



Heritage Tree Census Report Year_2022-2023 Scheme- Majhi Vasundhara Abhiyan3.0



Prepared by-



YOUNGMARVEL SERVICES LLP

Submitted to-



AHMEDNAGAR MUNICIPAL CORPORATION

Heritage Tree Census

Report Year_2023-2023



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अहमदनगर महानगरपालिका,अहमदनगर

Tal- अहमदनगर Dist - अहमदनगर

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जाहिर सुचना

अहमदनगर महानगरपालिकेमार्फत माझी वसुंधरा अभियान 3.0 अंतर्गत पृथ्वी, वायु, जल, अग्नी, आकाश या पंचमहाभुतांवर आधारीत अहमदनगर शहर हद्दीतील सर्व झाडांची जनगणना (Tree Census) , ३३% हरित क्षेत्र निर्मीती (33% Green Coverage), ५० वर्षावरील झाडांची गणना (Heritage Tree Census), जैवविविधता नोंद वही तसेच महापालिकेच्या विविध कार्यालयाचे energy ऑडिट व Water ऑडिट करण्यात आले असुन सदर कामांचे अहवाल नागरिकांना पाहणी करणे कामी महानगरपालिका कार्यालय येथे उपलब्ध करुन देण्यात आलेले असुन ज्या नागरिकांना सदर प्रकल्प अहवालाची माहिती उपलब्ध करुन घ्यायची असेल त्यांनी अहमदनगर महानगरपालिका कार्यालय येथे संपर्क करुन सदर माहिती उपलब्ध करुन घेऊ शकतात.

आयुक्त

अहमदनगर महानगरपालिका ,अहमदनगर



Dy. Commissioner

Ahmednagar Corporation, Ahmednagar

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Heritage tree census and inventory report

1.0 Introduction

1.1 Background

In view of “The Maharashtra (Urban Areas) Preservation of Trees Act (1975), for better preservation, protection and plantation of trees on Urban areas, it is binding to the Municipal Corporation to carry out a census of trees in all lands within the jurisdiction once before 1996 and thereafter once in very five years. This is the reason why this activity has been taken up by the concerned authorities.

When we think of the heritage of cities we usually think of historical monuments, statues of famous people, or buildings of architectural value. But there is another kind of heritage— the living heritage comprising trees in our towns and cities. These heritage trees can be found in a variety of urban spaces—along roads, in parks, alongside water bodies, amidst wooded groves, in religious spaces and even in private property.

These heritage trees are important, of course, for their biological value, but so also for their cultural value. Heritage trees are historical artefacts—connecting urban residents to the past and providing a sense of belonging in cities that can otherwise be stressful places to live in.

The present document is a Heritage tree census and inventory report of the Ahmednagar Municipal Corporation, (Tal- Ahmednagar) in Ahmednagar district. The geographical area of Ahmednagar Municipal Corporation is 80 Sq km and Population of village is 3,50,859. The study was commissioned by Ahmednagar Municipal Corporation in order to quantify, map and to create an inventory of Tree species in the actual area i.e. core area of the proposed project. The objectives of this study were to provide an assessment of Tree species diversity, population and distribution in the given Village area. The study also evaluated the present status of Tree individuals and their importance. The study gives a detailed account of Tree diversity, health status, density, distribution and their locations by using Google Earth and mapping tool.

1.2 Location of the project: -

The project site is located in Ahmednagar City (Tal- Ahmednagar), dist- Ahmednagar.

