
164	Mahogani					1		1
165	Mamphal					1		1
166	Mosambi					1		1
167	Nana			1				1
168	Padal						1	1
169	Sisvi					1		1
170	Sterculia guttata			1				1
171	Surangi						1	1
172	Vaivarna						1	1
173	Varas			1				1
	Grand Total	37	18	11992	1356	13743	1814	28960

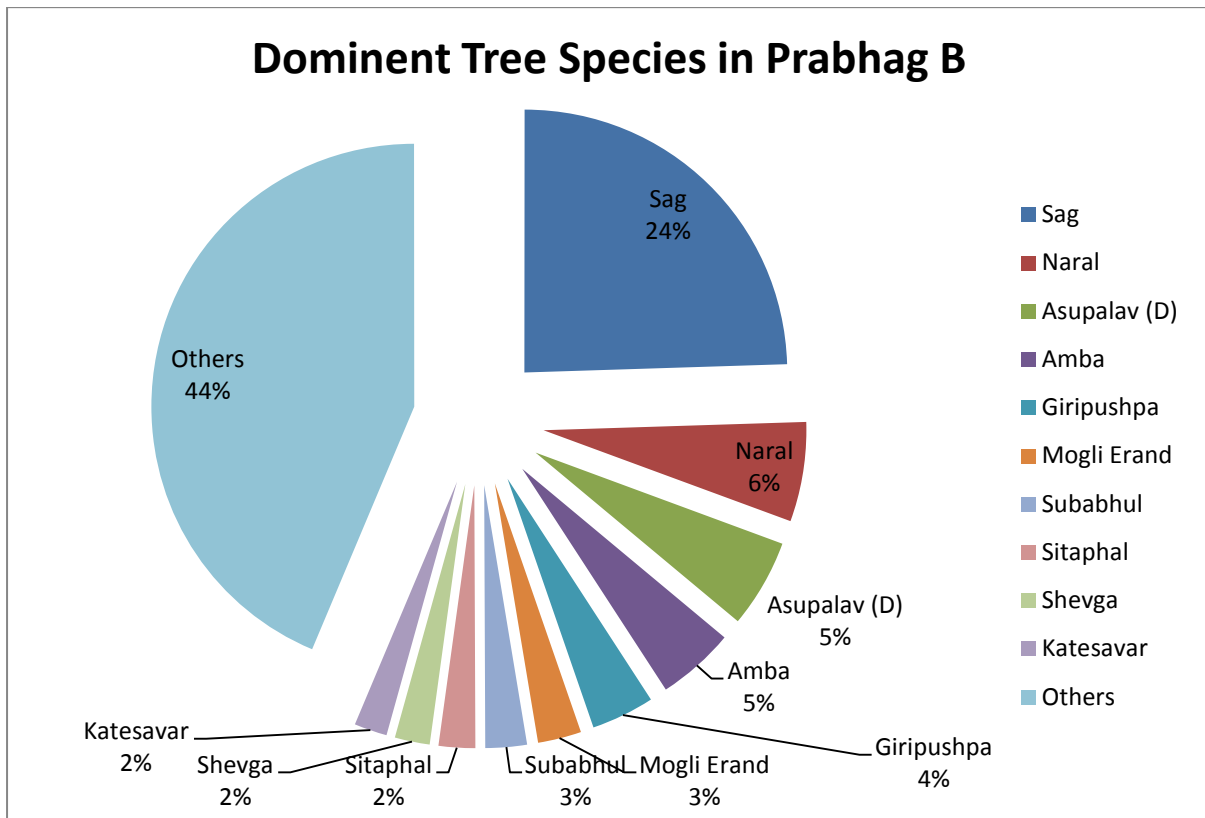


Figure 4.2: Ten dominant tree species in Prabhag – B

Table 4.3: Species and Ownership wise tree count of Prabhag – C

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
1	Sag	5826	1	12654	984	7075	54	26594
2	Subabhul	3581	159	727	1	4044	149	8661
3	Supari	621	1	2549		4892	18	8081
4	Naral	121	68	1789	5	4578	19	6580
5	Amba	689	34	873	4	4396	93	6089
6	Katesavar	1312	5	1442	151	2135	42	5087
7	Bor	301	48	606	1	2475	109	3540
8	Suru	26		2763		70	2	2861
9	Sonchapha	107		428	2	2027	14	2578
10	Shevga	375	2	576	13	1294	50	2310
11	Kala Umber	27	12	1166	39	665	24	1933
12	Giripushpa	43		864	9	846	125	1887
13	Sitaphal	125		215	1	1509	15	1865
14	Chinch	293	5	268	36	1220	30	1852
15	Australian Babhul	263	4	1078	39	370	37	1791
16	Mogli erand	208		672	168	724	12	1784
17	Tad	219		476	7	986	47	1735
18	Kharoti	376	4	309	2	973	10	1674
19	Pandhara khair	608		19		1031	2	1660
20	Khaya	188		4		1464		1656
21	Bhend	122	54	349		1048	61	1634
22	Dhaman	236		346	16	875	15	1488
23	Asupalav (D)	33	108	85	84	1048	28	1386
24	Kaduneem	101	60	169	30	843	60	1263
25	Asana	212		155	14	827	1	1209
26	Kadipatta	1049		16		98	10	1173
27	Kuda	189	10	343	2	501	11	1056
28	Khair	56	4	82		834		976
29	Kaju	47	5	163		712	9	936
30	Peru	38	21	105	6	730	23	923
31	Karanj	195	75	136		474	29	909
32	Jambhul	133	9	142	5	498	29	816
33	Apta	169	4	113	4	477	13	780
34	Bartondi (p)	48	3	124	5	553	10	743
35	Babhul	212		30		430	7	679
36	Umber	54	8	128	2	430	33	655
37	Ain	9		127		492	4	632
38	Ankul	2		442	12	106	28	590
39	Vavla	326	6	57		142	16	547
40	Sonmohar	216	82	11	7	146	17	479

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SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
41	Vilayati Chinch	29	10	106	2	247	29	423
42	Phanas	18		56		332	3	409
43	Akashneem	2		104		274		380
44	Bottle Palm		34		53	261	12	360
45	Gulmohar	33	65	21	1	193	42	355
46	Beheda			274	6	33	3	316
47	Deshibadam	16	2	45	6	229	16	314
48	Rain tree	14	2	41	1	187	65	310
49	Charcoal tree	4	143	46		63	12	268
50	Chiku	4	3	43		187	4	241
51	Nilgiri	15	1	42	11	138	12	219
52	Tetu			47	9	161		217
53	Bhokar	17		94		99	2	212
54	Vad	41	6	33	1	117	13	211
55	Saptparni	3	102	58	16	27	4	210
56	Atrun	35		35		138		208
57	Asupalav (S)	25	29	11	3	121	4	193
58	Chapha	6	49	7	15	113	3	193
59	Bitti	32		24		124	6	186
60	Palas	4		45		113	16	178
61	Rai Avla	8		22		146	2	178
62	Kakad	11		64		97	5	177
63	Pimpal	47	5	21	4	86	13	176
64	Shemat		3	56	2	107	3	171
65	Jamb		1	16		145	6	168
66	Ramphal	18		9		130	5	162
67	Moha	44		33		80	1	158
68	Shindi	1	1	49		57	47	155
69	Parijatak	1	12	7		120	1	141
70	Bahava	2	1	57	10	23	47	140
71	Kanchan	2	67	7		47	2	125
72	Pangara	5	25	19		71		120
73	Unidentified	56		16	1	33	1	107
74	Pichkari	1	97	2		4		104
75	Samudraphal			95	6			101
76	Kumb			69			23	92
77	Vaivarna	64		9		19		92
78	Singapur cherry	52		5		26	7	90
79	Limbu	2		15		70		87
80	Kashid	7		12		59	8	86
81	Bakneem	9	15	11		48	2	85

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
82	Avla	2	6	1		57	4	70
83	Lokhandi			25		41		66
84	Petari			5		57		62
85	Sisam	2		17		43		62
86	Benjamin tree		46	1	3	10		60
87	Bivla	10		35		12		57
88	Humb			48		8	1	57
89	Tamalpatra					57		57
90	Christmas Tree	2	2			49	2	55
91	Bottle Brush		47			5		52
92	Bakul	20			1	29	1	51
93	Bel		1	11		37		49
94	Pink Tabebuia		48					48
95	Shivan	2		21	1	23		47
96	Haldu			40		5		45
97	Shirish	3		10	1	27	4	45
98	Vilayati Babhul			5		39		44
99	Bibba	9		15	1	12	6	43
100	Mayurpankhi	1	1			41		43
101	Arjun	1		34		3	3	41
102	Kahandol	11		10	1	16		38
103	Dandus	1		32		1	3	37
104	Dalimb					36		36
105	Khirni	5	1	5	1	23	1	36
106	Ixora brachiata	20				13		33
107	Papanas	1		7	5	20		33
108	Taman		29			4		33
109	Bherli Mad		23			8		31
110	Madhuca longifolia			28			2	30
111	Kanak champa			18	10			28
112	Ritha	2		3		23		28
113	Sausage Tree	5	21			2		28
114	Calabash Tree					27		27
115	Kala Kuda			17		7		24
116	Varas	2		8		12		22
117	Kadamb			1		20		21
118	Kusum			20				20
119	Kalamb	13		3		3		19
120	Shankasur		8	2		8	1	19
121	Tendu	1		3	7	8		19
122	Datrang			9	1	2	6	18

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
123	Anjir					17		17
124	Dhatriphal	4				13		17
125	Chari					16		16
126	Dalbergia paniculata			15		1		16
127	Kokam	3				12		15
128	Kavath	13		1				14
129	Mosambi					14		14
130	Scarlet Cordia		14					14
131	Tuti	5			1	8		14
132	Ambada			5		8		13
133	F. tsiela	3				10		13
134	Kavas			12		1		13
135	Mamphal					13		13
136	Savar	1	1	2		9		13
137	Otamb			8		3	1	12
138	Agasti			8		3		11
139	Jungli Badam	1		1	1	8		11
140	Bhorsal			10				10
141	Kinai					10		10
142	Bartondi c	2		4			3	9
143	Karmal			8		1		9
144	Padal					9		9
145	Alu			3		5		8
146	Chapha (O)					8		8
147	Lettuce Tree					8		8
148	Sisvi	4				4		8
149	Vilayati Kikar					8		8
150	Litchi					7		7
151	Chenduphul			3		3		6
152	Mahua			6				6
153	Id limbu					5		5
154	Kailashpati					4	1	5
155	Khejdi					5		5
156	Mahogani	1				1	3	5
157	Phalsa			5				5
158	Putranjiva	1				4		5
159	Cassia Nodosa			4				4
160	Indian Rubber Tree					4		4
161	Karvat			4				4
162	Kumbh			3		1		4

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
163	Kumkum			2		2		4
164	Acacia mangium						3	3
165	Ashok		1			2		3
166	Chapha (T)					3		3
167	Ficus virens						3	3
168	Ixora arborea	3						3
169	Payar			2			1	3
170	Ratangunj	2				1		3
171	All Spice Tree			1		1		2
172	Chandan	1			1			2
173	Charoli			1		1		2
174	Chikne limbu			2				2
175	Nirphanas					2		2
176	Rudraksha					2		2
177	Silver oak						2	2
178	Umbrella tree			1	1			2
179	Acacia horrida			1				1
180	Alstonia macrophylla				1			1
181	Bondara					1		1
182	Dalchini					1		1
183	F tsiela			1				1
184	Fan Palm						1	1
185	Fern Tree					1		1
186	Flacourtia indica			1				1
187	Hansoli					1		1
188	Jambha			1				1
189	Kydia calycina			1				1
190	Lal chapha					1		1
191	Naringi			1				1
192	Paar			1				1
193	Pipli					1		1
194	Ran chiku						1	1
195	Surangi					1		1
196	T. pentaphylla	1						1
197	Tabebuia rosea					1		1
198	Tabernaemontana heyneana			1				1
	Grand Total	19542	1714	34880	1833	59596	1728	119293

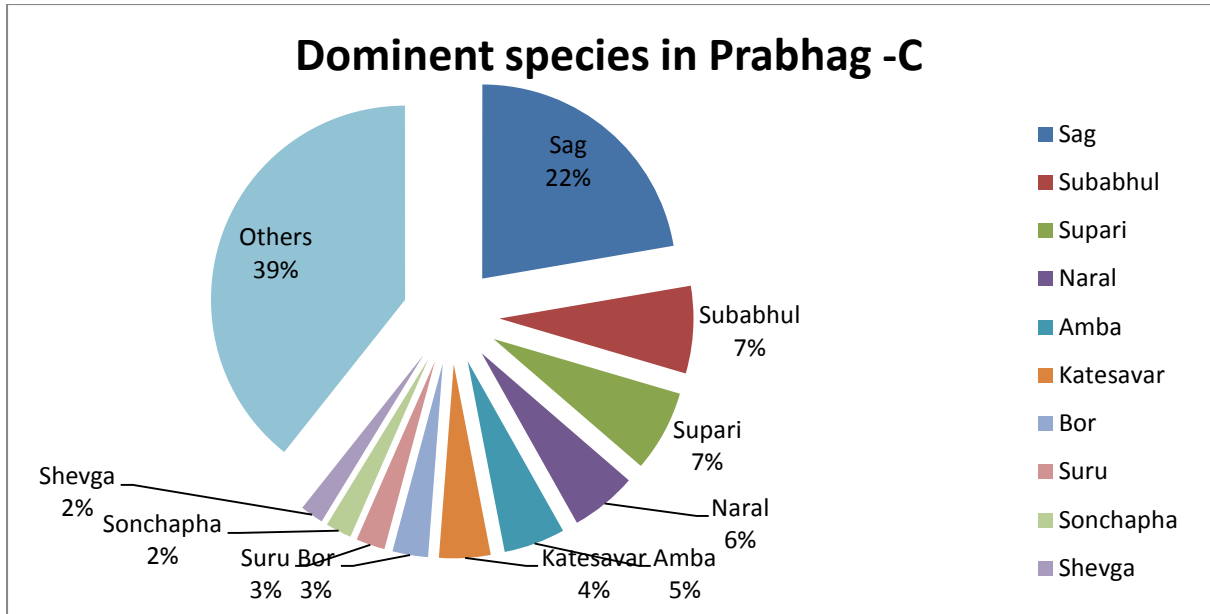


Figure 4.3: Ten dominant tree species in Prabhag – C

Table 4.4: Species and Ownership wise tree count of Prabhad – D

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
1	Sag	3067				2639		5706
2	Asupalav (D)	59	14	72	5	3230	93	3473
3	Naral	16	14	143	18	2508	133	2832
4	Mogli erand	547		24		1682		2253
5	Subabhul	348	31	83	5	910	85	1462
6	Amba	94	13	65	6	1190	29	1397
7	Kala umber	187		15	2	1115	14	1333
8	Kaduneem	10	10	67	1	689	34	811
9	Bottle Palm	2	1	37	144	492	120	796
10	Sitaphal	9		63	6	623	12	713
11	Deshibadam	25	20	34	10	561	52	702
12	Peru	9	3	22	6	594	13	647
13	Kharoti	50		24	2	485	2	563
14	Sonmohar	34	15	33	2	330	129	543
15	Gulmohar	6	19	11	1	374	63	474
16	Rain tree	13	15	19	12	143	246	448
17	Saptparni	3	15	23	4	139	243	427
18	Shevga	16	2	57		341	7	423
19	Jambhul	14	3	23	2	335	22	399
20	Pimpal	16	21	34	4	231	60	366
21	Asupalav (S)	7		7		317	8	339
22	Bor	15	3	111	3	177	20	329
23	Bhend	10	1	113	1	177	4	306
24	Supari			11		287		298
25	Umber	1	12	29	1	201	22	266
26	Suru	21	3	7	1	130	82	244
27	Katesavar	11		7		221	1	240
28	Phanas	1	3	1	2	217	3	227
29	Tad			61		113	4	178
30	Kaju	22		1		139		162
31	Chinch	21	1	15	1	95	3	136
32	Pichkari			2	9	95	23	129
33	Christmas tree			4		116	1	121
34	Parijatak	2		3		106	1	112
35	Moha	23				88		111
36	Bitti	4		23		78	1	106
37	Nilgiri	7	1	11	13	64	8	104
38	Vad	4	7	3	1	79	10	104
39	Australian babhul	7	5	15	4	59	13	103
40	Singapur Cherry	6		22		56	18	102

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SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
41	Karanj		2	16		70	13	101
42	Dhaman	32				68		100
43	Kumkum					94		94
44	Chiku			2		89	2	93
45	Jamb			3		84	2	89
46	Chapha			4		81	1	86
47	Kadipatta			3		74		77
48	Rai avla	4		2		66		72
49	Chari					66		66
50	Charcoal tree	1		2		49	6	58
51	Bakul			4		49	2	55
52	Phoenix roebelenii			46		8		54
53	Ramphal	1		2		49	1	53
54	Limbu	1		3	2	45		51
55	Unidentified	2			1	47	1	51
56	Bakneem	8	2	11	2	25	2	50
57	Apta	21		9		16		46
58	Mayurpankhi				3	41	2	46
59	Benjamin Tree				1	38	6	45
60	Vilayati chinch	4		9		16	14	43
61	Kashid	1	4	2		28	7	42
62	Kanchan			13	2	23	1	39
63	Dalimb			2		32		34
64	Fern tree			1		32		33
65	Kakad	12				21		33
66	F. benjamina			16		16		32
67	Ain	25				5		30
68	Shemat	4		4		20	2	30
69	Vavla	5		1		24		30
70	Bottle Brush	2		2	5	16	4	29
71	Bel			3		25		28
72	Asana	2				25		27
73	Bherli Mad					27		27
74	Putranjiva			1		23	2	26
75	Sonchapha			3		21	2	26
76	Bahava	2		5		9	9	25
77	Akashneem					24		24
78	Anjir				15	8		23
79	Ritha			1	1	21		23
80	Chapha (T)					22		22
81	Khaya			5		14	2	21
82	Samudraphal			1	1	17		19

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SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
83	Savar					16	2	18
84	Taman			5	11	2		18
85	Bartondi (p)	9				8		17
86	Kadamb			3		13	1	17
87	Fan Palm			3		13		16
88	Palas	12				4		16
89	Bhokar	4		2		8	1	15
90	Kuda					15		15
91	Mahogani			7		8		15
92	Chenduphul	1		1		11	1	14
93	Bivla	4				9		13
94	Jungli badam	1	1	2		9		13
95	Kailashpati			1		12		13
96	Nirphanas			3		9		12
97	Papanas					12		12
98	Shankasur				8	3	1	12
99	Khirni			1		9	1	11
100	Surangi					11		11
101	Atrun					10		10
102	Chapha (O)			3		7		10
103	Lokhandi	1		1		8		10
104	Scarlet Cordia				7	3		10
105	Shirish			3	1	6		10
106	Khair					9		9
107	T. pentaphylla					9		9
108	Vilayati babhul		2			1	6	9
109	Tuti					8		8
110	Babhul	3				1	3	7
111	fox tail			7				7
112	Sisam	1				6		7
113	Ankul					6		6
114	Ashok					6		6
115	Chota Taman					6		6
116	Giripushpa	4				2		6
117	Indian Rubber Tree			1		5		6
118	Pangara					6		6
119	Shivan					5	1	6
120	Ambada			5				5
121	Kunti					4	1	5
122	Markhamia			5				5
123	Petari	1				4		5
124	Arjun					4		4

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SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
125	Avla	1				3		4
126	Brazilian Pepper					4		4
127	F. tsiela	1				3		4
128	Karambol					3	1	4
129	Sausage tree					4		4
130	Tetu					4		4
131	All spice tree					3		3
132	Beheda					3		3
133	Chanda					3		3
134	Id limbu					3		3
135	Karvat					3		3
136	Litchi				2	1		3
137	Rudraksha					3		3
138	Tamalpatra					3		3
139	Bilambi					2		2
140	Cycas					2		2
141	Kahandol					2		2
142	Lettuce tree					2		2
143	Narikel					2		2
144	Ratangunj	2						2
145	Shindi					2		2
146	Silver Oak					2		2
147	Tabebuia Rosea					2		2
148	Tendu					2		2
149	Varas	2						2
150	Bartondi c					1		1
151	Chandan					1		1
152	Dalchini					1		1
153	Datrang					1		1
154	Hirda						1	1
155	Karmbola					1		1
156	Kavath					1		1
157	Kokam					1		1
158	Long Leafed fig					1		1
159	Madhuca longifolia						1	1
160	Maharukh					1		1
161	Mamphal					1		1
162	Naringi			1				1
163	Pink Tabebuia					1		1
164	Santra					1		1
165	Sisvi						1	1
166	Umbrella tree	1						1
	Grand Total	4862	243	1525	328	23315	1682	31955