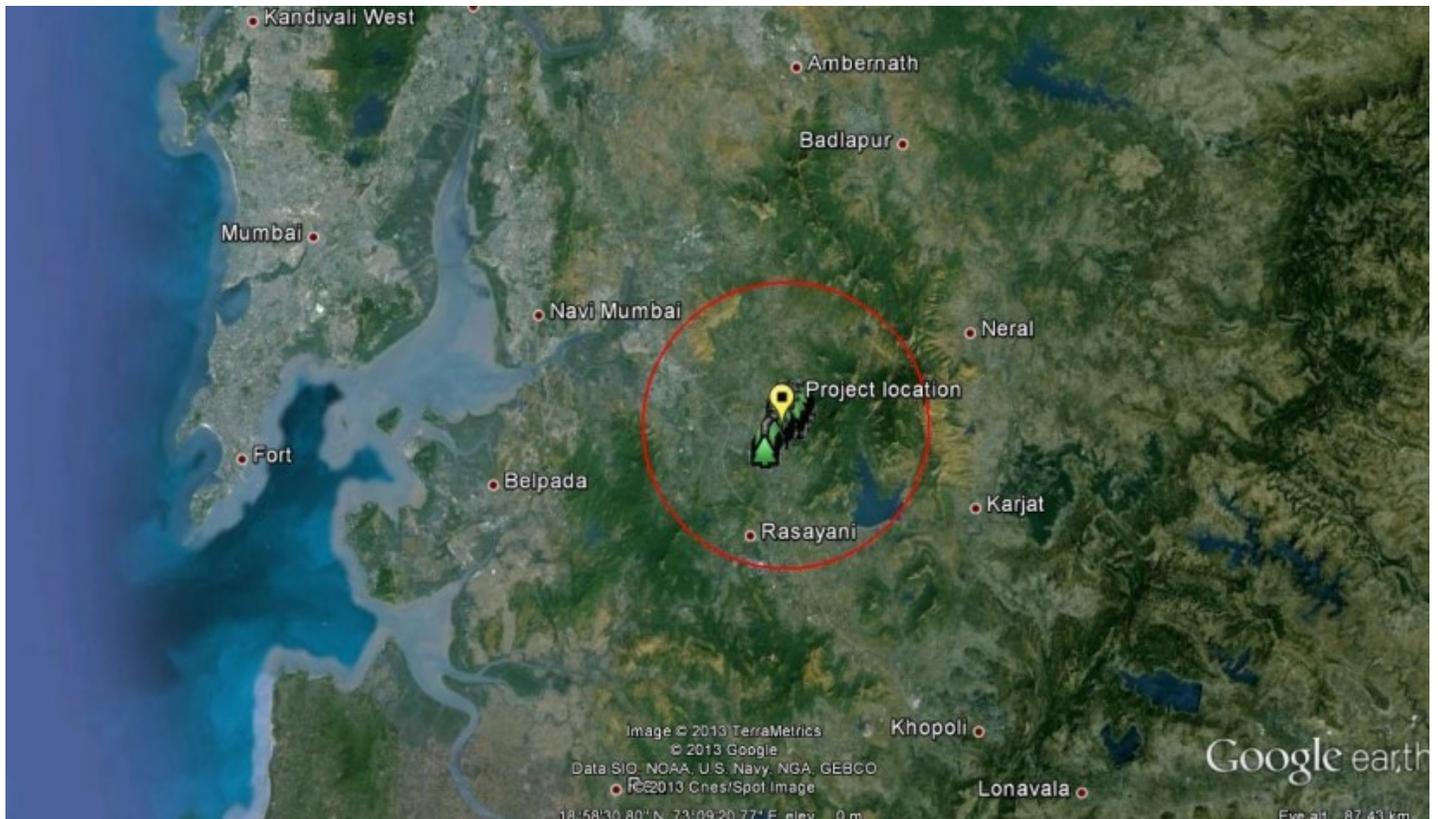


Fig. Google Image of Village

1.3 What are heritage trees?

There are a range of criteria that designate a tree as a heritage tree. These attributes—both material and non-material—makes the tree stand out. The material attributes could be age or size of the tree. It could also be the result of the form or shape of the tree. Further, it could be that the tree is a rare species or a tree at risk of being lost. The non-material criteria relate to cultural and aesthetic aspects. It could be that the tree has a historical or cultural association either with a person, an event or a place. It could also be a tree associated with myth or folklore. A comprehensive definition of a heritage tree by Aird (2005) is given below:

“A notable specimen because of its size, form, shape, beauty, age, colour, rarity, genetic constitution, or other distinctive features; a living relic that displays evidence of cultural modification by native or non-native people, including strips of bark or knot-free wood removed, test hole cut to determine soundness, furrows cut to collect pitch or sap, or blazes to mark a trail; a prominent community landmark; a specimen associated with a historic person, place, event or period; a representative of a crop grown by ancestors and their successors that is at risk of disappearing from cultivation; a tree associated with local folklore, myths, legends or traditions; a specimen identified by members of a community as deserving heritage recognition.”

Anyone or even a mix of the criteria can result in the tree being accorded the status of a heritage tree.

1.4 Heritage trees in Indian cities

Trees of large sizes, or antiquity, or connected with a person or an event are found across cities in India. Some of these have received recognition, but of many others we know little of their very existence, let alone the importance of the trees in the landscape and the history of the city.