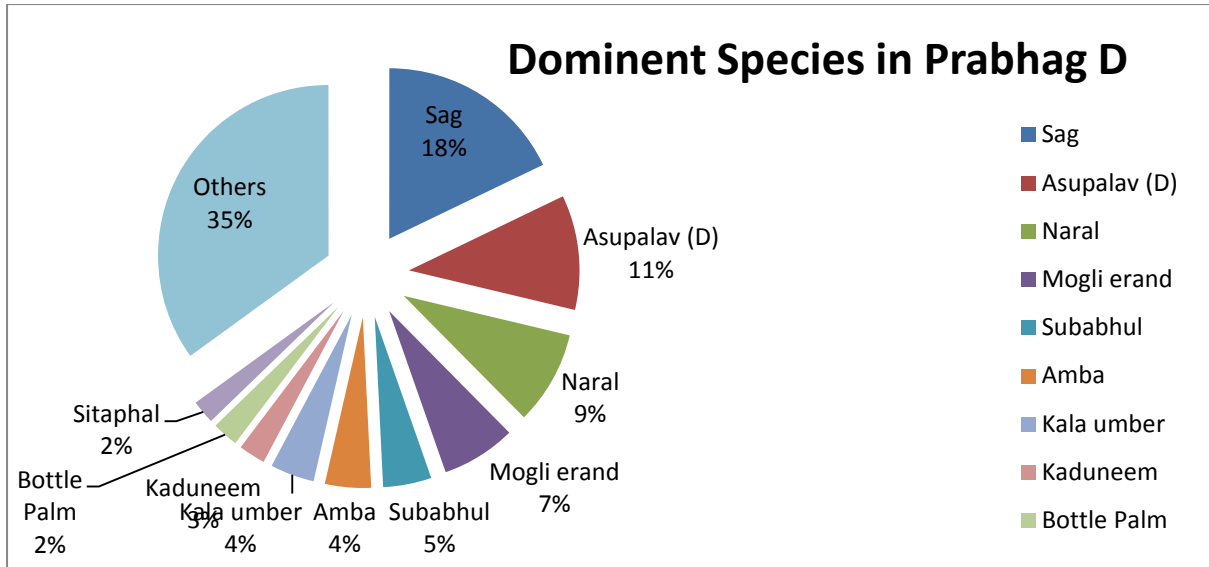


Figure 4.4: Ten dominant tree species in Prabhag – D

Table 4.5: Species and Ownership wise tree count of Prabhag – E

SN	Local Name	Government	Others	Park	Private	Roadside	Grand Total
1	Naral	31	5955	5	33256	286	39533
2	Kala Umber	38	4429	6	33579	157	38209
3	Supari		6504		17092	8	23604
4	Kharoti	11	3351	3	16395	49	19809
5	Amba	22	1217	6	8388	113	9746
6	Suru	4	5698	1	523	61	6287
7	Dhatriphal		2641		3263	6	5910
8	Shevga	1	585	4	4215	66	4871
9	Karanj	4	581	4	3617	201	4407
10	Bhend	2	650		3698	56	4406
11	Subabhul	7	1438	34	2612	177	4268
12	Tad	164	689	4	3031	106	3994
13	Ankul		2		2584	1	2587
14	Asupalav (D)	2	110	7	1973	49	2141
15	Chinch	3	368	3	1660	20	2054
16	Shindi	3	1522		151	7	1683
17	Tuti		1		1670	3	1674
18	Sitaphal		161		1394	28	1583
19	Akashneem		383		1187	3	1573
20	Bherli Mad	25	242		1295		1562
21	Phanas	3	191		1322	14	1530
22	Mogli Erand		340		899	8	1247
23	Jambhul	1	122	29	900	43	1095
24	Peru		87	1	958	25	1071
25	Kaduneem	8	59	23	817	87	994
26	Kadipatta		360		523	3	886
27	Bhokar		114	1	622	5	742
28	Ramphal		50		676	8	734
29	Deshibadam	11	61	4	544	93	713
30	Jamb		52		615	4	671
31	Asupalav (S)	2	36	4	601	7	650
32	Bor		103	2	474	45	624
33	Umber	5	120	2	433	22	582
34	Sag		31	6	433	2	472
35	Otamb	3	97		362	5	467
36	Bottle Palm		3	41	201	198	443
37	Pangara		66		348	1	415
38	Rai Avla		42	1	356	13	412
39	Chiku		26	1	344	4	375
40	Sonchapha		12		363		375

SN	Local Name	Government	Others	Park	Private	Roadside	Grand Total
41	Sonmohar		11	29	268	45	353
42	Vilayati Chinch		18	1	220	58	297
43	Lokhandi		118		157		275
44	Pimpal	6	23	2	187	47	265
45	Gulmohar	4	13	13	194	36	260
46	Ambada		15	2	224	2	243
47	Rain Tree	5	8	38	135	54	240
48	Kakad		15	1	194	4	214
49	Australian Babhul		5	8	117	76	206
50	Katesavar	1	32	1	160	3	197
51	Bitti		36		153	2	191
52	Jungli Badam		10		161	6	177
53	Papanas		33		138		171
54	Vaivarna		147		23		170
55	Limbu		28		114		142
56	Asana				131		131
57	Parijatak		6		110	5	121
58	Christmas Tree		2		108	8	118
59	Vad		9	1	80	25	115
60	Singapur Cherry		6		98	8	112
61	Petari		1		109	1	111
62	Nilgiri		14	16	59	10	99
63	Giripushpa				88		88
64	Saptparni	1		14	23	21	59
65	Ritha		9		48		57
66	Kaju		4	1	44		49
67	Babhul				47	1	48
68	Kashid			18	20	9	47
69	Kanchan		2		44		46
70	Bakul			26	17	2	45
71	Bel		11		34		45
72	Shemat		1		44		45
73	Avla		2		42		44
74	Umbrella Tree		14		30		44
75	Apta		7	4	30	2	43
76	Khaya				15	26	41
77	Chapha		2	1	37		40
78	Dalimb		10	1	27	1	39
79	Mayurpankhi			3	34		37
80	Bahava		1	4	20	9	34
81	Lettuce Tree				34		34

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Others	Park	Private	Roadside	Grand Total
82	Kalamb				33		33
83	Putranjiva	3			23	1	27
84	Vilayati Babhul		1	1	24	1	27
85	Nirphanas		7		19		26
86	Kadamb				5	19	24
87	Benjamin Tree				16	5	21
88	Kavti Chapha				21		21
89	Savar		3		14	2	19
90	Khirni		6		12		18
91	Unidentified	1			16		17
92	Chenduphul			1	11	1	13
93	Dhaman		4		9		13
94	Arjun		5		7		12
95	Kokam		1		11		12
96	Tetu				12		12
97	Agasti		2		9		11
98	Lal Jamb				11		11
99	Alu				10		10
100	F. benjamina				3	7	10
101	Mahogani				10		10
102	Pichkari				9	1	10
103	Indian Rubber Tree				8	1	9
104	Moha		2		5	2	9
105	Ratangunj				8	1	9
106	T. argentea					9	9
107	Tamalpatra		2		6	1	9
108	Beheda		8				8
109	Vavla		5		2		7
110	Karambol		3		3		6
111	Taman				6		6
112	Bakneem				5		5
113	Dalchini				4	1	5
114	Datrang				4	1	5
115	Dev Babhul				5		5
116	Fan Palm				5		5
117	Fern Tree				4	1	5
118	Kala Kuda				5		5
119	Ran Chiku	1			4		5
120	Scarlet Cordia		1		3	1	5
121	Sher				5		5
122	Chapha (O)				4		4

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SN	Local Name	Government	Others	Park	Private	Roadside	Grand Total
123	Gondni				4		4
124	Kailashpati				4		4
125	Khair				4		4
126	Litchi		1		3		4
127	Shirish				4		4
128	Avocado				3		3
129	Bottle Brush				3		3
130	F. tsiela				3		3
131	Id limbu				3		3
132	Khejdi				3		3
133	Mamphal				3		3
134	Samudraphal				3		3
135	Sausage Tree					3	3
136	Shankasur		1		2		3
137	Silver Oak				3		3
138	Star apple tree				3		3
139	Bartondi (P)		1		1		2
140	Cassia nodosa				2		2
141	Chapha (T)				2		2
142	Charcoal Tree				2		2
143	Gulabi jamb				2		2
144	Kavath				2		2
145	Kunti				2		2
146	Narikel				2		2
147	Shivan				2		2
148	Tabebuia rosea		2				2
149	Ain		1				1
150	All spice tree				1		1
151	Artocarpus hirsutus				1		1
152	Charoli				1		1
153	Chinai Mendhi				1		1
154	Dikemali				1		1
155	Karmal				1		1
156	Kumkum				1		1
157	Long Leafed Fig				1		1
158	Mosambi				1		1
159	Nana				1		1
160	Pendri		1				1
161	Surangi				1		1
162	T. pentaphylla				1		1
163	Undi				1		1
	Grand Total	372	39169	378	157641	2503	200063

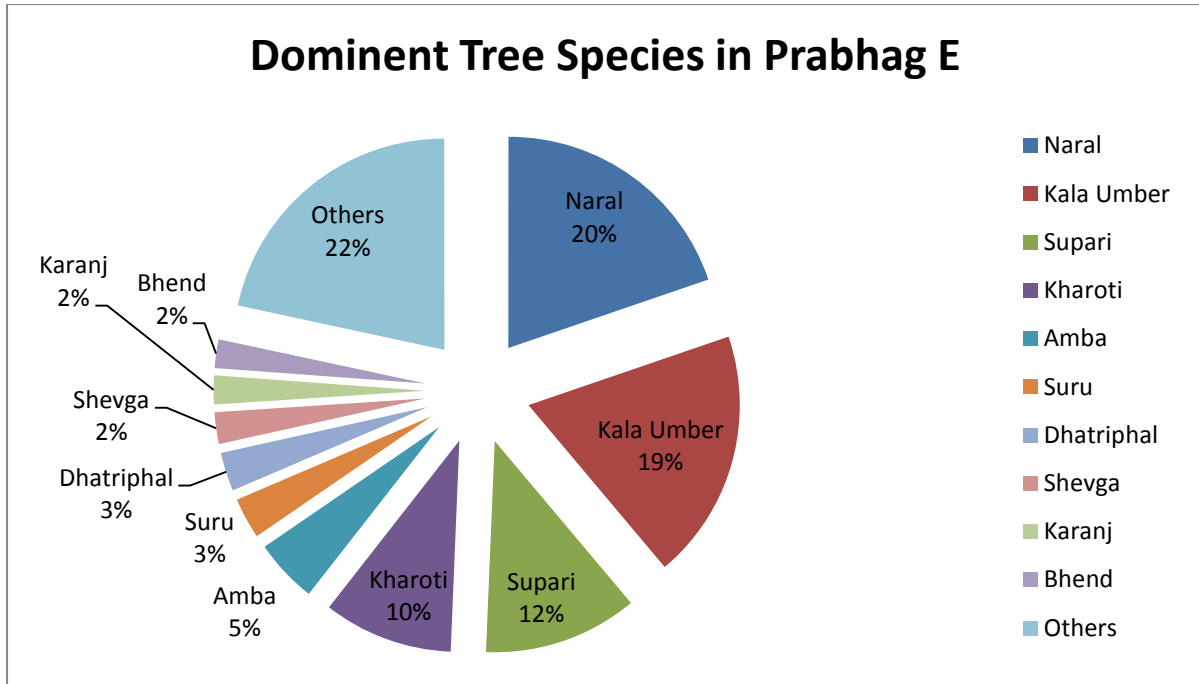


Figure 4.5: Ten dominant tree species in Prabhag – E

Table 4.6: Species and Ownership wise tree count of Prabhag – F

SN	Local Name	Government	Industry	Others	Private	Roadside	Grand Total
1	Subabhul	676	31	247	9710	13	10677
2	Bor	319	43	169	8756	19	9306
3	Amba	496	200	294	7230	41	8261
4	Sag	21	3	1056	5647	4	6731
5	Giripushpa	1147		137	3406		4690
6	Sitaphal	17	13	79	2844	12	2965
7	Shevga	31	35	108	2633	21	2828
8	Chinch	33	3	94	2559	17	2706
9	Kala umber	244	22	325	1931	14	2536
10	Naral	105	157	200	2039	22	2523
11	Asupalav (D)	29	242	151	1828	101	2351
12	Bhend	3	2	36	2165	9	2215
13	Kaduneem	21	48	256	1843	27	2195
14	Chiku	472	5	23	1637		2137
15	Karanj	306	2	87	1639	56	2090
16	Asana	42	2	117	1845		2006
17	Kharoti	233	8	53	1647	3	1944
18	Mogli erand			206	1528	1	1735
19	Katesavar	76	8	82	1370	5	1541
20	Kaju	11	9	119	1296	2	1437
21	Dhaman	32		3	1317	2	1354
22	Peru	65	16	72	1056	9	1218
23	Tad	72	7	37	1092	1	1209
24	Jambhul	36	31	88	1003	9	1167
25	Gulmohar		44	41	907	9	1001
26	Shemat	18	1	23	938	2	982
27	Apta	26		36	777	3	842
28	Australian babhul	13	10	20	794	2	839
29	Umbur	94	38	57	545	11	745
30	Kumkum	7		268	445		720
31	Vilayati Chinch	30	7	14	655	2	708
32	Avla	72	1	9	624		706
33	Bartondi (p)	47		58	554		659
34	Deshibadam	6	26	43	458	10	543
35	Rain tree	17	23	51	410	14	515
36	Vavla	18	4	11	466	7	506
37	Ankul	28		341	128		497
38	Ain	22		11	453	1	487
39	Phanas	10	32	38	375	1	456
40	Sonmohar		11	50	333	5	399

SN	Local Name	Government	Industry	Others	Private	Roadside	Grand Total
41	Charcoal tree	72	15	22	270	5	384
42	Nilgiri		7	7	361	2	377
43	Sonchapha				366	1	367
44	Vad	13	11	16	267	13	320
45	Chapha		12	15	254	1	282
46	Sisam	15		1	264		280
47	Rai Avla	4	2	23	231	2	262
48	Bottle Palm	7	31	1	202		241
49	Limbu	1		1	229		231
50	Supari	6	1	10	204	1	222
51	Arjun	10	1		206		217
52	Khair	4		14	187		205
53	Kakad			17	179		196
54	Asupalav (S)	2	22	46	110	13	193
55	Pimpal	4	18	7	146	12	187
56	Bhokar	25		5	153		183
57	Shivan	2		76	101		179
58	Kuda	3			175		178
59	Moha		2	3	168	1	174
60	Jamb	2			170		172
61	Bivla	1		160	3		164
62	Suru	1	6	6	149	2	164
63	Bitti		6	6	140	9	161
64	Kanchan	1	1	10	144	1	157
65	Silver Oak				145		145
66	Ramphal	2	2	12	121		137
67	Tetu			19	105		124
68	Atrun	1			119		120
69	Kanak champa			98	15		113
70	Pangara	1	1		111		113
71	Akashneem	35		13	61		109
72	Kadipatta		1	11	92	4	108
73	Shindi			2	94	3	99
74	Dhatriphal				98		98
75	Benjamin Tree		1	1	92		94
76	Putranjiva		48	1	45		94
77	Ritha	1		2	91		94
78	Bel	6	3	6	75	1	91
79	Singapur cherry		1	19	66	3	89
80	Unidentified		5	30	49	2	86
81	Mayurpankhi		11	1	72		84

SN	Local Name	Government	Industry	Others	Private	Roadside	Grand Total
82	Parijatak		1	3	75	2	81
83	Palas	1			77		78
84	Calabash Tree			1	72		73
85	Kashid	1	2	2	63		68
86	Petari	1	2		65		68
87	Saptarni		2	9	51	4	66
88	Babhul			5	51		56
89	Papanas		2	2	51		55
90	Shirish	1		3	49		53
91	Bahava		8	9	34		51
92	Christmas tree		9	2	39	1	51
93	Alu			10	40		50
94	Pichkari			1	48	1	50
95	Ratangunj		40		10		50
96	Bakneem		1		47		48
97	Kadamb		1	3	41	2	47
98	Beheda	1		1	43		45
99	Khirni	6			37		43
100	Kokam	9		1	32		42
101	Tendu				40		40
102	Tamalpatra	12			27		39
103	Tuti			2	36		38
104	Vilayati babhul		3		35		38
105	Bakul			1	35		36
106	Dalimb		1		35		36
107	Kahandol			1	33	1	35
108	Taman		14		20		34
109	Vaivarna			8	26		34
110	Chanda			21	12		33
111	F. tsiela		1		27		28
112	Khejdi				27		27
113	Ambada	4	1	1	18		24
114	Humb				24		24
115	Kala kuda			23	1		24
116	Shankasur		4		19		23
117	Chandan				22		22
118	Lokhandi				22		22
119	Kavas			4	17		21
120	Fan palm	1	2		16	1	20
121	Kalamb	1			18		19
122	Nirphanas		2	3	14		19

SN	Local Name	Government	Industry	Others	Private	Roadside	Grand Total
123	Savar		1		11	6	18
124	Bibba		1		16		17
125	Asupalav (M)			1	14		15
126	Chari				14		14
127	Samudraphal			4	9	1	14
128	Sisvi				13		13
129	Bottle Brush				12		12
130	Karvat			11	1		12
131	Chenduphul				11		11
132	Karambol				11		11
133	Khaya				11		11
134	Dandus			2	8		10
135	Umbrella tree				10		10
136	Jungli Badam	1			8		9
137	Litchi				9		9
138	Varas				9		9
139	Kailashpati		2	2	4		8
140	Indian Rubber Tree		1		5		6
141	Jambha			6			6
142	Anjir				5		5
143	Charoli			2	3		5
144	Cycas		1		4		5
145	F. benjamina				5		5
146	Kavath				5		5
147	Litsea				5		5
148	T. argentea				5		5
149	All Spice Tree				4		4
150	Bherli mad				4		4
151	Chinai Mendhi				4		4
152	Dalchini				4		4
153	Fox tail				4		4
154	Kumbh	1		1	2		4
155	Kunti				4		4
156	Mahogani				4		4
157	Ashok				3		3
158	Dikemali				3		3
159	Fern Tree				3		3
160	Karmal				1	2	3
161	Kinai				3		3
162	Shami				3		3
163	Shendri		1	2			3

SN	Local Name	Government	Industry	Others	Private	Roadside	Grand Total
164	Gulabi Jamb				2		2
165	Id limbu			1		1	2
166	Jaiphal				2		2
167	Kajra				2		2
168	Kapur				2		2
169	Lettuce tree				2		2
170	Pink Tabebuia		1		1		2
171	Santra				2		2
172	Surangi				2		2
173	T. pentaphylla				2		2
174	Undi				2		2
175	Acacia leucophloea				1		1
176	Bilambi				1		1
177	Gondni	1					1
178	Kumb				1		1
179	Kusum				1		1
180	Mamphal				1		1
181	Mosambi				1		1
182	Narikel				1		1
183	Nilmohar				1		1
184	Paar					1	1
185	Phalsa				1		1
186	Raktachandan				1		1
187	Rudraksha				1		1
	Grand Total	5155	1396	5919	84746	554	97770