In Bengaluru city, the capital of Karnataka, is situated a 150 feet tall New Caledonian Pine or Cook Pine (also known in Asia as the Christmastree) (*Araucaria columnaris*). The tree, brought to the city from New Caledonia in the late eighteenth century stands tall and easily identifiable in the Lal Bagh garden in the centre of the city. Also in Bengaluru is the Dodda Aalada Mara or the Big Banyan (*Ficus benghalensis*) estimated to be around 400 years old and whose canopy supported by aerial roots extend over 4 acres. There are other famous banyans across the country such as the 550-year-old banyan in the Bal Samand Palace in the desert city of Jodhpur, Rajasthan, that has a huge colony of bats roosting amongst its branches. Others are the banyan in Kolkata Botanical Garden, in Kolkata in West Bengal, with a canopy extending across 4.67 acres, and the 450-year-old banyan in Chennai, Tamil Nadu. Another ancient banyan is found inside the Allahabad Fort and is protected by the Indian Army. The tree is visited by hundreds of pilgrims during the Kumbh Mela, which is held once in 12 years.

The tamarind may be a part of everyday Indian cuisine. But this tree originally from Central Africa has attained iconic status in some sites. A tamarind tree in Gwalior, in the central Indian state of Madhya Pradesh, is planted on the tomb of Tansen, the famous singer and one of the jewels in the court of emperor Akbar. The tree does not have many leaves. This is owing to the belief that a decoction made from the leaves and bark will make one's voice as melodious as that of Tansen—thus people are said to have plucked the leaves extensively to consume them. Another tamarind stands in the premises of the Osmania General Hospital in Hyderabad, Telangana, with a plaque that says, "This tree saved 150 lives". During the devastating flood of 1908 in Hyderabad nearly 15,000 people were killed. But 150 people survived by climbing onto the tamarind tree. Believed to be more than 300 years old, every year on September 28th a programme is held at the tree to pay homage to those who lost their lives in the floods.

The Clock Tower in Dehra Dun, Uttarakhand, is a landmark for locals and tourists alike. But few know that the peepul tree adjacent to the Clock Tower is said to have been planted by the freedom fighter and poet known as the Nightingale of India, Sarojini Naidu. While Dehra Dun may still be a small town, heritage trees are also present in crowded megacities such as Mumbai, the business capital of India and capital of the Maharashtra state. Scattered across the city are around 120 baobabs (*Adansonia digitata*), African trees believed to have been brought to India a thousand years ago by Abyssinian and Portuguese traders. These are extremely rare 'green monuments' and are classified as to be protected according to a Heritage tree census conducted of trees in Mumbai.

Not only single trees but groves too are of heritage value because of their antiquity. The Nallur Amaraigrove located in peri-urban Bengaluru, close to the international airport, extends across an area of 53 acres. This grove has over 300 trees believed to have been planted during the time of the Chola dynasty. The oldest tree today in the grove is around 400 years old. A strange feature of the tamarind trees in this grove is that like the banyan prop roots emerge from the trunk of the

tree and provide support to these ancient trees. Some of the trees also have interesting markings and the trees themselves are considered as a genebank of tamarind trees. This grove is the first Biodiversity Heritage site in the country declared under the Biodiversity Act of 2002. In Sabarmati Ashram, in the city of Ahmedabad, Gujarat, Gandhiji's residence and the site from where he led the iconic Salt Satyagraha (Dandi march) are several old and towering neem trees (*Azadirachta indica*).

In spite of the variety and number of heritage trees in our cities, there is very little acknowledgement of their importance—resulting in trees being destroyed. Often trees fall victim to ill-planned urban development projects be it a road, flyover, metro and so on. Even trees that could be saved with small changes such as realignments to the constructions such as roads are lost forever.

Of course, there are natural causes too that are a threat to the trees. For example, the Great Banyan in the botanical gardens in Kolkata was struck by lightning during the Cyclone Amphan in May 2020. Some parts of the tree were thus damaged.

But more often the development of city infrastructure is prioritized over heritage trees. And instances of threats to heritage trees are available from across cities in the country. The Pimpal tree next to the Clock Tower in Dehra Dun was under threat of being cut for a road-widening project. But thanks to the efforts of local citizens and NGOs this was stopped. The foreign baobab that has made its home in urban Mumbai suffers many threats—concretization around roots, nailing of posters and are also at risk of being chopped down for road widening and construction of the metro. Many heritage trees in Lutyens Delhi planted during the time of the British too have been lost due to lack of care and maintenance, during the digging of trenches for laying underground cables and for road widening. Many of these trees were planted between 1920 and 1935 when Lutyens Delhi was under construction—old and majestic trees witness to several historic events have been lost for posterity.