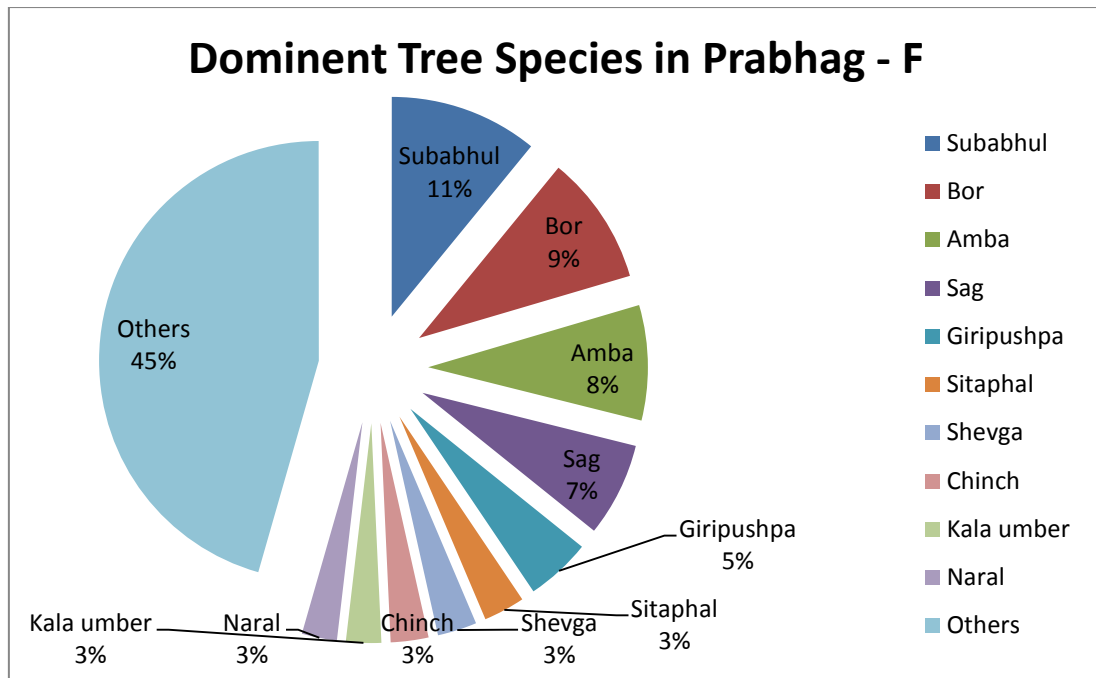


Figure 4.6: Ten dominant tree species in Prabhag – F

Table 4.7: Species and Ownership wise tree count of Prabhad – G

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
1	Sag	3443	227	1310		12253	4	17237
2	Subabhul	1552	339	794		6030	236	8951
3	Kharoti	1249	23	341		7281	4	8898
4	Kala umber	944	124	414		6537	31	8050
5	Amba	124	473	164	4	5709	73	6547
6	Mogli erand	92	83	210		4548		4933
7	Bor	84	129	169	3	4372	91	4848
8	Naral	16	467	207	3	3370	42	4105
9	Asupalav (D)	14	942	235		2631	109	3931
10	Karanj	958	17	62	9	2106	291	3443
11	Katesavar	48	41	72		2311	8	2480
12	Shevga	47	89	72	2	2081	29	2320
13	Singapur cherry	132	39	93	1	1848	7	2120
14	Kaduneem	288	140	80	1	1490	67	2066
15	Sitaphal	114	69	51	4	1671	18	1927
16	Dhaman	13	8	170		1710	1	1902
17	Chinch	48	22	33		1750	20	1873
18	Vavla	232	13	97		1391	8	1741
19	Kakad	13	11	36		1548	1	1609
20	Bhend	110	5	64		1364	34	1577
21	Umber	22	184	116	1	1101	26	1450
22	Peru	7	117	57	1	1182	16	1380
23	Kaju	102	32	13		1196	2	1345
24	Tetu	6	13	275		991		1285
25	Tad	16	24	11		1205	11	1267
26	Jambhul	12	88	49	3	1006	26	1184
27	Charcoal Tree		22	100	1	962	65	1150
28	Kumkum	8		280		774		1062
29	Asana	159	8	11		866		1044
30	Australian babhul	3	21	26		940	17	1007
31	Palas	16	1	3		951		971
32	Bottle palm	10	132	13		778	35	968
33	Sonmohar	62	67	62	1	640	92	924
34	Deshibadam	8	131	33		680	71	923
35	Gulmohar	39	131	38		527	121	856
36	Giripushpa	189	8	6		628	1	832
37	Asupalav (S)	6	158	19		597	13	793
38	Bhokar	1	1			777	1	780
39	Apta	134	2	14		609	2	761

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
40	Rain tree	15	47	23	3	472	129	689
41	Kanchan	328	2	23	29	282		664
42	Kadipatta	134	7	19	1	468	1	630
43	Shemat	2	4	5		565	10	586
44	Chiku	121	48	12	1	391	2	575
45	Bartondi (P)	5	8	75		438	1	527
46	Saptarni	78	20	48		342	32	520
47	Pimpal	5	120	40	1	326	24	516
48	Phanas	1	47	26		389	2	465
49	Ambada		3	25		409		437
50	Ain	1	9	12		397	2	421
51	Kuda		4	45		372		421
52	Supari	19	137	22		226	2	406
53	Vilayati chinch	8	8	44		313	9	382
54	Khair	5	4	40		314	2	365
55	Kashid	7	20	2	5	317	4	355
56	Vad	5	70	22		237	20	354
57	Nilgiri	11	48	6		248	9	322
58	Bivla	15		2		304		321
59	Petari		1	6		296	1	304
60	Vilayati Babhul	3	4	6		201	64	278
61	Bitti	5	33	15		197	11	261
62	Chapha		23	20	5	204	4	256
63	Rai avla		15	7		222	2	246
64	Ramphal		9	10		210	6	235
65	Beheda		8	15		211		234
66	Khejdi	9				103	108	220
67	Suru	9	37	14		154	1	215
68	Shindi	51	2	9	3	141	6	212
69	Jamb	2	14	2		182	2	202
70	Unidentified	4	18	2		163	7	194
71	Shivan	1	4	21		164	1	191
72	Humb			5		171		176
73	Parijatak	47	10	9		106	1	173
74	Arjun	3	64	2		78	8	155
75	Christmas tree		13	11	1	122	5	152
76	Bakneem		12	10		116	7	145
77	Avla	69	2	12		60		143
78	Atrun	1	1	22		112		136
79	Bahava	5	3	25		82	21	136
80	Ankul			22		109	4	135
81	Akashneem	3	5	4		104	3	119

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
82	Shirish	1	2	18		96	1	118
83	Tuti		1	13		101	1	116
84	Mayurpankhi		18	2		91		111
85	Moha		2	2		104		108
86	F. benjamina		5	24	7	60	9	105
87	Bel		1	6		88		95
88	Kahandol			3		87	1	91
89	Limbu		12	7		72		91
90	Pangara			1		84		85
91	Babhul		1	2		62	9	74
92	Sonchapha			10		63		73
93	Silver oak	25				40		65
94	Jungli Badam	2	7	5		49		63
95	Savar	1	1	13		44	2	61
96	Haldu			2		52	1	55
97	Lokhandi			1		51		52
98	Benjamin Tree		6			42	2	50
99	Bherli mad			3		46		49
100	Alu			4		38		42
101	Varas	37				4		41
102	Chenduphul		9	3		28		40
103	Khirni	1	1	2		33	1	38
104	Bibba			1		36		37
105	Kavti chapha		1	1		33	2	37
106	Shankasur		14			23		37
107	Vaivarna	16				21		37
108	Kadamb		2	9		21	4	36
109	Lettuce tree		19			16		35
110	Bakul			3		30	1	34
111	fox tail			10		20		30
112	Sisam		1			26	3	30
113	Fan palm		1			26	1	28
114	Padal					26		26
115	Kalamb		2	1		20		23
116	Papanas		1			22		23
117	Pichkari		4	1		13	5	23
118	Kusum			4		17		21
119	Samudraphal					21		21
120	Tamalpatra		1			20		21
121	Calabash tree					19		19
122	Ritha					19		19
123	T. argentea					18	1	19

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
124	Dalimb		4		1	13		18
125	Taman					17	1	18
126	Kumbh					17		17
127	F. tsiela		2			13		15
128	Kailashpati		1			14		15
129	Kala Kuda					15		15
130	Putranjiva		1			14		15
131	Ashok		2	1		11		14
132	Bottle brush		1		6	7		14
133	Kokam			1		12		13
134	Dandus			1		11		12
135	Khaya			1		2	8	11
136	Agasti					10		10
137	Tendu					10		10
138	Nirphanas					9		9
139	Umbrella tree					9		9
140	Chinese palm	8						8
141	Otamb					4	4	8
142	Scarlet cordia		3		4	1		8
143	Asupalav (M)					7		7
144	Cycas		2			3	1	6
145	Indian rubber tree			1		4	1	6
146	Jaiphal		6					6
147	Jambha		3	3				6
148	Ratangunj					6		6
149	Tembhurni					6		6
150	Anjir		1			4		5
151	Bartondi c					4	1	5
152	Karambol		1			3	1	5
153	Litchi					5		5
154	Cassia renigera			4				4
155	Kinai					4		4
156	Lal chapha					4		4
157	Paar					3	1	4
158	Pipli					4		4
159	Tambada Kuda					4		4
160	Chandan					3		3
161	H. brasiliensis					3		3
162	Kavas					3		3
163	Mahogani					2	1	3
164	Mamphal					3		3
165	Surangi			1		2		3

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SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
166	T. pentaphylla	1				2		3
167	Acacia horrida			2				2
168	Cupressus						2	2
169	Hansoli					2		2
170	Id limbu			2				2
171	Kanak champa					2		2
172	Karvat					1	1	2
173	Kunti					2		2
174	Maharukh					2		2
175	Nilmohar					2		2
176	Pink Tabebuia					2		2
177	Raktachandan					2		2
178	Sisvi					2		2
179	All spice tree					1		1
180	Bilambi	1						1
181	Chanda					1		1
182	Chapha (a)					1		1
183	Chapha (O)					1		1
184	Charoli					1		1
185	Dalchini		1					1
186	Datrang					1		1
187	Fern tree					1		1
188	Ficus parasitica					1		1
189	Gulab jamb					1		1
190	Ixora brachiata					1		1
191	Motha karmal					1		1
192	Naringi			1				1
193	Payar			1				1
194	Santra					1		1
195	Sausage tree					1		1
196	Shami					1		1
197	Tabebuia Rosea					1		1
198	Undi					1		1
	Grand Total	11386	5425	6710	101	100812	2150	126584

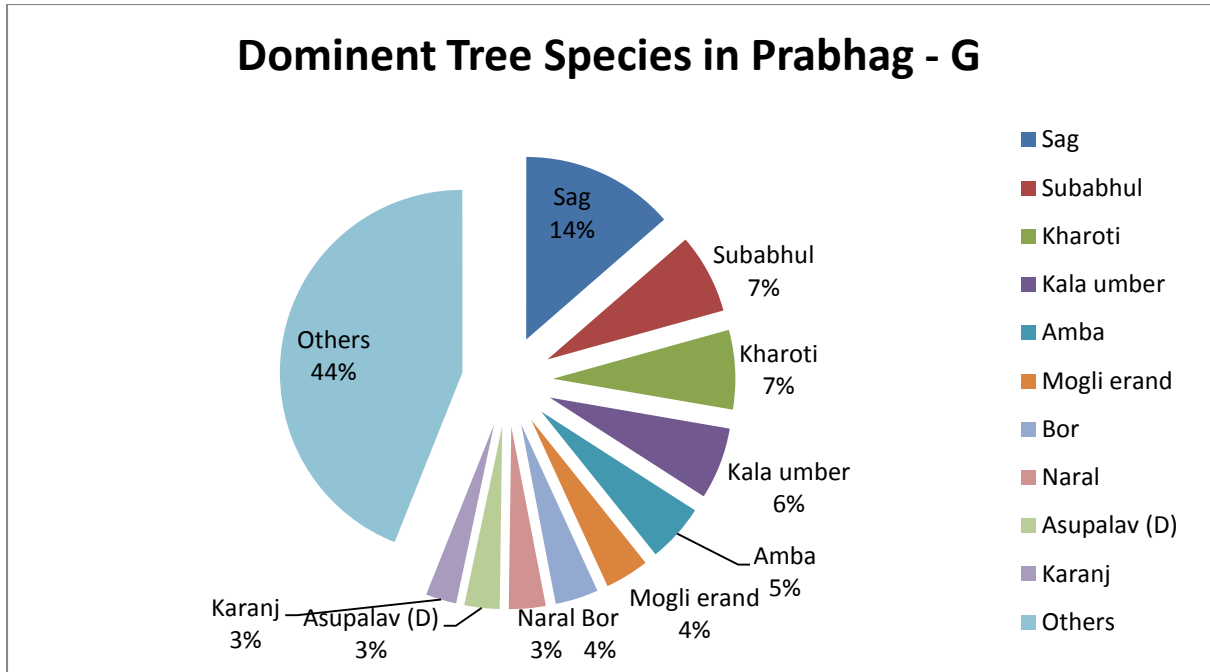


Figure 4.7: Ten dominant tree species in Prabhag – G

Table 4.8: Species and Ownership wise tree count of Prabhad – H

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
1	Naral	1		8	18	2767	52	2846
2	Asupalav (D)	8		37	53	2615	109	2822
3	Amba	3	1	3	16	1617	36	1676
4	Subabhul	13		67	2	992	167	1241
5	Suru	3		3	6	599	222	833
6	Saptarni	12		15	26	133	630	816
7	Sitaphal	5		3	9	748	13	778
8	Kaduneem	3		11	5	554	106	679
9	Australian Babhul			13	3	458	185	659
10	Shevga	3	1			624	9	637
11	Sonmohar	1		18	9	347	144	519
12	Peru	1		6	10	454	13	484
13	Bor			15		401	26	442
14	Bottle Palm	1		3	78	355	2	439
15	Gulmohar	5		17	3	174	137	336
16	Jambhul	4			7	277	30	318
17	Deshibadam	4		10	2	230	51	297
18	Karanj	3		24	2	178	44	251
19	Pimpal	7		10	5	169	60	251
20	Phanas	1		2		230	4	237
21	Singapur Cherry			2		223	11	236
22	Rain Tree	5		23	6	103	94	231
23	Kala Umber			1		210	4	215
24	Jamb					212	2	214
25	Umber	4		8	10	151	35	208
26	Chiku					177	1	178
27	Christmas Tree				1	142	1	144
28	Nilgiri	2		6		110	26	144
29	Tabebuia Rosea					96	46	142
30	Supari	3			1	135	2	141
31	Bakneem	6		4	3	79	27	119
32	Chinch	2				114	3	119
33	Parijatak	1		3	1	101	5	111
34	Rai Avla					105	3	108
35	Vilayati Chinch			4		89	7	100
36	Ramphal				2	89		91
37	Kadipatta					88		88
38	Avla					57	28	85
39	Benjamin Tree					76	3	79
40	Bahava				1	55	22	78

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
41	Chapha					66	5	71
42	Bhend			1		53	16	70
43	Asupalav (S)				1	59	6	66
44	Kashid			2	8	16	34	60
45	Charcoal Tree			2	1	51	1	55
46	Vad	1	1	1	2	33	15	53
47	Dev Babhul					51		51
48	Shankasur				8	40	2	50
49	Bherli Mad					44		44
50	Mayurpankhi				13	30	1	44
51	Bitti					39	4	43
52	Babhul			1		36	4	41
53	Bottle Brush					40		40
54	Limbu			1		38	1	40
55	Sag					39		39
56	Khaya					3	31	34
57	Mogli Erand					34		34
58	Vavla					10	21	31
59	Pichkari					27	3	30
60	Chenduphul					19	6	25
61	Fan Palm					25		25
62	Kanchan				1	22	1	24
63	Katesavar			1		17	2	20
64	Lokhandi					19	1	20
65	Sonchapha				1	15		16
66	Bilambi					13		13
67	Shemat					11	2	13
68	Shivan					9	4	13
69	Bel					11		11
70	Akashneem				2	8		10
71	Putranjiva					1	9	10
72	Savar				1	7	2	10
73	Tuti					9	1	10
74	Dalchini					9		9
75	Dalimb					9		9
76	Kharoti				1	6	2	9
77	Papanas					9		9
78	Arjun						8	8
79	Jungli badam			3		5		8
80	Kaju					8		8
81	Khair			5		3		8
82	Khirni					8		8

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
83	Ritha				1	7		8
84	Shirish					4	4	8
85	Tad	2		2		4		8
86	Bhokar			1		5		6
87	Kailashpati					5	1	6
88	Kakad					6		6
89	Lettuce Tree					5	1	6
90	Bakul					3	2	5
91	F. tsiela					4	1	5
92	Id Limbu					5		5
93	Kadamb					5		5
94	Khejdi			4		1		5
95	Shindi					5		5
96	Vilayati Babhul						5	5
97	Anjir					4		4
98	Apta					4		4
99	Bartondi (P)			1		3		4
100	Giripushpa					4		4
101	Indian Rubber Tree					4		4
102	Silver Oak					3	1	4
103	Tamalpatra					4		4
104	Chinai Mendhi					3		3
105	Kokam					3		3
106	Kunti					2	1	3
107	Ambada				1	1		2
108	Chota Taman					2		2
109	Cycas					2		2
110	Gela					2		2
111	Karambol					2		2
112	Lal Jamb					2		2
113	Nirphanas					2		2
114	Surangi	1					1	2
115	Vaivarna					2		2
116	Alu					1		1
117	Ankul					1		1
118	Bibba					1		1
119	Cassia Javanica					1		1
120	Chanda					1		1
121	Chapha (O)					1		1
122	Dhaman					1		1
123	Dikemali					1		1
124	Jaiphal					1		1

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
125	Kalamb					1		1
126	Kanak Champa						1	1
127	Karmal					1		1
128	Litchi					1		1
129	Mahogani					1		1
130	Mamphal					1		1
131	Markhamia						1	1
132	Moha					1		1
133	Mosambi					1		1
134	Pangara					1		1
135	Pink Tabebuia						1	1
136	Ratangunj					1		1
137	Sher					1		1
138	Sisam					1		1
139	Small Leaf Mahogany						1	1
140	Taman				1			1
141	Undi						1	1
	Grand Total	105	3	341	321	17414	2564	20748

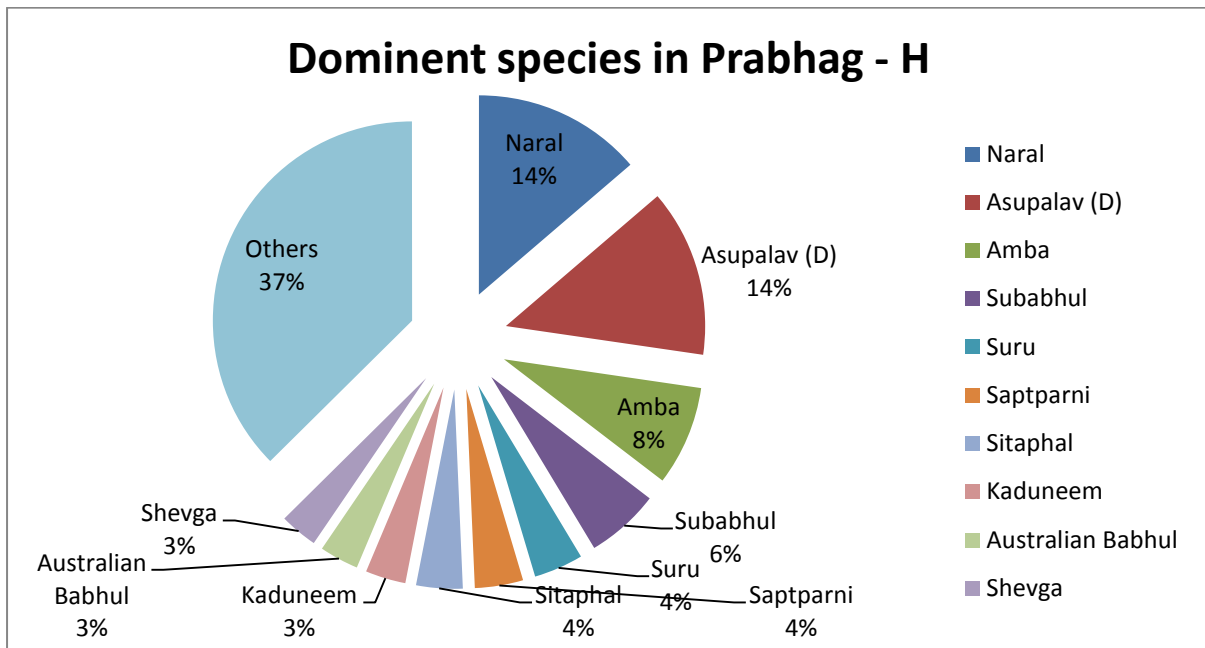


Figure 4.8: Dominant Tree Species H

Table 4.9: Species and Ownership wise tree count of Prabhad - I

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
1	Naral	113	36	973		72781	192	74095
2	Amba	356	21	227		25412	68	26084
3	Supari	1		57		25033	13	25104
4	Kharoti	203	79	439		22077	217	23015
5	Dhatrupal		31	501		13391	72	13995
6	Kala Umber	239	36	420		11936	60	12691
7	Tad	147	15	823		11140	108	12233
8	Suru	6918	2	3104		1660	30	11714
9	Subabhul	536		535		8320	261	9652
10	Phanas	7	2	16	2	9572	14	9613
11	Bhend	49		497	3	7866	87	8502
12	Shevga	25	4	202		8083	50	8364
13	Shindi	2786		23		4649	1	7459
14	Karanj	29	5	697		5751	73	6555
15	Chinch	34	2	84		4921	60	5101
16	Sitaphal	2		23		4473	23	4521
17	Asupalav (D)	66	18	71	11	3823	58	4047
18	Bherli Mad	355	10	61		3550	4	3980
19	Ramphal	9	1	20		3662	7	3699
20	Jamb	2		25		3603	3	3633
21	Gulabi Jamb					3484		3484
22	Akashneem	1	27	28		2369	2	2427
23	Ambada	157	33	14		2196	9	2409
24	Otamb	34	16	3		2314	1	2368
25	Kaduneem	74	1	56		2193	38	2362
26	Bor	272		122		1870	46	2310
27	Peru	8		12		2093	6	2119
28	Kadipatta	2		4		2110	2	2118
29	Jambhul	33	2	28		1939	12	2014
30	Petari					1749	1	1750
31	Chiku	6		27		1655	1	1689
32	Asupalav (S)	13	2	14	1	1599	3	1632
33	Giripushpa	13		5		1603	8	1629
34	Mogli Erand			41		1449	10	1500
35	Jungli Badam			7		1478	7	1492
36	Khejdi	1335				91	9	1435
37	Rai Avla	3	4	14		1392	9	1422
38	Katesavar	399		202		748	5	1354
39	Rain Tree	42	2	43		1133	81	1301

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SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
40	Bhokar	30	2	16		1149	9	1206
41	Umber	30	1	18	1	945	12	1007
42	Babhul	634		18		243	2	897
43	Lokhandi			12		849	1	862
44	Sag	1		14		703	1	719
45	Australian Babhul	25		50		571	36	682
46	Kakad	16		212		438	3	669
47	Deshibadam	22		23	2	583	19	649
48	Tuti	1				641		642
49	Christmas Tree	2		8		563	5	578
50	Limbu					534	2	536
51	Papanas	1		1		530	1	533
52	Parijatak	4		3		510	1	518
53	Sonmohar	21	4	12		391	79	507
54	Vilayati Chinch	74	3	98		316	6	497
55	Gulmohar	22	5	7	2	378	42	456
56	Pangara	44		25		368	5	442
57	Vad	4		17		330	48	399
58	Kaju			38		285	1	324
59	Pimpal	14		25	1	240	25	305
60	Ratangunj		1			297		298
61	Bottle Palm			1	1	224	32	258
62	Kavti Chapha			1		257		258
63	Ritha	1		1		231	3	236
64	Kahandol			143		90		233
65	Bitti	1		4		220	3	228
66	Nilgiri	24		12		166	14	216
67	Shivan			62		145	2	209
68	Apta			40		155	1	196
69	Ankul			2		191		193
70	Dhaman			19		144		163
71	Savar	20				137	3	160
72	Bel	1		1		157		159
73	Sonchapha			2		153	2	157
74	Shemat	2		14		133	2	151
75	Kanchan	1		34		109	1	145
76	Star Apple Tree					135		135
77	Avla	1		1		132		134
78	Nirphanas				1	129		130
79	Chapha	1				123	2	126
80	Khirni			4		122		126
81	Mamphal					113		113

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
82	Asana	90				22		112
83	Moha	1		43		67		111
84	Vaivarna	2		1		101	7	111
85	Bahava			2		98	2	102
86	Kashid	5		25	1	58	5	94
87	Bilambi			1		89		90
88	Saptparni	1		1	11	70	5	88
89	Bakneem		3			80	1	84
90	Kokam			1		80		81
91	Tamalpatra					76		76
92	Dalimb					70		70
93	Litchi					70		70
94	Unidentified			6		57		63
95	Dalchini					60		60
96	Beheda			10		46	1	57
97	Singapur Cherry					53	4	57
98	Kumkum					54		54
99	Bakul					52		52
100	Fan palm			8		40		48
101	Taman	1				41	4	46
102	Karambol					43	1	44
103	Lal Jamb	1		1		36		38
104	Charcoal Tree	1		3		30	2	36
105	Indian Rubber Tree			1		34	1	36
106	Surangi					35		35
107	Vilayati Babhul	2				27	6	35
108	Shankasur			2		32		34
109	Putranjiva					27	4	31
110	Shirish	11		8		12		31
111	Tetu	13				18		31
112	Dev Babhul					30		30
113	Khair					27		27
114	Mayurpankhi					27		27
115	Anjir		1			25		26
116	Dombeya					26		26
117	Avocado					25		25
118	Sher					25		25
119	Arjun			1		23		24
120	Lettuce Tree					24		24
121	Benjamin Tree					21	2	23
122	Kunti					23		23
123	Bartondi (P)					21		21

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SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
124	All Spice Tree					19		19
125	Chinai Mendhi					19		19
126	Kadamb	1		1		16		18
127	Vavla	2		3		12	1	18
128	Atrun			1		16		17
129	Narikel			10		7		17
130	Pichkari					15	2	17
131	Kalamb		1	2		13		16
132	Chenduphul					12	3	15
133	Kanak Champa	4				9	1	14
134	Chapha (T)					13		13
135	Id Limbu					13		13
136	Cassia Nodosa					12		12
137	Chapha (O)					12		12
138	Nana					12		12
139	Pink Tabebuia					12		12
140	Shami					12		12
141	Mosambi					11		11
142	Datrang			1		9		10
143	Palas	7				3		10
144	Silver Oak					10		10
145	Sundri					10		10
146	Alu					9		9
147	Kailashpati					9		9
148	Khaya					9		9
149	Dandus					8		8
150	Gorakh Chinch	6				1	1	8
151	Padal			5		3		8
152	Sisvi					7		7
153	F. tsiela					6		6
154	Kinai	1				5		6
155	Jaiphal					5		5
156	Kajra					5		5
157	Mahogani					5		5
158	Samudraphal	1				4		5
159	Sisam			3		2		5
160	Fern Tree					4		4
161	Jamalgota					4		4
162	Kala Kuda					4		4
163	Pendri					4		4
164	Undi					4		4
165	Ashok					3		3

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SN	Local Name	Government	Industry	Others	Park	Private	Roadside	Grand Total
166	Bell Bauhinia					3		3
167	Bottle Brush					3		3
168	Karvat					3		3
169	Lal Chapha					3		3
170	Ran chiku					3		3
171	Santra					3		3
172	Ain					2		2
173	Albizia Lucidior	2						2
174	Asupalav (M)					2		2
175	Barbedos Cherry					2		2
176	Cassia Grandis					2		2
177	Cycas					2		2
178	Ficus Parasitica					2		2
179	Karmal					2		2
180	Laxmi Taru					2		2
181	Nilmohar					2		2
182	Small Leaf Mahogany	2						2
183	Tabebuia Rosea					2		2
184	Umbrella Tree					2		2
185	Varas					2		2
186	Balsam Tree					1		1
187	Baobab						1	1
188	Ficus Nitida					1		1
189	Gela					1		1
190	Haldu	1						1
191	Kavas					1		1
192	Kleinhovia	1						1
193	Kuda					1		1
194	Kumbh	1						1
195	Lavang					1		1
196	Long Leafed Fig					1		1
197	Maharukh					1		1
198	Tembhurni					1		1
	Grand Total	15423	370	10496	37	301592	2068	329986

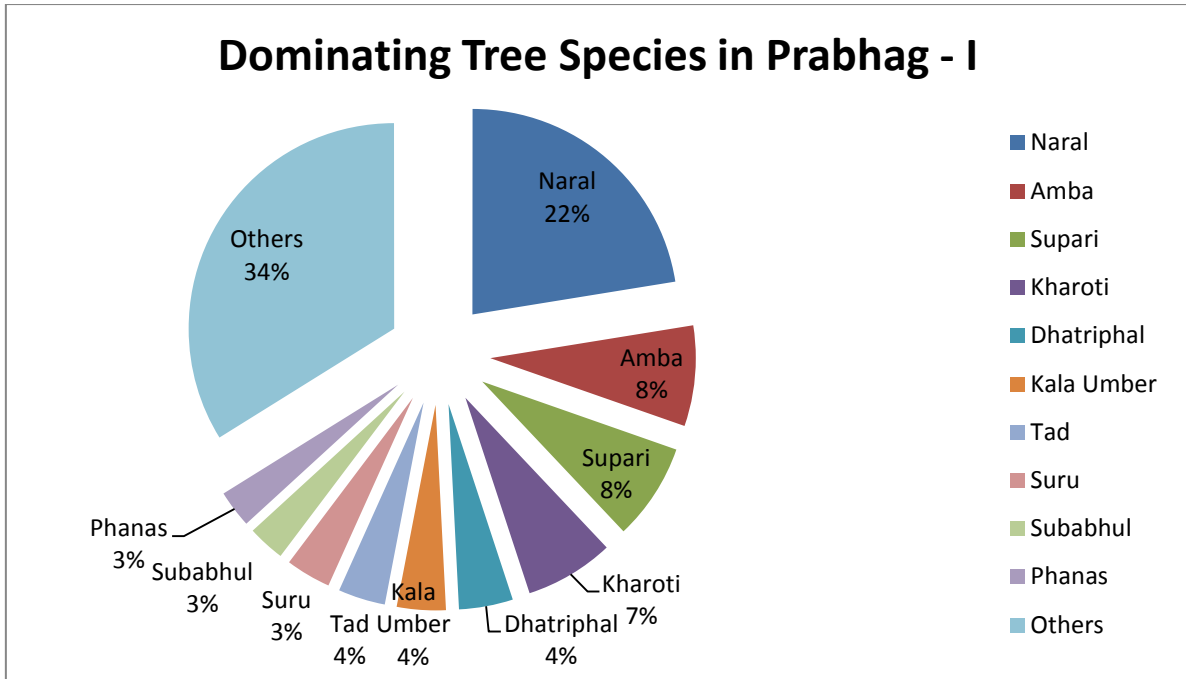


Figure 4.9: Ten dominant tree species in Prabhog – I

5. ANALYSIS OF TREE CENSUS DATA

Tree Census in 9 Prabhags was conducted. Total 14, 14,462 trees were counted in this duration. 259 species of trees belonging to 59 families were reported in this study. Dominant tree species were Supari and Naral with 3, 95,836 and 1, 89,561 count respectively. Prabhag A has maximum tree density with 4, 59,103 counts.

Ownership-wise distribution of tree species:

Ownership-wise segregation of each tree species reveals that the area under Private premises has maximum tree numbers i.e. 11, 25,292 Trees under parks are in less number and have scope of plantation to increase the green cover.

Table 5.1: Ownership wise species count

SN	Local Name	Government	Industry	Park	Private	Roadside	Others	Grand Total
1	Supari	1746	139	6	353385	51	40509	395836
2	Naral	909	742	54	171380	930	15546	189561
3	Kala Umber	1711	197	102	60582	408	8263	71263
4	Amba	1816	742	64	61308	594	4375	68899
5	Sag	12361	231	1196	30623	332	19974	64717
6	Kharoti	2134	114	15	52846	305	5380	60794
7	Subabhul	6731	562	49	37010	1187	5128	50667
8	Shevga	517	133	27	22153	293	2057	25180
9	Asupalav (D)	232	1324	278	20592	672	1329	24427
10	Tad	649	46	25	19214	301	2931	23166
11	Suru	7001	48	13	3616	404	11646	22728
12	Bor	1004	224	19	19089	409	1626	22371
13	Dhatrighal	39	31	0	18277	84	3594	22025
14	Bhend	297	62	4	18314	308	2155	21140
15	Karanj	1499	101	28	14505	861	1866	18860
16	Phanas	44	84	4	16295	61	719	17207
17	Sitaphal	288	82	28	15126	136	890	16550
18	Chinch	443	33	71	13966	229	1267	16009
19	Mogli Erand	847	83	175	11324	103	1760	14292
20	Kaduneem	522	259	64	9445	501	855	11646
21	Katesavar	1849	54	185	7159	86	2216	11549
22	Giripushpa	1403	8	327	7026	152	1415	10331
23	Shindi	2844	3	6	5211	156	1650	9870
24	Peru	135	157	26	8261	132	535	9246

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Park	Private	Roadside	Others	Grand Total
25	Akashneem	41	32	2	7049	19	1184	8327
26	Jambhul	247	133	60	6956	221	702	8319
27	Bherli Mad	384	33	0	5423	15	407	6262
28	Australian Babhul	325	41	72	3764	466	1551	6219
29	Kadipatta	1185	8	1	4393	21	483	6091
30	Jamb	6	15	0	5679	22	214	5936
31	Umber	224	243	26	4442	228	648	5811
32	Chiku	605	57	2	4840	21	259	5784
33	Dhaman	313	8	75	4332	24	820	5572
34	Ramphal	30	12	2	5316	28	160	5548
35	Deshibadam	113	179	37	3936	419	332	5016
36	Asana	505	10	37	3905	1	494	4952
37	Sonmohar	340	179	51	2816	922	255	4563
38	Kaju	185	48	25	3850	29	408	4545
39	Bottle palm	529	198	321	2921	481	60	4510
40	Asupalav (S)	60	211	10	3914	78	191	4464
41	Sonchapha	107	0	3	3829	33	472	4444
42	Ankul	35	0	34	3130	48	926	4173
43	Gulmohar	123	264	33	2997	545	184	4146
44	Rain tree	117	89	61	2812	761	267	4107
45	Bhokar	79	3	1	3232	18	350	3683
46	Gulabi jamb	0	0	0	3491	0	0	3491
47	Singapur Cherry	196	40	1	2580	106	414	3337
48	Ambada	164	37	3	2926	14	69	3213
49	Otamb	37	16	0	2962	11	151	3177
50	Rai Avla	20	21	1	2882	47	158	3129
51	Kakad	53	11	2	2561	22	376	3025
52	Vavla	583	24	0	2110	68	204	2989
53	Apta	350	8	13	2127	35	312	2845
54	Vilayati chinch	147	28	3	1991	137	437	2743
55	Saptarni	107	139	71	945	1137	157	2556
56	Tuti	6	1	1	2515	5	17	2545
57	Bartondi (P)	109	11	101	1674	73	565	2533
58	Pimpal	122	164	21	1645	291	235	2478
59	Petari	2	3	25	2325	3	47	2405
60	Shemat	29	8	10	1946	22	184	2199
61	Kuda	192	14	55	1117	16	716	2110
62	Jungli Badam	5	8	1	1992	19	57	2082
63	Charcoal Tree	81	180	2	1513	99	198	2073
64	Bitti	42	39	0	1788	44	127	2040
65	Ain	57	9	11	1370	12	529	1988

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Park	Private	Roadside	Others	Grand Total
66	Kumkum	15	0	0	1384	7	559	1965
67	Babhul	850	2	2	928	33	100	1915
68	Tetu	19	13	41	1307	1	436	1817
69	Khaya	188	0	0	1522	67	10	1787
70	Khejdi	1344	0	0	246	117	4	1711
71	Vad	71	95	9	1221	155	129	1680
72	Pandhara khair	608			1031	2	19	1660
73	Khair	65	10	0	1391	7	174	1647
74	Nilgiri	60	57	45	1241	82	151	1636
75	Palas	40	2	42	1169	113	251	1617
76	Parijatak	56	23	1	1396	27	64	1567
77	Christmas tree	4	24	5	1303	25	48	1409
78	Kanchan	332	70	32	800	50	119	1403
79	Limbu	4	12	2	1260	7	67	1352
80	Lokhandi	2	0	0	1173	2	175	1352
81	Pangara	50	26	0	1133	8	127	1344
82	Avla	146	9	0	1034	34	59	1282
83	Chapha	13	85	21	1038	48	56	1261
84	Papanas	2	3	5	952	1	69	1032
85	Beheda	1	8	78	347	4	487	925
86	Benjamin tree	0	58	14	615	85	43	815
87	Kashid	22	26	32	574	72	57	783
88	Moha	68	4	2	547	4	95	720
89	Shivan	5	4	2	468	10	225	714
90	Bahava	9	12	17	350	124	136	648
91	Bel	7	5	2	517	3	54	588
92	Unidentified	64	23	12	377	15	93	584
93	Bakneem	28	33	5	424	40	48	578
94	Bivla	30	0	0	328	0	197	555
95	Atrun	37	1	1	419	0	59	517
96	Arjun	14	65	1	363	19	48	510
97	Ritha	4	0	2	473	4	20	503
98	Vilayati Babhul	5	9	1	338	83	15	451
99	Vaivarna	82	0	0	192	8	166	448
100	Sisam	18	1	4	374	8	42	447
101	Mayurpankhi	3	30	20	383	4	3	443
102	Pichkari	1	101	9	262	42	10	425
103	Kahandol	11	0	2	230	2	163	408
104	Ratangunj	4	41	0	333	3	2	383
105	Humb	0	0	0	211	3	130	344
106	Bakul	21	0	28	254	11	17	331

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Park	Private	Roadside	Others	Grand Total
107	Savar	25	3	1	253	19	28	329
108	Dalimb	0	5	2	303	2	16	328
109	Kavti Chapha	0	1	0	320	2	2	325
110	Khirni	12	2	1	277	3	25	320
111	Shirish	16	2	3	199	11	64	295
112	Chari				271			271
113	Silver Oak	25	0	0	222	3	1	251
114	Tamalpatra	12	1	0	221	1	8	243
115	Putranjiva	4	49	0	165	16	3	237
116	Tabebuia Rosea	0	0	0	186	46	4	236
117	Shankasur	0	26	20	154	7	7	214
118	Nirphanas	0	2	1	193	3	14	213
119	Kadamb	1	3	0	135	34	37	210
120	Bottle brush	2	48	11	132	4	2	199
121	Kokam	12	0	0	169	3	11	195
122	Samudraphal	1	0	8	60	5	107	181
123	Kanak champa	4	0	10	27	2	120	163
124	Taman	1	43	12	93	6	7	162
125	Fan palm	1	3	0	131	3	14	152
126	Mamphal	0	0	0	139	0	3	142
127	Chenduphul	1	9	1	101	20	7	139
128	Star Apple Tree	0	0	0	139	0	0	139
129	Kalamb	15	3	0	105	0	7	130
130	Kumb	2	0	0	21	23	81	127
131	Umbrella tree	1	0	1	71	1	49	123
132	Alu	0	0	0	103	0	18	121
133	Calabash Tree	0	0	0	119	0	1	120
134	Lettuce tree	0	19	0	99	1	0	119
135	Litchi	0	0	2	111	0	1	114
136	Bilambi	1	0	0	109	0	3	113
137	Haldu	1	0	0	57	1	50	109
138	Kala Kuda	0	0	0	58	8	41	107
139	Bibba	9	1	1	65	6	22	104
140	Tendu	1	0	7	88	0	4	100
141	Anjir	0	2	15	71	0	11	99
142	Pink Tabebuia	3	49	0	39	2	1	94
143	Dev Babhul	0	0	0	89	0	0	89
144	Kailashpati	0	3	0	64	7	13	87
145	Agasti	0	0	0	75	1	10	86
146	Indian Rubber Tree	0	1	0	76	3	6	86
147	Dalchini	0	1	0	79	4	1	85

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Park	Private	Roadside	Others	Grand Total
148	F. tsiela	4	3	0	70	5	2	84
149	Varas	41	0	0	29	0	9	79
150	Dandus	1	0	0	30	3	41	75
151	Karambol	0	1	0	68	3	3	75
152	Surangi	1	0	0	60	2	1	64
153	Kavas	0	0	0	23	0	36	59
154	Id limbu	0	0	0	53	1	3	57
155	Mahogani	1	0	0	45	4	7	57
156	Lal Jamb	1	0	0	53	0	1	55
157	Phoenix roebelenii				8		46	54
158	Fern tree	0	0	0	51	1	1	53
159	Padal	0	0	0	38	1	5	44
160	Sausage Tree	5	21	0	14	3	1	44
161	Kusum	0	0	0	18	0	24	42
162	Fox tail palm	0	0	0	24	0	17	41
163	Scarlet Cordia	0	17	11	9	2	2	41
164	Chandan	1	0	1	38	0	0	40
165	Chapha (T)	0	0	0	40	0	0	40
166	Kunti	0	0	0	38	2	0	40
167	Datrang	0	0	1	20	8	10	39
168	All Spice Tree	0	0	0	34	1	3	38
169	Chanda	0	0	0	17	0	21	38
170	Chapha (O)	0	0	0	35	0	3	38
171	Sher	0	0	0	38	0	0	38
172	Narikel	0	0	0	25	0	11	36
173	Ixora brachiata	20	0	0	14	0	0	34
174	Karvat	0	0	0	12	1	20	33
175	T. argentea	0	0	0	23	10	0	33
176	Ashok	0	3	0	28	0	1	32
177	Sisvi	4	0	0	27	1	0	32
178	Avocado	0	0	0	31	0	0	31
179	Madhuca longifolia					3	28	31
180	Chinai Mendhi	0	0	0	27	0	2	29
181	Mosambi	0	0	0	29	0	0	29
182	Dombeya				26			26
183	Jaiphal	0	6	0	19	0	0	25
184	Asupalav (M)	0	0	0	23	0	1	24
185	Dalbergia paniculata				1		22	23
186	Kinai	1	0	0	22	0	0	23
187	Bhorsal						22	22
188	Kavath	13			8		1	22