There are many such heritage trees that are in danger of being lost in Indian cities—unmarked and undocumented.

Why protect heritage trees? Uses and value of heritage trees

Trees in cities have many uses. They provide shade, help keep the climate cool and reduce the effects of the urban heat island. They settle the dust on the roads, and absorb toxic gases from vehicular and industrial pollution. Trees help prevent soil erosion by binding the soil, especially along urban water bodies. Trees serve as a habitat for biodiversity. At the same time, they are a source of food, medicine and raw material for us and are also of cultural and sacred significance.

But heritage trees, in addition, to all of the above also provide other benefits. For one, heritage trees while valuable from an ecological perspective, are also living cultural artefacts that connect the city's past to the present. There is no better way to take civic pride in our cities than through heritage trees that are part of the history of the city itself.

Heritage trees are also of value in tourism. Many nature lovers visit heritage trees in cities often taking part in tree walks, while a tourist may inadvertently visit the tree in a park taking away memories of the tree. Not just tourists, but local communities who live alongside heritage trees also attach cultural value to trees, along with aesthetic or ecological values such as shade.

Heritage trees can play an important role in creating awareness about the importance of both heritage trees, as well as other trees in an urban landscape. Many of the heritage trees especially the Ficus are keystone species in the environment. The old trees serve as important roosting, nesting sites or as a food source for many species of wildlife.

An ancient tree is also an invaluable gene bank of tree species.

Protection of heritage trees

- Legal protection in the form of inclusion in existing Acts, new Acts or issue of government orders that will accord the highest level of protection from being cut or lopped.
- If of tourism or sacred value no structures should be allowed to be built that will damage any part of the trees (roots, trunk or branches).
- Drawing up rules with regard to actions that will be deemed harmful to heritage trees— for example driving of nails into trees, the concretization of the base.
- Clear responsibilities of protection and maintenance to specified departments.
- Budgetary allocations for heritage tree monitoring, protection and maintenance.

Criteria of Heritage Tree for Census

Under the proposed amendment, a tree with an estimated age of 50 years or more shall be defined as a heritage tree. The Maharashtra government will make amendments to the Maharashtra (Urban Areas) Protection and Preservation of Trees Act of 1975, to introduce provisions for the protection of 'heritage trees. **Trees that are greater than 100” in circumference** are considered Heritage Trees.

For Heritage tree census- A plant, by habit, having woody stem or trunk having minimum girth of 10 cm at chest level and has a height of 1.3 m above the ground level (Maharashtra Tree Act 1975 & Various Flora / Field Books on plants).

Outcomes of the Heritage tree census work

It is one of the best tool for the management and maintenance of city's green cover as well as native biodiversity. It also helps in understanding the species composition of the studied area, tree to human population ratio, monitoring and maintenance, management of defective trees, carbon sequestration potential, etc.

The present document considers definition of Tree with respect to Tree Act 1975, as perennial woody plant with **Trees that are greater than 100” in circumference** are considered Heritage Trees or an estimated age of 50 years or more shall be defined as a heritage tree respectively. For the present study, the Heritage tree census was carried out by using modern Kobo toolbox (free source app) to create a more efficient, portable and comfortable database of tree species. The Heritage tree census is an important scientific, technical, and educational effort. The results enable us to characterize the tree population in terms of its structure, function, and value. This information is used in a variety of ways, including:

Management: Enables daily and strategic decision-making based on the composition, condition and distribution of trees.

Planning: Tracking the changes that have occurred in the landscape and predicting or analyzing the changes / impacts that the proposed project will have on the landscape.

Mitigation: Understanding of number, diversity and density of trees helps in developing appropriate mitigation measures.

2.0 Scope of the study

2.1 Objectives

1. To make an inventory of tree individuals and tree species in the proposed project site
2. To create a distribution/vegetation map of the whole area representing Tree individuals
3. To undertake ecological analysis and calculate the following:
 - a. IVI (Importance Value Index calculation)
 - i. Frequency and relative frequency
 - ii. Density and relative density
 - iii. Dominance and relative dominance
 - b. Simpson's biodiversity Index calculation
4. Assessment of species protected by specific legislation (Rare, endangered, critically endangered, endemic and vulnerable)
5. To enumerate importance of the Tree species/individuals observed

2.2 Materials and Methodology

Sampling methodology

Since the purpose of the project was to create a detailed inventory of Tree individuals and species, the "Census" was used as a sampling technique.