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Park	Private	Roadside	Others	Grand Total
189	Dikemali	0	0	0	15	0	5	20
190	Karmal	0	0	1	6	2	11	20
191	Shami	0	0	0	20	0	0	20
192	Cassia Nodosa	0	0	0	14	0	4	18
193	Ganapaty tree			17			1	18
194	Bartondi c	2	0	0	5	4	6	17
195	Cycas	0	3	0	13	1	0	17
196	Payar	0	0	1	4	3	8	16
197	Ran Chiku	1	0	0	14	1	0	16
198	Nana	0	0	0	14	0	1	15
199	Jambha	0	3	0	0	0	11	14
200	Naringi	0	0	0	0	0	14	14
201	Cassia Javanica	0	0	0	12	0	0	12
202	Shendri		1				10	11
203	Undi	0	0	0	10	1	0	11
204	Charoli	0	0	0	7	0	3	10
205	Barbedos cherry	0	0	0	2	0	7	9
206	Gorakh Chinch	6	0	0	1	2	0	9
207	Phalsa				1		8	9
208	Chinese palm	8						8
209	Chota Taman	0	0	0	8	0	0	8
210	Kajra	0	0	0	7	0	1	8
211	Lal chapha	0	0	0	8	0	0	8
212	Vilayati Kikar				8			8
213	Markhamia	0	0	0	1	1	5	7
214	Santra	0	0	0	7	0	0	7
215	Tembhurni				7			7
216	Gondni	1			4	1		6
217	Rudraksha				6			6
218	Acacia mangjum					5		5
219	Cassia Renigera	0	0	0	1	0	4	5
220	Litsea				5			5
221	Nilmohar	0	0	0	5	0	0	5
222	Pendri	0	0	0	4	0	1	5
223	Pipli	0	0	0	5	0	0	5
224	Acacia horrida	0	0	0	0	1	3	4
225	Brazilian Pepper				4			4
226	Ficus virens					4		4
227	Jamalgota				4			4
228	Maharukh	0	0	0	4	0	0	4
229	Tambada Kuda				4			4

Tree Census of Vasai-Virar Municipal Corporation - 2016

SN	Local Name	Government	Industry	Park	Private	Roadside	Others	Grand Total
230	Albizia Lucidior	2	0	0	1	0	0	3
231	Bell Bauhinia				3			3
232	Bondara				1		2	3
233	Ficus parasitica				3			3
234	Gela				3			3
235	H. brasiliensis				3			3
236	Hansoli	0	0	0	3	0	0	3
237	Ixora arborea	3						3
238	Long Leafed Fig	0	0	0	3	0	0	3
239	Raktachandan	0	0	0	3	0	0	3
240	Small Leaf Mahogany	2				1		3
241	Tabernaemontana heyneana						3	3
242	Yellow silk cotton tree	0	0	0	1	0	2	3
243	Cassia Grandis				2			2
244	Chikne limbu						2	2
245	Cupressus					2		2
246	Kapur				2			2
247	Laxmi Taru				2			2
248	Acacia leucophloea				1			1
249	Alstonia macrophylla			1				1
250	Balsam Tree				1			1
251	Chapha (a)				1			1
252	Dhavda						1	1
253	Ficus Nitida				1			1
254	Hirda					1		1
255	Kleinhovia	1						1
256	Kydia calycina						1	1
257	Lavang				1			1
258	Motha karmal				1			1
259	Sterculia guttata						1	1
	Total	59,448	9,169	4,506	11,65,434	16,914	1,58,991	14,14,462

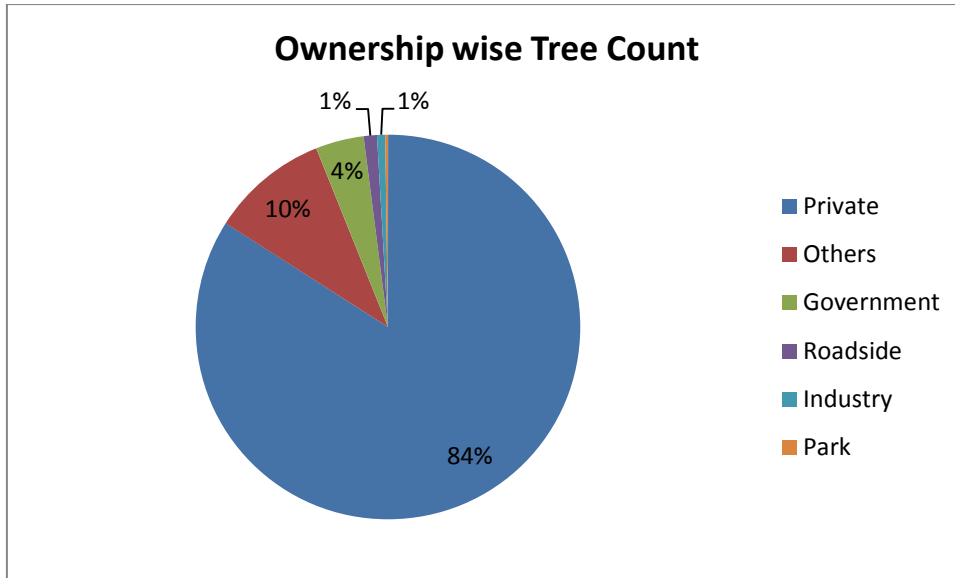


Figure 5.1: Percentage of trees ownership wise

Ward wise distribution of Trees:

Tree density of each ward was calculated. Prabhag A has maximum tree density per sq. km. i.e. 13,745./km², followed by Prabhag I with tree density of 10,999.53/km². Ward H and G have less tree density and have scope for plantation to increase the tree density.

Table 5.2: Tree density in Each Ward

Ward/Village Name	Tree Count	Total Are in sq. km	Tree Density (no. of trees/sq. m.)
Prabhag A	459,103	33.4	13745.60
Prabhag B	28,960	4.8	6033.33
Prabhag C	119,293	42.9	2780.72
Prabhag D	31,955	7.1	4500.70
Prabhag E	200,063	23.6	8477.25
Prabhag F	97,770	36.4	2685.99
Prabhag G	126,584	105.86	1195.77
Prabhag H	20,748	14.02	1479.89
Prabhag I	329,986	30	10999.53
Total	1,414,462	298.08	45843.82

Dominant tree species Overall:

Supari and Naral are 2 dominant tree species in entire 9 Prabhags with count of 3,95,836 and 1,89,561 respectively.

Table 5.3: Ten dominant trees in Vasai-Virar

S. N.	Tree Name	Count
1	Supari	395,836
2	Naral	189,561
3	Kala umber	71,263
4	Amba	68,899
5	Sag	64,717
6	Kharoti	60,794
7	Subabhul	50,667
8	Shevga	25,180
9	Asupalav (D)	24,427
10	Tad	23,166
11	Others	439,952
Total		14,14,462

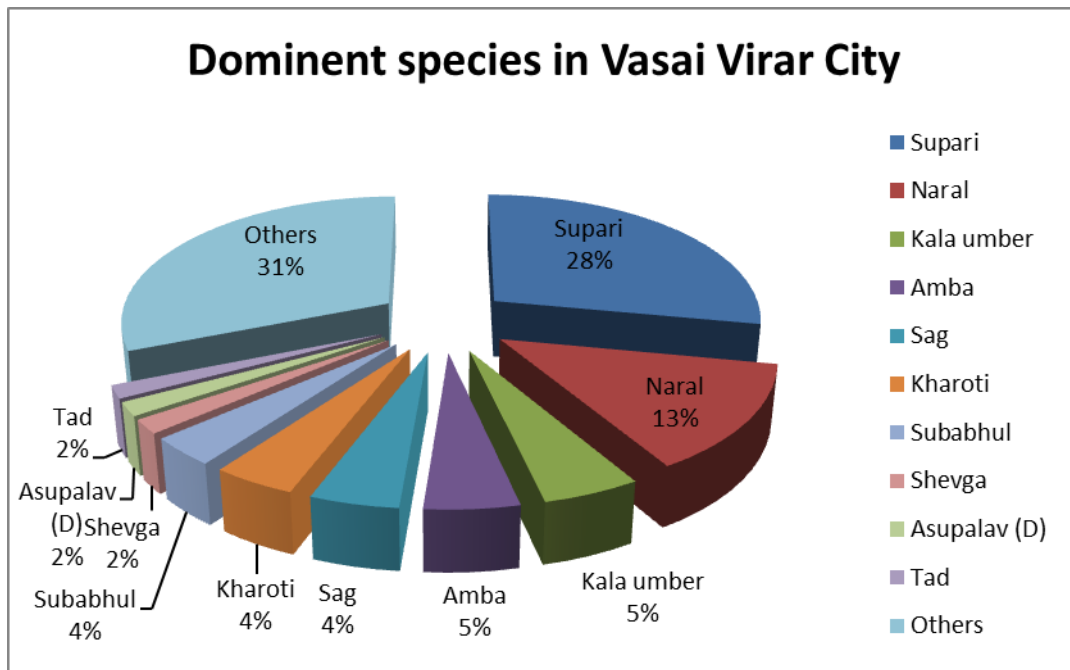


Figure 5.2: Ten dominant trees in Vasai-Virar

Invasive Species:

An invasive species has the ability to thrive and spread aggressively outside its native range. A naturally aggressive plant may be especially invasive when it is introduced to a new habitat. A study reveals 50,667 of tree population are invasive which belong to Subabhul.

IUCN Category:

The International Union for Conservation of Nature and Natural Resources is an international organization working in the field of nature conservation and sustainable use of natural resources. IUCN collects primary and secondary data and categories plant species on basis distribution and population size and prepares Redlist data of species. According to this red list data 6 species are Vulnerable and they are Sisvi, Gulmohar, Khaya, Bivla and Chandan. Raktachandan and *Cycas* are 2 endangered species found in Vasai-Virar. Mayurpanki which is cultivated in most of the gardens are Near Threatened in its wild distribution. Among all 9 species Bivla, Chandan, Raktachandan and Sisvi are native species.

Table 5.4: Trees under IUCN Category

S. N.	Tree Name	Botanical Name	IUCN Categories	Count
1	Bivla	<i>Pterocarpus marsupium</i> Roxb.	Vulnerable	555
2	Chandan	<i>Santalum album</i> Linn.	Vulnerable	40
3	Cycas	<i>Cycas revoluta</i> Thunb.	Endangered	17
4	Gulmohar	<i>Delonix regia</i> (Hook.) Rafin.	Vulnerable	4146
5	Khaya	<i>Khaya senegalensis</i> (Desr.) A. Juss.	Vulnerable	1787
6	Mayurpankhi	<i>Thuja biota</i> (Linn.) Blume	Near Threatened	443
7	Nilmohar	<i>Jacaranda mimosaeifolia</i> D. Don	Vulnerable	5
8	Raktachandan	<i>Pterocarpus santalinus</i> Linn. F.	Endangered	3
9	Sisvi	<i>Dalbergia latifolia</i> Roxb.	Vulnerable	32

Condition of trees:

Overall health of the tree in City is Healthy. The condition of trees was recorded at the time of field study. 35,182 species were recorded unhealthy, among this mostly were mechanically cut.

Table 5.5: Condition of Trees

Health Condition	Tree Count
Healthy	1372663
Mechanically Cut	26453
Uprooted	10007
Average	3778
Diseased	876
Poor	680
Dangerous	5

Girth class:

The distribution of individual tree ages within a tree population influences present and future costs as well as the flow of benefits. An evenly aged population allows managers to allocate annual maintenance costs uniformly over many years and assures continuity in overall tree canopy coverage and associated benefits. A desirable distribution has a high proportion of young trees to offset establishment and age related mortality as the percentage of older trees declines over time (Richards, 1982/83). In present analysis trees with less than 50 cm girth is considered as mature, trees with girth between 51 to 100 cm is taken as middle aged and above 101cm as mature trees. The analysis present data revealed that Vasai-Virar have 71 % of population as mature, 22 % as middle aged and 7 % as old trees.

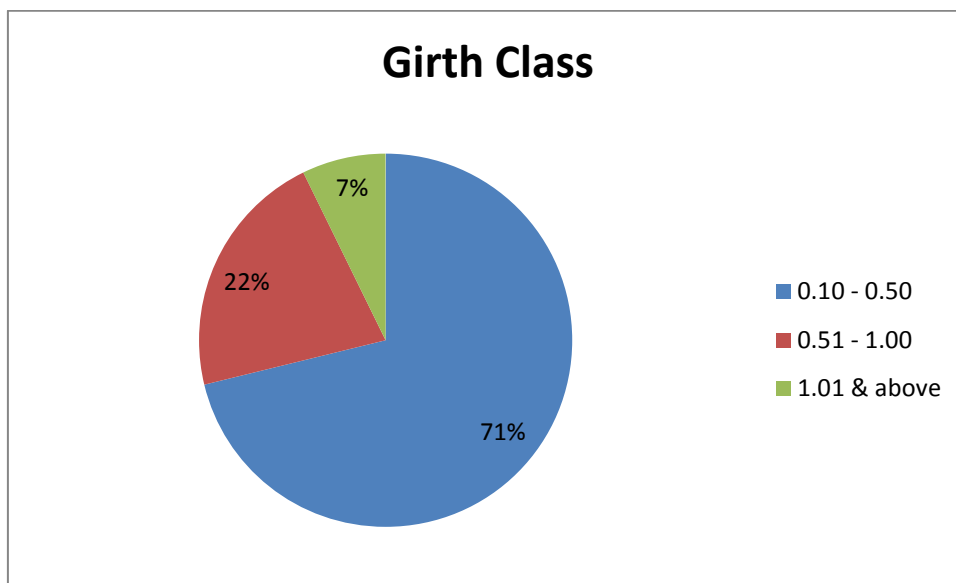


Figure 5.3: Girth Class of trees

Tree species with its nativity:

Among 259 species of trees found in study area 140 species are native to South Asian region. Thus city shows good diversity of native flora. Native tree population is also good with around **11,05,543** individuals and contribute to 78 % of population.

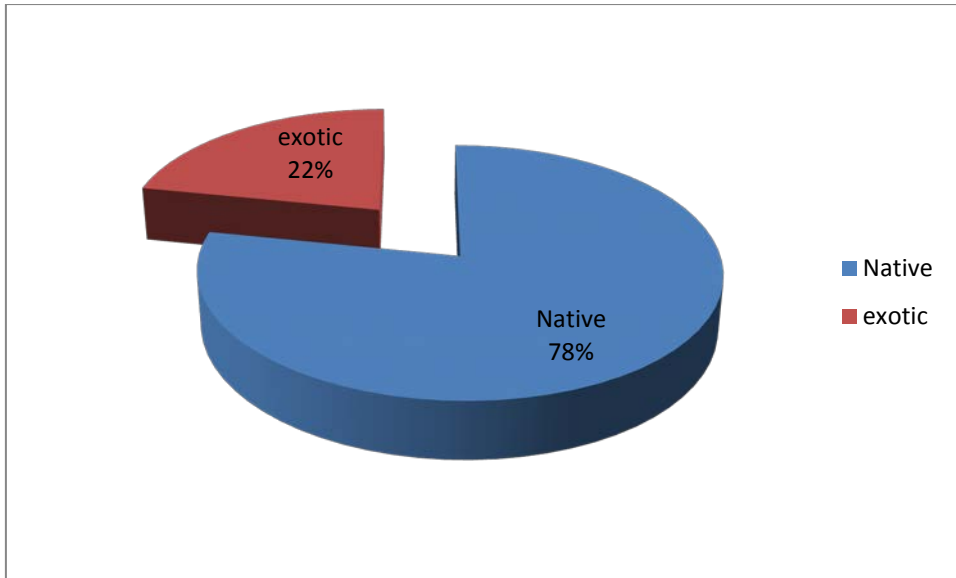


Figure 5.4: Native & Exotic tree population

6. RECOMMENDATIONS

Plantation

- Tree count in park and industrial premises is very low. These two areas have good scope of new plantations.
- Prabhags ... and ... have large open space and should be consider for new plantations.
- Invasive tree population is high and hence preference should be given to native flora.
- Species diversity of native flora is good and thus city supports native vegetation.
- Tree species belonging to Fig family like Vad, Pimpal, Umbar, etc which are native trees should give preference for new plantation. This will not only increase green cover but also supports many other life forms like Birds, Arboreal Mammals, insects, etc.
- Plantations, Conservation and maintenance of Endangered and Vulnerable species should be done to enhance city's tree diversity.

Removals:

- Subabhul which is consider as major invasive tree species in India should not be further planted and removal of them is recomended.

Maintenance:

- City has good population of healthy trees, but special attention should be given to diseased and dangerous trees.
- Young population of trees in city is high and thus requires protection from getting cut.
- Regular maintenance and pruning of mature trees will lessen the nuisances created by tree felling.

7. BIBLIOGRAPHY

- Almeida, M.R. (1996). Flora of Maharashtra—Vol. 1. Blatter Herbarium, St. Xavier's College, Mumbai.
- Almeida, M.R. (1998). Flora of Maharashtra—Vol. 2. Blatter Herbarium, St. Xavier's College, Mumbai.
- Almeida, M.R. (2001). Flora of Maharashtra—Vol. 3 a & b. Blatter Herbarium, St. Xavier's College, Mumbai.
- Almeida, M.R. (2003). Flora of Maharashtra—Vol. 4a. Blatter Herbarium, St. Xavier's College, Mumbai.
- Almeida, M.R. (2009). Flora of Maharashtra—Vol. 5a & b. Blatter Herbarium, St. Xavier's College, Mumbai.
- IUCN (2014). IUCN red list categories and criteria, ver. 2.— IUCN Species Survival Commission.
- Kaplan, Rachel and Stephen. 1989. *The Experience of Nature: A Psychological Perspective*. Cambridge: Cambridge University Press.
- Lakshminarasimhan, P. (1996). Flora of Maharashtra, Monocotyledons—Series 2. Botanical Survey of India, Kolkata, pp. 28, 139.
- Singh N.P & S. Karthikeyan (eds.) (2000). Flora of Maharashtra—Vol. I. Series 2. Botanical Survey of India, Kolkata, pp. 771, 826, 976.
- Singh N. P & S. Karthikeyan (eds.) (2001). Flora of Maharashtra—Vol. II. Series 2. Botanical Survey of India, Kolkata, pp. 31, 205, 245, 490, 581, 722, 780.
- Ulrich, Roger S. 1986. Human Responses to Vegetation and Landscapes. *Landscape and Urban Planning*, 13, 29-44.
- Wolf, K. L. (2007). The Environmental Psychology of Trees. *International Council of Shopping Centers Research Review*. 14, 3:39-43.
- Yadav, S. R. & M. M. Sardesai (2002). Flora of Vasai-Virar District. Shivaji University, Vasai-Virar.

Websites:

<http://www.theplantlist.org/>

<http://www.ipni.org/>

<http://www.tropicos.org/>

<http://www.treesforcities.org/about-us/>

<http://www.iucnredlist.org/>

<http://www.invasivespecies.net/database/welcome/>

8. ANNEXURES

Annexure 1: Trees with Botanical Information

S. N.	Tree Name	Botanical Name	Family
1	Acacia horrida	<i>Acacia horrida</i> (Linn.) Willd.	Mimosaceae
2	Acacia leucophloea	<i>Acacia leucophloea</i> (Roxb.) Willd.	Mimosaceae
3	Acacia mangium	<i>Acacia mangium</i>	Caesalpiniaceae
4	Agasti	<i>Sesbania grandiflora</i> (L.) Poir.	Fabaceae
5	Ain	<i>Terminalia crenulata</i> Roth.	Combretaceae
6	Akashneem	<i>Millingtonia hortensis</i> Linn.f.	Bignoniaceae
7	Albizia Lucidior	<i>Albizia lucidior</i> (Steud.) Nielson ex Hara	Mimosaceae
8	All spice tree	<i>Pimenta dioica</i> (Linn.) Merrill	Myrtaceae
9	Alstonia macrophylla	<i>Alstonia macrophylla</i> Wall ex A. DC.	Apocynaceae
10	Alu	<i>Meyna spinosa</i> Roxb. ex Link	Rubiaceae
11	Amba	<i>Mangifera indica</i> Linn.	Anacardiaceae
12	Ambada	<i>Spondias pinnata</i> (Linn.f.) Kurz	Anacardiaceae
13	Anjir	<i>Ficus carica</i> Linn.	Moraceae
14	Ankul	<i>Alangium salvifolium</i> (Linn.f.) Wangerin	Alangiaceae
15	Apta	<i>Bauhinia racemosa</i> Lamk.	Caesalpiniaceae
16	Arjun	<i>Terminalia arjuna</i> (Roxb.) Wt&Arn.	Combretaceae
17	Asana	<i>Bridelia retusa</i> (Linn.) Spreng.	Euphorbiaceae
18	Ashok	<i>Saraca asoka</i> (Roxb.) de Willde	Caesalpiniaceae
19	Asupalav (D)	<i>Polyalthia longifolia</i> var. <i>pendula</i> (Sonn.) Thw.	Annonaceae
20	Asupalav (M)	<i>Polyalthia longifolia</i> (Sonn.) Thw. var <i>angustifolia</i>	Annonaceae
21	Asupalav (S)	<i>Polyalthia longifolia</i> (Sonn.) Thw.	Annonaceae
22	Atrun	<i>Flacourtia montana</i> Graham	Flacourtiaceae
23	Australian babhul	<i>Acacia auriculiformis</i> A.Cunn.ex Benth.	Mimosaceae
24	Avla	<i>Emblica officinalis</i> Gaertn.	Euphorbiaceae
25	Avocado	<i>Persea americana</i> Mill.	Lauraceae
26	Babhul	<i>Acacia nilotica</i> (Linn.) Del.	Mimosaceae
27	Bahava	<i>Cassia fistula</i> Linn.	Caesalpiniaceae
28	Bakneem	<i>Melia azadirach</i> Linn.	Meliaceae
29	Bakul	<i>Mimusops elengi</i> Linn.	Sapotaceae
30	Balsam Tree	<i>Clusea rosea</i> Jacq.	Clusiaceae
31	Barbedos Cherry	<i>Malphigia glabra</i> Linn.	Malphigiaceae
32	Bartondi (P)	<i>Morinda pubesence</i> Sm.	Rubiaceae
33	Bartondi c	<i>Morinda citrifolia</i> Linn.	Rubiaceae
34	Beheda	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae
35	Bel	<i>Aegle marmelos</i> (Linn.) Correa	Rutaceae
36	Bell Bauhinia	<i>Bauhinia tomentosa</i>	Caesalpiniaceae
37	Benjamin Tree	<i>Ficus benjamina</i> Linn.	Moraceae

S. N.	Tree Name	Botanical Name	Family
38	Bhend	<i>Thespesia populnea</i> (Linn.) Sol.ex Cor.	Malvaceae
39	Bherli mad	<i>Caryota urens</i> Linn.	Arecaceae
40	Bhokar	<i>Cordia dichotoma</i> Forst. f.	Boraginaceae
41	Bhorsal	<i>Hymenodictyon orixense</i> (Roxb.) Mabberley	Rubiaceae
42	Bibba	<i>Semecarpus anacardium</i> Linn.f.	Anacardiaceae
43	Bilambi	<i>Averrhoa bilimbi</i> Linn.	Oxalidaceae
44	Bitti	<i>Thevetia peruviana</i> (Pers.) K. Schum.	Apocynaceae
45	Bivla	<i>Pterocarpus marsupium</i> Roxb.	Fabaceae
46	Bondara	<i>Lagerstroemia lanceolata</i> Wall.	Lythraceae
47	Bor	<i>Ziziphus mauritiana</i> Lamk.	Rhamnaceae
48	Bottle brush	<i>Callistemon citrinus</i> (Curtis) Skeels	Myrtaceae
49	Bottle palm	<i>Roystonea regia</i> (H.B.K.) Cooke	Arecaceae
50	Brazilian Pepper	<i>Schinus terebinthifolius</i>	Anacardiaceae
51	Calabash tree	<i>Crescentia cujute</i> Linn.	Bignoniaceae
52	Cassia Grandis	<i>Cassia grandis</i>	Caesalpiniaceae
53	Cassia Javanica	<i>Cassia javanica</i>	Caesalpiniaceae
54	Cassia Nodosa	<i>Cassia nodosa</i> Buch.-Ham. ex Roxb.	Caesalpiniaceae
55	Cassia renigera	<i>Cassia renigera</i> Wall. Ex Benth.	Caesalpiniaceae
56	Chanda	<i>Macaranga peltata</i> Muell.-Arg.	Euphorbiaceae
57	Chandan	<i>Santalum album</i> Linn.	Santalaceae
58	Chapha	<i>Plumeria alba</i> Linn.	Apocynaceae
59	Chapha (a)	<i>Plumeria acuminata</i> Alt.	Apocynaceae
60	Chapha (O)	<i>Plumeria obtusa</i> Linn.	Apocynaceae
61	Chapha (T)	<i>Plumeria rubra</i> Linn. forma tricolor (Roem. & Schult)	Apocynaceae
62	Charcoal Tree	<i>Trema orientalis</i> Blume	Ulmaceae
63	Chari	<i>Casearia elliptica</i> Willd.	Flacourtiaceae
64	Charoli	<i>Buchanania lanzen</i> Spreng.	Anacardiaceae
65	Chenduphul	<i>Parkia biglandulosa</i> Wt. & Arn.	Mimosaceae
66	Chikne limbu	<i>Triphasia trifolia</i> (Burm. f.) Wils.	Rutaceae
67	Chiku	<i>Manilkara zapota</i> (Linn.) Van Royen	Sapotaceae
68	Chinai Mendhi	<i>Lagerstroemia indica</i> Linn.	Lythraceae
69	Chinch	<i>Tamarindus indica</i> Linn.	Caesalpiniaceae
70	Chinese palm	<i>Livistonia chinensis</i> R. Br.	Arecaceae
71	Chota Taman	<i>Lagerstroemia thoreli</i> Gagnepin	Lythraceae
72	Christmas tree	<i>Aruacaria columnaris</i> Hk.	Aruacariaceae
73	Cupressus	<i>Cupressus sps</i>	Pinaceae
74	Cycas	<i>Cycas revoluta</i> Thunb.	Cycadaceae
75	Dalbergia paniculata	<i>Dalbergia paniculata</i> Roxb.	Fabaceae
76	Dalchini	<i>Cinnamomum verum</i>	Lauraceae

S. N.	Tree Name	Botanical Name	Family
77	Dalimb	<i>Punica granatum</i> Linn.	Punicaceae
78	Dandus	<i>Dalbergia lanceolaria</i> Linn.f.	Fabaceae
79	Datrang	<i>Ehretia laevis</i> Roxb.	Ehretiaceae
80	Deshibadam	<i>Terminalia catappa</i> Linn.	Combretaceae
81	Dev Babhul	<i>Acacia farnesiana</i> (Linn.) Willd.	Mimosaceae
82	Dhaman	<i>Grewia tiliaefolia</i> Vahl.	Tiliaceae
83	Dhatrupal	<i>Barringtonia acutangula</i> (Linn.) Gaertn.	Lecythidaceae
84	Dhavda	<i>Anogeisus latifolia</i> (Roxb. Ex DC.) Guillemain & Perottet	Combretaceae
85	Dikemali	<i>Gardenia resinifera</i> Roth	Rubiaceae
86	Dombeya	<i>Dombeya spectabilis</i> Bojer	Sterculiaceae
87	F. tsiela	<i>Ficus tsiela</i> Roxb.	Moraceae
88	Fan palm	<i>Livistonia chinensis</i> R. Br.	Areaceae
89	Fern tree	<i>Filicum decipiens</i> (Wt. & Arn.) Thw.	Sapindaceae
90	Ficus Nitida	<i>Ficus nitida</i> Thunb.	Moraceae
91	Ficus parasitica	<i>Ficus parasitica</i> Koen. ex Willd	Moraceae
92	Ficus virens	<i>Ficus virens</i> Ait	Moraceae
93	fox tail palm	<i>Woodeytia bifurcata</i>	Aracaceae
94	Ganapaty tree	<i>Litsea deccanensis</i> (Retz.) Almeida	Lauraceae
95	Gela	<i>Catunaregam spinosa</i> (Thunb.) Tiruveng	Rubiaceae
96	Giripushpa	<i>Gliricidia sepium</i> (Jacq.) H.B.K.	Fabaceae
97	Gondni	<i>Cordia gharaf</i> (Forsskal) Ehrenb.ex Asch.	Boraginaceae
98	Gorakh Chinch	<i>Adansonia digitata</i> Linn.	Bombacaceae
99	Gulabi Jamb	<i>Syzygium jambos</i> (Linn.) Alston	Myrtaceae
100	Gulmohar	<i>Delonix regia</i> (Hook.) Rafin.	Caesalpiniaceae
101	H. brasiliensis	<i>Hevea brasiliensis</i> (Willd. Ex Juss.) Muell.-Arg.	Euphorbiaceae
102	Haldu	<i>Haldinia cordifolia</i> (Roxb.) Ridsdale	Rubiaceae
103	Hansoli	<i>Microcos paniculata</i> Linn.	Tiliaceae
104	Hirda	<i>Terminalia chebula</i> Retz.	Combretaceae
105	Humb	<i>Milliusa tomentosa</i> (Roxb.) Sinclair	Annonaceae
106	Id limbu	<i>Citrus lemon</i> (Linn.) Burm.f.	Rutaceae
107	Indian rubber tree	<i>Ficus elastica</i> Roxb.	Moraceae
108	Ixora arborea	<i>Ixora pavetta</i> Andrews	Rubiaceae
109	Ixora brachiata	<i>Ixora brachiata</i> Roxb. ex DC	Rubiaceae
110	Jaiphul	<i>Myristica fragrans</i> Linn.	Myristicaceae
111	Jamalgota	<i>Croton tiglium</i> Linn.	Euphorbiaceae
112	Jamb	<i>Syzygium samarangens</i> (Blume) Mer. & Per.	Myrtaceae
113	Jambha	<i>Xylia xylocarpa</i> (Roxb.) Taub.	Mimosaceae
114	Jambhul	<i>Syzygium cuminii</i> (Linn.) Skeels	Myrtaceae
115	Jungli Badam	<i>Sterculia foetida</i> Linn.	Sterculiaceae

S. N.	Tree Name	Botanical Name	Family
116	Kadamb	<i>Neolamarkiana cadamba</i> (Roxb.) Bosser.	Rubiaceae
117	Kadipatta	<i>Murraya Koenigii</i>	Rutaceae
118	Kaduneem	<i>Azadirachta indica</i> (Linn.) A. Juss.	Meliaceae
119	Kahandol	<i>Sterculia urens</i> Roxb.	Sterculiaceae
120	Kailashpati	<i>Couroupita guianensis</i> Aubl.	Lecythidaceae
121	Kajra	<i>Strychnous nux-vomica</i> Linn.	Loganiaceae
122	Kaju	<i>Anacardium occidentale</i> Linn.	Anacardiaceae
123	Kakad	<i>Garuga pinnata</i> Roxb.	Burseraceae
124	Kala Kuda	<i>Holarrhena antidysenterica</i> (Roth) A. DC. Kurchi	Apocynaceae
125	Kala umber	<i>Ficus hispida</i> Linn.f.	Moraceae
126	Kalamb	<i>Mitragyna parvifolia</i> (Roxb.) Korth	Rubiaceae
127	Kanak champa	<i>Pterospermum acerifolium</i> (Gaertn.) Willd.	Sterculiaceae
128	Kanchan	<i>Bauhinia purpurea</i> Linn.	Caesalpiniaceae
129	Kapur	<i>Cinnamomum camphora</i> (L.) Sieb.	Lauraceae
130	Karambol	<i>Averrhoa carambola</i> Linn.	Oxalidaceae
131	Karanj	<i>Pongamia pinnata</i> (Linn.) Pierre	Fabaceae
132	Karmal	<i>Dillenia indica</i> Linn.	Dilleneaceae
133	Karvat	<i>Ficus aperima</i> Roxb.	Moraceae
134	Kashid	<i>Cassia siamea</i> Lamk.	Caesalpiniaceae
135	Katesavar	<i>Bombax ceiba</i> Linn.	Bombacaceae
136	Kavas	<i>Firmiana colorata</i> (Roxb.) Br.	Sterculiaceae
137	Kavath	<i>Feronia limonia</i> (Linn.) Swingle	Rutaceae
138	Kavti chapha	<i>Magnolia Pumila</i> Andrews	Magnoliaceae
139	Khair	<i>Acacia catechuoides</i> (Roxb.) Benth.	Mimosaceae
140	Kharoti	<i>Streblus asper</i> Lour.	Moraceae
141	Khaya	<i>Khaya senegalensis</i> (Desr.) A. Juss.	Meliaceae
142	Khejdi	<i>Prosopis chilensis</i> (Molina) Stunz.	Mimosaceae
143	Khirni	<i>Manilkara hexandra</i> (Roxb.) Dubard	Sapotaceae
144	Kinai	<i>Albizzia procera</i> (Roxb.) Benth.	Mimosaceae
145	Kleinhovia	<i>Kleinhovia hospita</i> Linn.	Sterculiaceae
146	Kokam	<i>Garcinia indica</i> (Thou.) Chois.	Clusiaceae
147	Kuda	<i>Wrightia tinctoria</i> (Roxb.) R. Br.	Apocynaceae
148	Kumb	<i>Careya arborea</i> Roxb.	Lecythidaceae
149	Kumkum	<i>Mallotus philipinensis</i> (Lamk.) Muell.-Arg.	Euphorbiaceae
150	Kunti	<i>Murraya paniculata</i> (Linn.) Jack.	Rutaceae
151	Kusum	<i>Schleicheria oleosa</i> (Lour.) Oken	Sapindaceae
152	Kydia calycina	<i>Kydia calycina</i> Roxb.	Malvaceae
153	Lal chapha	<i>Plumeria rubra</i> Linn.	Apocynaceae
154	Lal Jamb	<i>Syzygium jambos</i> (Linn.) Alston	Myrtaceae
155	Lavang	<i>Syzygium aromaticum</i> (Linn.) Merrill & Perry	Myrtaceae

S. N.	Tree Name	Botanical Name	Family
156	Laxmi Taru	<i>Simarouba glauca</i> DC	Simaroubaceae
157	Lettuce tree	<i>Pisonia alba</i> Spanog.	Nyctaginaceae
158	Limbu	<i>Citrus aurantifolia</i> (Christ.) Swingle	Rutaceae
159	Litchi	<i>Nephelium chinensis</i> (Lour.) Almeida	Sapindaceae
160	Litsea	<i>Litsea involucreta</i> (Retz.) Almeida	Lauraceae
161	Lokhandi	<i>Ixora parviflora</i> Lamk.	Rubiaceae
162	Long Leafed Fig	<i>Ficus longifolia</i>	Moraceae
163	Madhuca longifolia	<i>Madhuca longifolia var latifolia</i> (Koenig) McBride	Sapotaceae
164	Maharukh	<i>Ailanthus excelsa</i> Roxb.	Simaroubaceae
165	Mahogani	<i>Swetinia macrophylla</i> King	Meliaceae
166	Mahua	<i>Madhuca indica</i> Gmel.	Sapotaceae
167	Mamphal	<i>Annona muricata</i> Linn.	Annonaceae
168	Markhamia	<i>Markhamia platycalyx</i>	Bignoniaceae
169	Mayurpankhi	<i>Thuja biota</i> (Linn.) Blume	Thujaoidae
170	Mogli erand	<i>Jatropha curcas</i> Linn.	Euphorbiaceae
171	Mosambi	<i>Citrus sinensis</i> (Linn.) Osbeck.	Rutaceae
172	Motha karmal	<i>Averrhoa carambola</i> Linn.	Oxalidaceae
173	Nana	<i>Lagerstroemia parviflora</i> Roxb.	Lythraceae
174	Naral	<i>Cocos nucifera</i> Linn.	Arecaceae
175	Narikel	<i>Pterygota alata</i> (Roxb.) R. Br.	Sterculiaceae
176	Naringi	<i>Citrus aurantium</i> Linn.	Rutaceae
177	Nilgiri	<i>Eucalyptus globulus</i> Labil.	Myrtaceae
178	Nilmohar	<i>Jacaranda mimosaeifolia</i> D. Don	Bignoniaceae
179	Nirphanas	<i>Artocarpus incisa</i> Linn. f.	Moraceae
180	Otamb	<i>Artocarpus lakoocha</i> Roxb.	Moraceae
181	Padal	<i>Stereospermum chelonoides</i> (Linn. f.) DC.	Bignoniaceae
182	Palas	<i>Butea monosperma</i> (Lamk.) Kuntze	Fabaceae
183	Pandhara khair	<i>Acacia ferruginea</i> DC.	Mimosaceae
184	Pangara	<i>Erythrina variegata var orientalis</i> (Linn.) Merrill	Fabaceae
185	Papanas	<i>Citrus grandis</i> Osbeck.	Rutaceae
186	Parijatak	<i>Nyctanthus arbor-tristis</i> Linn.	Oleaceae
187	Payar	<i>Ficus arnottiana</i> (Miq.) Miq.	Moraceae
188	Pendri	<i>Catunaregam uliginosa</i> (Retz.) Sivaranjan	Rubiaceae
189	Peru	<i>Psidium guajava</i> Linn.	Myrtaceae
190	Petari	<i>Trewia nudiflora</i> Linn.	Euphorbiaceae
191	Phalsa	<i>Grewia asiatica</i> Linn.	Tiliaceae
192	Phanas	<i>Artocarpus heterophyllus</i> Lamk.	Moraceae
193	Phoenix roebelenii	<i>Phoenix roebelenii</i>	Aracaceae
194	Pichkari	<i>Spathodia campanulata</i> Beauv.	Bignoniaceae
195	Pimpal	<i>Ficus religiosa</i> Linn.	Moraceae

S. N.	Tree Name	Botanical Name	Family
196	Pink Tabebuia	<i>Tabebuia pentaphylla</i> (Linn.) Hemsl.	Bignoniaceae
197	Pipli	<i>Ficus infectoria</i> Roxb.	Moraceae
198	Putranjiva	<i>Drypetes roxburghii</i> (Wall.) Hurus.	Euphorbiaceae
199	Rai avla	<i>Cicca acida</i> Linn.	Euphorbiaceae
200	Rain tree	<i>Samania saman</i> (Jacq.) Merrill	Mimosaceae
201	Raktachandan	<i>Pterocarpus santalinus</i> Linn. F.	Fabaceae
202	Ramphal	<i>Annona reticulata</i> Linn.	Annonaceae
203	Ran chiku	<i>Diospyros embyopteris</i> Pers.	Ebenaceae
204	Ratangunj	<i>Adenanthera pavonia</i> Linn.	Mimosaceae
205	Ritha	<i>Sapindus emarginatus</i> Vahl.	Sapindaceae
206	Rudraksha	<i>Elaeocarpus sphaericus</i> (Gaertn) K Schum	Elaeocarpaceae
207	Sag	<i>Tectona grandis</i> Linn. f.	Verbenaceae
208	Samudraphal	<i>Barringtonia asiatica</i> (Linn.) Kurz.	Lecythidaceae
209	Santra	<i>Citrus reticulata</i> Blanco	Rutaceae
210	Saptarni	<i>Alstonia scholaris</i> (Linn.) R.Br.	Apocynaceae
211	Sausage tree	<i>Kigelia africana</i> (Lamk.) Benth.	Bignoniaceae
212	Savar	<i>Ceiba pentandra</i> (DC.) HK.f.	Bombacaceae
213	Scarlet cordia	<i>Cordia sebestina</i> Linn.	Ehretiaceae
214	Shami	<i>Prosopis cineraria</i> (Linn.) Druce	Mimosaceae
215	Shankasur	<i>Caesalpinia pulcherima</i> (Linn.) Sw.	Caesalpiaceae
216	Shemat	<i>Lannea coromandelica</i> (Houtt.) Merrill	Anacardiaceae
217	Shendri	<i>Bixa orellana</i> Linn.	Bixaceae
218	Sher	<i>Euphorbia tirucalli</i> . L.	Euphorbiaceae
219	Shevga	<i>Moringa pterigosperma</i> Gaertn.	Moringaceae
220	Shindi	<i>Phoenix sylvestris</i> (Linn.)Roxb.	Arecaceae
221	Shirish	<i>Albizia lebeck</i> (Linn.) Willd.	Mimosaceae
222	Shivan	<i>Gmelina arborea</i> Roxb.	Verbenaceae
223	Silver oak	<i>Grevillea robusta</i> A. Cunn.	Proteaceae
224	Singapur cherry	su	Elaeocarpaceae
225	Sisam	<i>Dalbergia sissoo</i> Roxb. ex. DC.	Fabaceae
226	Sisvi	<i>Dalbergia latifolia</i> Roxb.	Fabaceae
227	Sitaphal	<i>Annona squamosa</i> Linn.	Annonaceae
228	Small Leaf Mahogany	<i>Swietenia mahagoni</i>	Meliaceae
229	Sonchapha	<i>Michellia champaca</i> Linn.	Magnoliaceae
230	Sonmohar	<i>Peltophorum pterocarpum</i> (DC.) Bk.exHyn	Caesalpiaceae
231	Star Apple Tree	<i>Chrysophyllum cainito</i> Linn.	Sapotaceae
232	Sterculia guttata	<i>Sterculia guttata</i>	Sterculiaceae
233	Subabhul	<i>Leucaena leucocephala</i> (Lamk.) De Wit	Mimosaceae
234	Supari	<i>Areca catechu</i> Linn.	Arecaceae
235	Surangi	<i>Mammea longifolia</i> Planch. & Triana	Clusiaceae

S. N.	Tree Name	Botanical Name	Family
236	Suru	<i>Casuarina equisetifolia</i> J. R. & G. Forst	Casuarinaceae
237	T. argentea	<i>Tabebuia argentea</i> (Bur.& Schum.)Britt	Bignoniaceae
238	Tabebuia Rosea	<i>Tabebuia rosea</i> (Bartol.) DC.	Bignoniaceae
239	Tabernaemontana heyn	<i>Ervatamia alternifolia</i> (Linn.) Almeida	Apocynaceae
240	Tad	<i>Borassus flabellifer</i> Linn.	Areaceae
241	Tamalpatra	<i>Cinnamomum tamala</i> Nees & Eberm.	Lauraceae
242	Taman	<i>Lagerstroemia speciosa</i> (Linn.) Pers	Lythraceae
243	Tambada Kuda	<i>Wrightia arborea</i> (Dennst.) Mabberley	Apocynaceae
244	Tembhurni	<i>Diospyros malabarica</i> (Desr.) Kostel	Ebenaceae
245	Tendu	<i>Diospyros melanoxylon</i> Roxb.	Ebenaceae
246	Tetu	<i>Oroxylum indicum</i> (Linn.) Vent.	Bignoniaceae
247	Tuti	<i>Morus alba</i> Linn.	Moraceae
248	Umber	<i>Ficus racemosa</i> Linn.	Moraceae
249	Umbrella tree	<i>Brassaia actinophylla</i> Endl.	Araliaceae
250	Undi	<i>Calophyllum inophyllum</i> Linn.	Clusiaceae
251	Vad	<i>Ficus benghalensis</i> Linn.	Moraceae
252	Vaivarna	<i>Crataeva tapia</i> Linn.	Capparidaceae
253	Varas	<i>Heterophragma quadriloculare</i> (Roxb.) K.Schum.	Bignoniaceae
254	Vavla	<i>Holoptela integrifolia</i> (Roxb.) Planch	Urticaceae
255	Vilayati Babhul	<i>Acacia mangium</i> Willd.	Mimosaceae
256	Vilayati chinch	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Mimosaceae
257	Vilayati Kikar	<i>Parkinsonia aculeata</i> Linn.	Caesalpiniaceae
258	Yellow silk cotton t	<i>Cochlospermum religiosum</i> (Linn.) Alston	Cochlospermaceae
259	Unidentified	Unidentified	
	Total		

9. Annexure 2: Trees with its importance

S. N.	Local Name	Aesthetic	Ecological	Economic
1	Acacia horrida	--	Deciduous	Avenue tree
2	Acacia leucophloea	--	Deciduous	--
3	Acacia mangium	Cultivated in garden & avenue	Used in green belt	Avenue tree
4	Agasti	Garden plant	Deciduous	Timber & Tannin yielding plant
5	Ain	--	Deciduous	Timber yielding & Medicinal plant
6	Akashneem	Cultivated in garden	Semievergreen	Volatile oil, paper industry
7	Albizia Lucidior	Cultivated in garden	Deciduous	Avenue tree
8	All spice tree	Cultivated in garden	Evergreen	Used as spice
9	Alstonia macrophylla	Cultivated in garden	Evergreen	Medicinal Plant
10	Alu	--	Evergreen	Fruits are edible
11	Amba	Cultivated plant	Evergreen	Important commercial fruit
12	Ambada	--	Deciduous	Timber yielding plant
13	Anjir	Cultivated in orchard	Evergreen	Important dry fruit
14	Ankul	--	Evergreen	Medicinal
15	Apta	Cultivated in garden	Evergreen	Bark medicinal
16	Arjun	--	Deciduous	Bark medicinal
17	Asana	Avenue	Deciduous	Fruits are edible
18	Ashok	Garden plant	Evergreen	Ornamental, medicinal bark
19	Asupalav (D)	Avenue	Evergreen	Ornamental
20	Asupalav (M)	Avenue	Evergreen	Ornamental
21	Asupalav (S)	Avenue	Evergreen	Ornamental
22	Atrun	--	Deciduous	Fruits edible
23	Australian babhul	Avenue	Evergreen	Avenue tree
24	Avla	Cultivated in garden	Deciduous	Medicinal fruits, Vitamin C

S. N.	Local Name	Aesthetic	Ecological	Economic
25	Avocado	Cultivated in courtyard	Evergreen	Ornamental, Fruits edible
26	Babhul	--	Semi arid & arid region tree	For tannin & gum Calico printing
27	Bahava	Cultivated in garden	Deciduous	Bark for tannin, seeds medicinal
28	Bakneem	Cultivated in garden	Evergreen	Ornamental
29	Bakul	Cultivated in garden	Evergreen	Ornamental
30	Balsam Tree	Cultivated in Garden	Evergreen	Ornamental
31	Barbedos Cherry	Cultivated in Garden	Evergreen	Ornamental
32	Bartondi (P)	--	Evergreen	Roots yield dye
33	Bartondi c	Cultivated in garden	Evergreen	Fruits Medicinal
34	Beheda	--	Deciduous	Fruits used in Triphala churna
35	Bel	--	Deciduous	Leaves and fruits medicinal
36	Bell Bauhinia	Cultivated in Garden	Evergreen	Ornamental
37	Benjamin Tree	Cultivated in Garden	Evergreen	Ornamental
38	Bhend	Garden & avenue	Evergreen	Fruits yield dye
39	Bherli mad	Cultivated in garden	Evergreen palm	Plant parts for multiple uses
40	Bhokar	--	Evergreen	Fruits used as medicine
41	Bhorsal	--	Deciduous	Medicinal plant
42	Bibba	--	Evergreen	Seeds used for making linen
43	Bilambi	Cultivated in wadi	Evergreen	Fruits are pickled
44	Bitti	Cultivated in garden	Evergreen	Ornamental
45	Bivla	--	Evergreen	Timber yielding
46	Bondara	--	Deciduous	Timber yielding
47	Bor	Cultivated in garden	Evergreen	Ornamental plant

S. N.	Local Name	Aesthetic	Ecological	Economic
48	Bottle brush	Garden & avenue	Evergreen	Ornamental
49	Bottle palm	Garden & avenue	Evergreen	Avenue palm
50	Brazilian Pepper	Cultivated in Garden	Evergreen	Ornamental
51	Calabash tree	Garden & avenue	Evergreen	Ornamental plant
52	Cassia Grandis	Cultivated in Garden	Evergreen	Ornamental
53	Cassia Javanica	Cultivated in Garden	Evergreen	Ornamental
54	Cassia Nodosa	Cultivated in garden & avenue	Evergreen	Ornamental
55	Cassia renigera	Cultivated in Garden	Evergreen	Ornamental
56	Chanda	Garden & avenue	Deciduous	Ornamental
57	Chandan	Garden & avenue	Evergreen	Yields Sandal wood Oil
58	Chapha	Cultivated in Garden	Evergreen	Ornamental
59	Chapha (a)	Cultivated in garden	Deciduous	Ornamental plant
60	Chapha (O)	Cultivated in Garden	Evergreen	Ornamental
61	Chapha (T)	Cultivated in garden	Deciduous	Ornamental plant
62	Charcoal Tree	--	Evergreen	Bark yield fibres used for ropes
63	Chari	Small Tree	Deciduous	Avenue tree
64	Charoli	Avenue	Deciduous	Seeds edible
65	Chenduphul	Garden & avenue	Evergreen	Ornamental
66	Chikne limbu	Garden & avenue	Evergreen	Fruits edible
67	Chiku	--	Evergreen	Fruits edible
68	Chinai Mendhi	Garden & avenue	Evergreen	Ornamental
69	Chinch	Garden & avenue	Evergreen	Pods edible, Vitamin C
70	Chinese palm	Garden	Evergreen	Ornamental

S. N.	Local Name	Aesthetic	Ecological	Economic
71	Chota Taman	Garden & avenue	Evergreen	Ornamental
72	Christmas tree	Cultivated in garden	Evergreen	Ornamental
73	Cupressus	Cultivated in garden	Evergreen	Ornamental
74	Cycas	Cultivated in garden	Deciduous	Ornamental
75	Dalbergia paniculata	Cultivated in garden	Evergreen	Ornamental
76	Dalchini	Cultivated in garden	Evergreen	Bark used in flavoring eatables
77	Dalimb	Garden plant	Evergreen	Fruits are edible
78	Dandus	--	Deciduous	Timber yielding tree
79	Datrang	--	Evergreen	Leaves as cattle fodder
80	Deshibadam	Garden & avenue	Deciduous	Fruits edible
81	Dev Babhul	Cultivated in gardens	Deciduous	Fruits medicinal
82	Dhaman	--	Evergreen	Fuel wood & timber
83	Dhatriphal	Garden & avenue	Evergreen	Ornamental
84	Dhavda	Garden & avenue	Deciduous	Ornamental
85	Dikemali	Garden & avenue	Evergreen	Ornamental
86	Dombeya	Garden & avenue	Evergreen	Ornamental
87	F. tsiela	Gardens & avenue	Evergreen	Ornamental
88	Fan palm	Cultivated in garden		--
89	Fern tree	Garden & avenue	Evergreen	Ornamental
90	Ficus Nitida	Cultivated in garden	Evergreen	Ornamental
91	Ficus parasitica	Garden & avenue	Evergreen	Avenue
92	Ficus virens	Cultivated in garden	Evergreen	--
93	fox tail palm	Garden & avenue	Evergreen	Ornamental

S. N.	Local Name	Aesthetic	Ecological	Economic
94	Ganapaty tree	Cultivated in garden	Evergreen	--
95	Gela	Forest plant	Evergreen	Avenue tree
96	Giripushpa	Cultivated in garden	Deciduous	Green manure
97	Gondni	Garden & avenue	Evergreen	Ornamental
98	Gorakh Chinch	Trunk of large diameter near base	Deciduous	Fruits medicinal, Kernels are eaten
99	Gulabi Jamb	Gardens & avenue	Semievergreen	Fruits edible
100	Gulmohar	Gardens & avenue	Deciduous	Ornamental
101	H. brasiliensis	Cultivated in wadi	Evergreen	Sap is used in making rubber
102	Haldu	Forest plant	Deciduous	Bark medicinal
103	Hansoli	Forest plant	Evergreen	Avenue tree
104	Hirda	Garden & avenue	Deciduous	Fruits use in Ayurved
105	Humb	Forest plant	Deciduous	Avenue
106	Id limbu	Cultivated in garden	Evergreen	Edible fruits
107	Indian rubber tree	Garden plant	Evergreen	Timber yielding tree
108	Ixora arborea	Forest plant	Evergreen	Avenue
109	Ixora brachiata	Forest plant	Evergreen	Avenue
110	Jaiphal	Cultivated in garden	Evergreen	Fruits medicinal
111	Jamalgota	Cultivated in garden	Evergreen	Seeds medicinal
112	Jamb	Cultivated in garden	Evergreen	Fruits edible
113	Jambha	Cultivated in garden	Deciduous	--
114	Jambhul	Garden plant	Evergreen	Fruits medicinal & edible
115	Jungli Badam	Garden & avenue	Deciduous	Ornamental & avenue
116	Kadamb	Garden & avenue	Evergreen	Ornamental
117	Kadipatta	Garden & avenue	Evergreen	Ornamental

S. N.	Local Name	Aesthetic	Ecological	Economic
118	Kaduneem	Avenue	Semievergreen	All parts are used medicinally
119	Kahandol	Cultivated in garden	Deciduous	Timber yielding
120	Kailashpati	Cultivated in garden	Deciduous	Ornamental
121	Kajra	Forest plant	Evergreen	Seeds medicinal
122	Kaju	--	Semideciduous	Nuts, a valuable dry fruit
123	Kakad	Garden & avenue	Deciduous	Fruits edible
124	Kala Kuda	Cultivated in garden	Evergreen	Timber yielding, seeds medicinal
125	Kala umber	--	Evergreen	--
126	Kalamb	Garden & avenue	Evergreen	Timber yielding plant
127	Kanak champa	Cultivated in garden	Semideciduous	Timber yielding & ornamental
128	Kanchan	Garden & avenue	Evergreen	Ornamental
129	Kapur	Cultivated in garden	Evergreen	Ornamental
130	Karambol	Cultivated in wadi	Evergreen	Raw fruits pickled ripe one eaten
131	Karanj	Avenue	Deciduous	Fruits are medicinal
132	Karmal	Cultivated in garden	Evergreen	Raw fruits pickled, Ripe one eaten as desert
133	Karvat	Cultivated in garden	Evergreen	Tannin yielding
134	Kashid	Garden & avenue	Evergreen	Ornamental
135	Katesavar	--	Deciduous	Tannin yielding
136	Kavas	Garden & avenue	Deciduous	Ornamental plant
137	Kavath	Garden & avenue	Evergreen	Fruits are edible
138	Kavti chapha	Garden & avenue	Evergreen	Ornamental plant
139	Khair	--	Tree of arid & semi arid, Deciduous	Source of catechu from heart wood medicinal
140	Kharoti	Garden plant	Evergreen	Timber yielding plant

S. N.	Local Name	Aesthetic	Ecological	Economic
141	Khaya	Garden plant	Evergreen	Timber yielding plant
142	Khejdi	--	Evergreen	Branches used as tooth brush
143	Khirni	Garden & avenue	Evergreen	Fruits edible
144	Kinai	Garden & avenue	Deciduous	Avenue
145	Kleinhovia	Garden & avenue	Deciduous	Avenue
146	Kokam	Garden & avenue	Evergreen	Fruit butter medicinal
147	Kuda	Cultivated in garden	Evergreen	Leaves used as medicine
148	Kumb	Forest plant	Evergreen	Avenue
149	Kumkum	Cultivated in garden	Semideciduous	Seed used for obtaining dye
150	Kunti	Cultivated in garden	Evergreen	Ornamental
151	Kusum	Forest plant	Deciduous	Avenue
152	Kydia calycina	Forest plant	Deciduous	Avenue
153	Lal chapha	Garden & avenue	Deciduous	Ornamental plant
154	Lal Jamb	Cultivated in orchard	Deciduous	Cultivated for its fruits
155	Lavang	Cultivated in garden	Evergreen	Medicinal plant
156	Laxmi Taru	Garden & avenue	Evergreen	Ornamental
157	Lettuce tree	Cultivated in garden	Evergreen	Ornamental plant
158	Limbu	Cultivated in garden	Evergreen	Squash, Sharbat & Vitamin C
159	Litchi	Cultivated in orchard	Evergreen	Fruits edible
160	Litsea	Forest plant	Deciduous	Avenue
161	Lokhandi	Cultivated in garden	Evergreen	Ornamental tree
162	Long Leafed Fig	Garden & avenue	Evergreen	Ornamental
163	Madhuca longifolia	Forest plant	Deciduous	Fruit use in medicine
164	Maharukh	Avenue	Deciduous	Wood used for various purposes

S. N.	Local Name	Aesthetic	Ecological	Economic
165	Mahogani	Cultivated in garden	Evergreen	Timber yielding plant
166	Mahua	Garden	Deciduous	Timber yielding
167	Mamphal	Cultivated in garden	Evergreen	Fruits edible
168	Markhamia	Garden & avenue	Deciduous	Ornamental
169	Mayurpankhi	Cultivated in garden	Evergreen	Ornamental
170	Mogli erand	Cultivated in garden	Deciduous	Seeds medicinal bio diesel plant
171	Mosambi	Cultivated in farm	Evergreen	Edible fruits
172	Motha karmal	Cultivated in garden	Deciduous	--
173	Nana	Cultivated in garden	Evergreen	--
174	Naral	Avenue	Evergreen palm	All parts are economically useful
175	Narikel	Garden & avenue	Deciduous	Ornamental & roadside plant
176	Naringi	Gardens & avenue	Evergreen	Fruits are edible
177	Nilgiri	Gardens & avenue	Evergreen	Volatile oil, paper industry
178	Nilmohar	Gardens & avenue	Deciduous	Ornamental
179	Nirphanas	Cultivated in garden	Evergreen	Fruit edible after boiling
180	Otamb	Cultivated in garden	Evergreen	Ornamental
181	Padal	Gardens & avenue	Evergreen	Roots medicinal
182	Palas	--	Deciduous	Flowers & seeds medicinal
183	Pandhara khair	--	Deciduous	--
184	Pangara	Beautiful flowers, avenue	Deciduous	Timber yield ,bark yield fibre
185	Papanas	Cultivated in garden	Evergreen	Edible fruits
186	Parijatak	Cultivated in garden	Semievergreen	Medicinal, Ornamental

S. N.	Local Name	Aesthetic	Ecological	Economic
187	Payar	Forest plant	Deciduous	Ornamental plant
188	Pendri	Cultivated in garden	Evergreen	Ornamental plant
189	Peru	Cultivated in garden	Evergreen	Fruits edible
190	Petari	Cultivated in garden	Evergreen	Timber yielding, roots medicinally
191	Phalsa	Cultivated in garden	Evergreen	Fruits are used in making kala Khata
192	Phanas	Cultivated in courtyard	Evergreen	Delicious fleshy pericarp eaten
193	Phoenix roebelenii	Gardens & avenue	Evergreen	Ornamental
194	Pichkari	Cultivated in garden	Semideciduous	Ornamental bark medicinal
195	Pimpal	Avenue	Deciduous	Ornamental
196	Pink Tabebuia	Gardens & avenue	Deciduous	Avenue
197	Pipli	--	Evergreen	Ornamental
198	Putranjiva	Garden & avenue	Evergreen	Ornamental plant
199	Rai avla	Cultivated in garden	Deciduous	Edible fruits
200	Rain tree	Garden & avenue	Evergreen	Wood as timber
201	Raktachandan	Cultivated in garden	Evergreen	Medicinal plant
202	Ramphal	Cultivated in garden	Small evergreen tree	Wood as timber
203	Ran chiku	Cultivated in garden	Evergreen	--
204	Ratangunj	Ornamental	Deciduous	Ornamental
205	Ritha	--	Evergreen	Fruits are used medicinally
206	Rudraksha	Garden & avenue	Evergreen	Fruits are beaded & worn by Saints & Sanyasis
207	Sag	Social forestry plant	Deciduous	Timber yielding plant
208	Samudraphal	Garden & avenue	Evergreen	Ornamental plant
209	Santra	Cultivated in orchard	Deciduous	Cultivated for its fruits

S. N.	Local Name	Aesthetic	Ecological	Economic
210	Saptarni	Garden & avenue	Evergreen	Bark medicinal
211	Sausage tree	Garden & avenue	Evergreen	Ornamental
212	Savar	Garden & avenue	Deciduous	Ornamental plant
213	Scarlet cordia	Cultivated in garden	Evergreen	Ornamental
214	Shami	Garden & avenue	Evergreen	Avenue
215	Shankasur	Cultivated in garden	Evergreen	Ornamental
216	Shemat	--	Deciduous	Timber
217	Shendri	Cultivated in garden	Evergreen	Seeds yields Arnatto Dye
218	Sher	Cultivated in garden	Evergreen	Medicinal plant
219	Shevga	Cultivated in wadi	Evergreen	Medicinal plant
220	Shindi	Garden & avenue	Evergreen	Toddy from plant sap
221	Shirish	Avenue	Deciduous	Wood excellent for furniture
222	Shivan	Cultivated in garden	Semideciduous	Timber & Medicinal plant
223	Silver oak	Garden & avenue	Evergreen	Timber yielding plant
224	Singapur cherry	--	Evergreen	Fruits edible
225	Sisam	Avenue	Deciduous	Timber yielding tree
226	Sisvi	Garden & avenue	Deciduous	Timber yielding tree
227	Sitaphal	Cultivated in courtyard	Evergreen	Fruits with flavoured, sweet flesh
228	Small Leaf Mahogany	Garden & avenue	Evergreen	Timber yielding plant
229	Sonchapha	Cultivated in garden	Evergreen	Ornamental
230	Sonmohar	Garden & avenue	Evergreen	Ornamental
231	Star Apple Tree	Garden & avenue	Evergreen	Ornamental
232	Sterculia guttata	Cultivated in garden	Deciduous	--

S. N.	Local Name	Aesthetic	Ecological	Economic
233	Subabhul	--	Evergreen	Fuel wood
234	Supari	Ornamental, avenue	Evergreen palm	Edible nuts as masticatory
235	Surangi	Garden & avenue	Evergreen	Ornamental
236	Suru	Gardens and sea coast	Sand-binder, checks erosion	Wood as timber
237	T. argentea	Cultivated in garden	Deciduous	Ornamental
238	Tabebuia Rosea	Cultivated in garden	Deciduous	Ornamental
239	Tabernaemontana heyn	Cultivated in garden	Deciduous	Ornamental
240	Tad	--	Tall evergreen palm	Fruits edible
241	Tamalpatra	Cultivated in garden	Evergreen	Leaves as condiment
242	Taman	Garden & avenue	Deciduous	Ornamental
243	Tambada Kuda	Forest plant	Deciduous	--
244	Tembhurni	Garden & avenue	Evergreen	Ornamental
245	Tendu	Forest plant	Deciduous	Leaf use in Bidi
246	Tetu	Cultivated in garden	Ornamental plant	Medicinal
247	Tuti	Cultivated in garden	Evergreen	Fruits edible
248	Umber	Garden plant	Evergreen	Medicinal plant
249	Umbrella tree	Umbrella like leaf arrangement	Evergreen	Medicinal plant
250	Undi	Cultivated in garden	Evergreen	Ornamental
251	Vad	Garden & avenue	Evergreen	Latex,bark,leaves medicinal
252	Vaivarna	Garden & avenue	Deciduous	Medicinal plant
253	Varas	Garden & avenue	Deciduous	Timber yielding plant
254	Vavla	Garden & avenue	Deciduous	Timber yielding plant
255	Vilayati Babhul	Potential avenue	Large phyllode	For energy plantation

S. N.	Local Name	Aesthetic	Ecological	Economic
256	Vilayati chinch	Garden & avenue	Evergreen	Fruits edible, hedge plant
257	Vilayati Kikar	Garden & avenue	Evergreen	Ornamental
258	Yellow silk cotton t	Garden & avenue	Deciduous	Ornamental
259	Unidentified			

Annexure 3: Native Trees with Count

S. N.	Tree Name	Botanical Name	Family	Count
1	Supari	<i>Areca catechu</i> Linn.	Arecaceae	395836
2	Naral	<i>Cocos nucifera</i> Linn.	Arecaceae	189561
3	Kala umber	<i>Ficus hispida</i> Linn.f.	Moraceae	71263
4	Amba	<i>Mangifera indica</i> Linn.	Anacardiaceae	68899
5	Kharoti	<i>Streblus asper</i> Lour.	Moraceae	60794
6	Shevga	<i>Moringa pterigosperma</i> Gaertn.	Moringaceae	25180
7	Asupalav (D)	<i>Polyalthia longifolia</i> var. <i>pendula</i> (Sonn.) Thw.	Annonaceae	24427
8	Tad	<i>Borassus flabellifer</i> Linn.	Arecaceae	23166
9	Dhatrighal	<i>Barringtonia acutangula</i> (Linn.) Gaertn.	Lecythidaceae	22025
10	Bhend	<i>Thespesia populnea</i> (Linn.) Sol.ex Cor.	Malvaceae	21140
11	Karanj	<i>Pongamia pinnata</i> (Linn.) Pierre	Fabaceae	18860
12	Phanas	<i>Artocarpus heterophyllus</i> Lamk.	Moraceae	17207
13	Kaduneem	<i>Azadirachta indica</i> (Linn.) A. Juss.	Meliaceae	11646
14	Katesavar	<i>Bombax ceiba</i> Linn.	Bombacaceae	11549
15	Shindi	<i>Phoenix sylvestris</i> (Linn.)Roxb.	Arecaceae	9870
16	Akashneem	<i>Millingtonia hortensis</i> Linn.f.	Bignoniaceae	8327
17	Jambhul	<i>Syzygium cuminii</i> (Linn.) Skeels	Myrtaceae	8319
18	Bherli mad	<i>Caryota urens</i> Linn.	Arecaceae	6262
19	Kadipatta	<i>Murraya Koenigii</i>	Rutaceae	6091
20	Umbur	<i>Ficus racemosa</i> Linn.	Moraceae	5811
21	Dhaman	<i>Grewia tiliifolia</i> Vahl.	Tiliaceae	5572
22	Asana	<i>Bridelia retusa</i> (Linn.) Spreng.	Euphorbiaceae	4952
23	Sonmohar	<i>Peltophorum pterocarpum</i> (DC.) Bk.exHyn	Caesalpiaceae	4563
24	Asupalav (S)	<i>Polyalthia longifolia</i> (Sonn.) Thw.	Annonaceae	4464
25	Sonchapha	<i>Michellia champaca</i> Linn.	Magnoliaceae	4444
26	Ankul	<i>Alangium salvifolium</i> (Linn.f.) Wangerin	Alangiaceae	4173
27	Bhokar	<i>Cordia dichotoma</i> Forst. f.	Boraginaceae	3683
28	Ambada	<i>Spondias pinnata</i> (Linn.f.) Kurz	Anacardiaceae	3213
29	Otamb	<i>Artocarpus lakoocha</i> Roxb.	Moraceae	3177
30	Rai Avla	<i>Cicca acida</i> Linn.	Euphorbiaceae	3129
31	Kakad	<i>Garuga pinnata</i> Roxb.	Burseraceae	3025
32	Vavla	<i>Holoptela integrifolia</i> (Roxb.) Planch	Urticaceae	2989
33	Apta	<i>Bauhinia racemosa</i> Lamk.	Caesalpiaceae	2845
34	Saptarni	<i>Alstonia scholaris</i> (Linn.) R.Br.	Apocynaceae	2556
35	Tuti	<i>Morus alba</i> Linn.	Moraceae	2545

S. N.	Tree Name	Botanical Name	Family	Count
36	Bartondi (P)	<i>Morinda pubesence</i> Sm.	Rubiaceae	2533
37	Pimpal	<i>Ficus religiosa</i> Linn.	Moraceae	2478
38	Petari	<i>Trewia nudiflora</i> Linn.	Euphorbiaceae	2405
39	Shemat	<i>Lannea coromandelica</i> (Houtt.) Merrill	Anacardiaceae	2199
40	Kuda	<i>Wrightia tinctoria</i> (Roxb.) R. Br.	Apocynaceae	2110
41	Jungli Badam	<i>Sterculia foetida</i> Linn.	Sterculiaceae	2082
42	Ain	<i>Terminalia crenulata</i> Roth.	Combretaceae	1988
43	Kumkum	<i>Mallotus philipinensis</i> (Lamk.) Muell.-Arg.	Euphorbiaceae	1965
44	Tetu	<i>Oroxylum indicum</i> (Linn.) Vent.	Bignoniaceae	1817
45	Vad	<i>Ficus benghalensis</i> Linn.	Moraceae	1680
46	Pandhara khair	<i>Acacia ferruginea</i> DC.	Mimosaceae	1660
47	Khair	<i>Acacia catechuoides</i> (Roxb.) Benth.	Mimosaceae	1647
48	Palas	<i>Butea monosperma</i> (Lamk.) Kuntze	Fabaceae	1617
49	Parijatak	<i>Nyctanthus arbor-tristis</i> Linn.	Oleaceae	1567
50	Lokhandi	<i>Ixora parviflora</i> Lamk.	Rubiaceae	1352
51	Pangara	<i>Erythrina variegata var orientalis</i> (Linn.) Merrill	Fabaceae	1344
52	Avla	<i>Emblia officinalis</i> Gaertn.	Euphorbiaceae	1282
53	Beheda	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	925
54	Moha	<i>Madhuca indica</i> Gmel.	Sapotaceae	720
55	Shivan	<i>Gmelina arborea</i> Roxb.	Verbenaceae	714
56	Bahava	<i>Cassia fistula</i> Linn.	Caesalpiaceae	648
57	Bel	<i>Aegle marmelos</i> (Linn.) Correa	Rutaceae	588
58	Bivla	<i>Pterocarpus marsupium</i> Roxb.	Fabaceae	555
59	Atrun	<i>Flacourtia montana</i> Graham	Flacourtiaceae	517
60	Arjun	<i>Terminalia arjuna</i> (Roxb.) Wt&Arn.	Combretaceae	510
61	Ritha	<i>Sapindus emarginatus</i> Vahl.	Sapindaceae	503
62	Vaivarna	<i>Crataeva tapia</i> Linn.	Capparidaceae	448
63	Sisam	<i>Dalbergia sissoo</i> Roxb. ex. DC.	Fabaceae	447
64	Kahandol	<i>Sterculia urens</i> Roxb.	Sterculiaceae	408
65	Humb	<i>Milliusa tomentosa</i> (Roxb.) Sinclair	Annonaceae	344
66	Bakul	<i>Mimusops elengi</i> Linn.	Sapotaceae	331
67	Khirni	<i>Manilkara hexandra</i> (Roxb.) Dubard	Sapotaceae	320
68	Shirish	<i>Albizzia lebeck</i> (Linn.) Willd.	Mimosaceae	295
69	Chari	<i>Casearia elliptica</i> Willd.	Flacourtiaceae	271
70	Tamalpatra	<i>Cinnamomum tamala</i> Nees & Eberm.	Lauraceae	243
71	Putranjiva	<i>Drypetes roxburghii</i> (Wall.) Hurus.	Euphorbiaceae	237
72	Nirphanas	<i>Artocarpus incisa</i> Linn. f.	Moraceae	213

S. N.	Tree Name	Botanical Name	Family	Count
73	Kadamb	<i>Neolamarkiana cadamba</i> (Roxb.) Bosser.	Rubiaceae	210
74	Kokam	<i>Garcinia indica</i> (Thou.) Chois.	Clusiaceae	195
75	Samudraphal	<i>Barringtonia asiatica</i> (Linn.) Kurz.	Lecythidaceae	181
76	Kanak champa	<i>Pterospermum acerifolium</i> (Gaertn.) Willd.	Sterculiaceae	163
77	Taman	<i>Lagerstroemia speciosa</i> (Linn.) Pers	Lythraceae	162
78	Kalamb	<i>Mitragyna parvifolia</i> (Roxb.) Korth	Rubiaceae	130
79	Kumb	<i>Careya arborea</i> Roxb.	Lecythidaceae	127
80	Alu	<i>Meyna spinosa</i> Roxb. ex Link	Rubiaceae	121
81	Haldu	<i>Haldinia cordifolia</i> (Roxb.) Ridsdale	Rubiaceae	109
82	Kala Kuda	<i>Holarrhena antidysenterica</i> (Roth) A. DC. Kurchi	Apocynaceae	107
83	Bibba	<i>Semecarpus anacardium</i> Linn.f.	Anacardiaceae	104
84	Tendu	<i>Diospyros melanoxylon</i> Roxb.	Ebenaceae	100
85	Dev Babhul	<i>Acacia farnesiana</i> (Linn.) Willd.	Mimosaceae	89
86	Dalchini	<i>Cinnamomum verum</i>	Lauraceae	85
87	F tsiela	<i>Ficus tsiela</i> Roxb.	Moraceae	84
88	Varas	<i>Heterophragma quadriloculare</i> (Roxb.) K.Schum.	Bignoniaceae	79
89	Dandus	<i>Dalbergia lanceolaria</i> Linn.f.	Fabaceae	75
90	Surangi	<i>Mammea longifolia</i> Planch. & Triana	Clusiaceae	64
91	Kavas	<i>Firmiana colorata</i> (Roxb.) Br.	Sterculiaceae	59
92	Mahogani	<i>Swetinia macrophylla</i> King	Meliaceae	57
93	Padal	<i>Stereospermum chelonoides</i> (Linn. f.) DC.	Bignoniaceae	44
94	Kusum	<i>Schleicheria oleosa</i> (Lour.) Oken	Sapindaceae	42
95	Chandan	<i>Santalum album</i> Linn.	Santalaceae	40
96	Datrang	<i>Ehretia laevis</i> Roxb.	Ehretiaceae	39
97	Chanda	<i>Macaranga peltata</i> Muell.-Arg.	Euphorbiaceae	38
98	Ixora brachiata	<i>Ixora brachiata</i> Roxb. ex DC	Rubiaceae	34
99	Karvat	<i>Ficus aperima</i> Roxb.	Moraceae	33
100	Ashok	<i>Saraca asoka</i> (Roxb.) de Wilde	Caesalpiaceae	32
101	Sisvi	<i>Dalbergia latifolia</i> Roxb.	Fabaceae	32
102	Madhuca longifolia	<i>Madhuca longifolia</i> var <i>latifolia</i> (Koenig) McBride	Sapotaceae	31
103	Chinai Mendhi	<i>Lagerstroemia indica</i> Linn.	Lythraceae	29
104	Jaiphal	<i>Myristica fragrans</i> Linn.	Myristicaceae	25
105	Asupalav (M)	<i>Polyalthia longifolia</i> (Sonn.) Thw. var <i>angustifolia</i>	Annonaceae	24
106	Dalbergia paniculata	<i>Dalbergia paniculata</i> Roxb.	Fabaceae	23
107	Bhorsal	<i>Hymenodictyon orixense</i> (Roxb.) Mabblerley	Rubiaceae	22

S. N.	Tree Name	Botanical Name	Family	Count
108	Kavath	<i>Feronia limonia</i> (Linn.) Swingle	Rutaceae	22
109	Dikemali	<i>Gardenia resinifera</i> Roth	Rubiaceae	20
110	Karmal	<i>Dillenia indica</i> Linn.	Dilleneaceae	20
111	Shami	<i>Prosopis cineraria</i> (Linn.) Druce	Mimosaceae	20
112	Payar	<i>Ficus arnottiana</i> (Miq.) Miq.	Moraceae	16
113	Nana	<i>Lagerstroemia parviflora</i> Roxb.	Lythraceae	15
114	Jambha	<i>Xylia xylocarpa</i> (Roxb.) Taub.	Mimosaceae	14
115	Charoli	<i>Buchanania lanzen</i> Spreng.	Anacardiaceae	10
116	Phalsa	<i>Grewia asiatica</i> Linn.	Tiliaceae	9
117	Chota Taman	<i>Lagerstroemia thoreli</i> Gagnepin	Lythraceae	8
118	Kajra	<i>Strychnous nux-vomica</i> Linn.	Loganiaceae	8
119	Tembhurni	<i>Diospyros malabarica</i> (Desr.) Kostel	Ebenaceae	7
120	Rudraksha	<i>Elaeocarpus sphaericus</i> (Gaertn) K Schum	Elaeocarpaceae	6
121	Litsea	<i>Litsea involucrata</i> (Retz.) Almeida	Lauraceae	5
122	Pendri	<i>Catunaregam uliginosa</i> (Retz.) <i>Sivaranjan</i>	Rubiaceae	5
123	Pipli	<i>Ficus infectoria</i> Roxb.	Moraceae	5
124	Tambada Kuda	<i>Wrightia arborea</i> (Dennst.) Mabberley	Apocynaceae	4
125	Bondara	<i>Lagerstroemia lanceolata</i> Wall.	Lythraceae	3
126	Ficus parasitica	<i>Ficus parasitica</i> Koen. ex Willd	Moraceae	3
127	Gela	<i>Catunaregam spinosa</i> (Thunb.) Tiruveng	Rubiaceae	3
128	Hansoli	<i>Microcos paniculata</i> Linn.	Tiliaceae	3
129	Ixora arborea	<i>Ixora pavetta</i> Andrews	Rubiaceae	3
130	Raktachandan	<i>Pterocarpus santalinus</i> Linn. F.	Fabaceae	3
131	Tabernaemontana	<i>Eroatamia alternifolia</i> (Linn.) Almeida	Apocynaceae	3
132	Yellow silk cotton tree	<i>Cochlospermum religiosum</i> (Linn.) Alston	Cochlospermaceae	3
133	Chikne limbu	<i>Triphasia trifolia</i> (Burm. f.) Wils.	Rutaceae	2
134	Kapur	<i>Cinnamomum camphora</i> (L.) Sieb.	Lauraceae	2
135	Acacia leucophloea	<i>Acacia leucophloea</i> (Roxb.) Willd.	Mimosaceae	1
136	Dhavda	<i>Anogeisus latifolia</i> (Roxb. Ex DC.) Guillemin & Perottet	Combretaceae	1
137	Ficus Nitida	<i>Ficus nitida</i> Thunb.	Moraceae	1
138	Hirda	<i>Terminalia chebula</i> Retz.	Combretaceae	1
139	Kydia calycina	<i>Kydia calycina</i> Roxb.	Malvaceae	1
140	Lavang	<i>Syzygium aromaticum</i> (Linn.) Merrill & Perry	Myrtaceae	1
	Total			110543

Annexure 4: Tree species suggested for Roadside and Industrial Premises

S. N.	Botanical Names	Family	Common Name	Pollutant
1	<i>Acacia nilotica</i>	Fabaceae	Babhul	SO ₂ , Fly ash
2	<i>Aegle marmelos</i>	Rutaceae	Bel	SPM, SO ₂ , NO ₂
3	<i>Alstonia scholaris</i>	Apocynaceae	Saptparni	SPM, SO ₂ , NO ₂
4	<i>Artocarpus heterophyllus</i>	Moraceae	Phanas	SPM, SO ₂ , NO ₂
5	<i>Azadirachta indica</i>	Meliaceae	Neem	SO ₂
6	<i>Cassia siamea</i>	Fabaceae	Kashid	SPM, SO ₂
7	<i>Cordia dichotoma</i>	Boraginaceae	Bhokar	SPM
8	<i>Dalbergia sissoo</i>	Fabaceae	Sisam	SO ₂
9	<i>Ficus benghalensis</i>	Moraceae	Vad	SPM, SO ₂ , NO ₂
10	<i>Ficus religiosa</i>	Moraceae	Pimpal	SPM, SO ₂ , NO ₂
11	<i>Lagerstroemia speciosa</i>	Lythraceae	Taman	Dust
12	<i>Mangifera indica</i>	Anacardiaceae	Amba	SPM, NO ₂
13	<i>Mimusops elengi</i>	Sapotaceae	Bakul	SPM, SO ₂ , NO ₂
14	<i>Peltophorum pterocarpum</i>	Fabaceae	Sonmohar	SPM
15	<i>Phoenix sylvestris</i>	Arecaceae	Shindi	SPM
16	<i>Pithecolobium dulce</i>	Fabaceae	Vilayati chinch	SO ₂
17	<i>Plumeria alba</i>	Apocynaceae	Chapha	SO ₂
18	<i>Saraca asoka</i>	Fabaceae	Ashok	Dust
19	<i>Sesbania sesban</i>	Fabaceae	Agasti	SO ₂
20	<i>Tamarindus indica</i>	Fabaceae	Chinch	SPM, SO ₂ , NO ₂

Annexure 5: Tree species suitable for Park

S. N.	Botanical Names	Family	Common Name
1	<i>Albizia lebbek</i>	Fabaceae	Shirish
2	<i>Butea monosperma</i>	Fabaceae	Palas
3	<i>Careya arborea</i>	Lecythidaceae	Kumbha
4	<i>Cassia fistula</i>	Fabaceae	Bhava
5	<i>Couropita guianensis</i>	Lecythidaceae	Kailaspati
6	<i>Dalbergia lanceolaria</i>	Fabaceae	Dandus
7	<i>Dillenia pentagyna</i>	Dilleniaceae	Karmal
8	<i>Gardenia jasminoides</i>	Rubiaceae	Anant
9	<i>Melia azadirach</i>	Meliaceae	Bakneem
10	<i>Millingtonia hortensis</i>	Bignoniaceae	Akashneem
11	<i>Mimusops elengi</i>	Sapotaceae	Bakul
12	<i>Nyctanthes arbor-tristis</i>	Oleaceae	Praijatak
13	<i>Saraca asoka</i>	Fabaceae	Ashok

S. N.	Botanical Names	Family	Common Name
14	<i>Thespesia populnea</i>	Malvaceae	Bhend

Annexure 6: Tree species suitable for Government and Private Premises

S. N.	Botanical Names	Family	Local Name
1	<i>Aphanomyxis polystachya</i>	Meliaceae	Rohitak
2	<i>Artocarpus heterophyllus</i>	Moraceae	Phanas
3	<i>Dillenia pentagyna</i>	Dilleniaceae	Karmal
4	<i>Diospyros melanoxylon</i>	Ebenaceae	Tendu
5	<i>Drypetes roxburghii</i>	Euphorbiaceae	Putranjiva
6	<i>Ficus benghalensis</i>	Moraceae	Vad
7	<i>Ficus elastica</i>	Moraceae	Indian Rubber Tree
8	<i>Ficus religiosa</i>	Moraceae	Pimpal
9	<i>Holoptelia integrifolia</i>	Ulmaceae	Vavla
10	<i>Madhuca longifolia</i>	Sapotaceae	Mahua
11	<i>Mammea suriga</i>	Clusiaceae	Surangi
12	<i>Mangifera indica</i>	Anacardiaceae	Amba
13	<i>Manilkara hexandra</i>	Sapotaceae	Khirni
14	<i>Schleichera oleosa</i>	Sapindaceae	Kusum
15	<i>Syzigium cumini</i>	Myrtaceae	Jambul
16	<i>Terminalia bellerica</i>	Combretaceae	Beheda
17	<i>Terminalia chebula</i>	Combretaceae	Chebula



Acacia auriculiformis A. Cunn. ex Benth.



Acacia nilotica (L.) Del.



Adansonia digitata L.



Areca catechu L.



Artocarpus incisa L. f.



Artocarpus lacucha Buch.-Ham.

Photo plates I: Photos of some trees found in Vasai - Virar



Averrhoa bilimbi L.



Bombax ceiba L.



Catunaregam spinosa (Thunb.) Tiruveng



Couroupita guianensis Aubl.



Firmiana colorata (Roxb.) R.Br.



Gardenia resinifera Roth

Photo plate II: Photos of some trees found in Vasai - Virar



Grewia asiatica L.



Lagerstroemia speciosa (L.) Pers



Mimusops elengi L.



Phyllanthus acidus (L.) Skeels



Plumeria alba L.



Saraca asoka (Roxb.) de Wilde

Photo plate III: Photos of some trees found in Vasai - Virar