In total, (Area of Village in SqKm) Sqkm of the project site were surveyed and each tree was counted and marked on a GPS device. The data collection was done from all units in the population and a 'complete enumeration' of the population was done. The census technique was specifically used to collect accurate information of the population. Some inaccessible locations on mountainous tracks/valleys were surveyed by using strategic representative belt transects. The data from the representative belt transect was extrapolated to the areas where it was not possible to reach.

Identification of Tree species

Most of the tree species encountered were identified on field on the basis of their morphological characters - Bark shape, texture, and colour, Leaves-shape, size, texture, colour, arrangement, flower and fruit colour, shape, size, internal morphology, odour and arrangement of reproductive features. Morphological characteristics were used to identify the Tree species to the species level. The Flora of Maharashtra, and Bombay Presidency were used as references and online database of The International Plant Names Index (IPNI) was used to find out the latest and acceptable international scientific name of the Tree species.

Some of the Tree species that could not be identified on field were collected or photographed for off-field analysis. The Tree species that could not be identified due to lack of morphological signs/characteristics were grouped in to the Un-Identified section (subjected to identification in another season).



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हेरीटेज ट्री



दिनांक २ ऑगस्ट २०२१ रोजी अहमदनगर महानगरपालिका हद्दीतील उज्ज्वल कॉम्प्लेक्स येथे असलेल्या वड वृक्षास पुरातन वृक्ष (हेरीटेज ट्री) म्हणून घोषित करण्यात आले. पुरातन वृक्ष म्हणजे जे कुठलीही महानगरपालिका हद्दीतील ५० वर्षांपेक्षा जास्त वयाचे वृक्ष असतील त्या वृक्षांच्या संरक्षण व संवर्धन करण्याकरिता त्यांची गणना केली जाईल. त्याला कुठलीही हानी आणि इजा होणार नाही याची दक्षता घेतली जाईल, अशाप्रकारे अहमदनगर महानगरपालिकेने उपक्रमास सुरुवात केली आहे. या करिता वृक्षाच्या बाजूस फलक लावून त्याची घोषणा करण्यात आली आहे. सदर कार्यक्रमाकरिता आमदार संग्रामभैर्या जगताप, उपमहापौर श्री. गणेश भोसले, विरोधी पक्षनेते श्री. संपत बारस्कर, आयुक्त श्री. शंकर गोरे, अतिरिक्त आयुक्त श्री. पठारे, उपायुक्त श्री. डांगे, माजी नगरसेवक श्री. संजयजी शेंडगे, नगरसेवक श्री. प्रकाशजी भागानगरे, माजी नगरसेवक संजय चोपडा, उद्यान विभाग प्रमुख मेहेर लहारे हे उपस्थित होते.



सौ. रोहिणीताई संजय शेंडगे
महापौर

श्री. गणेश भोसले
उपमहापौर

श्री. शंकर गोरे
आयुक्त

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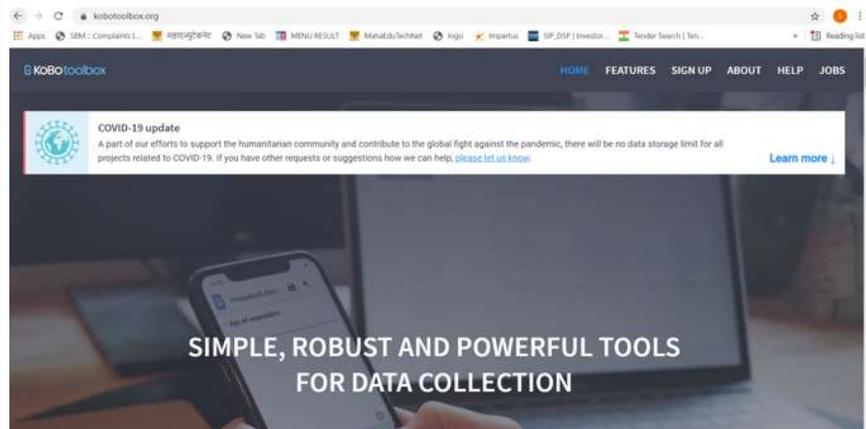
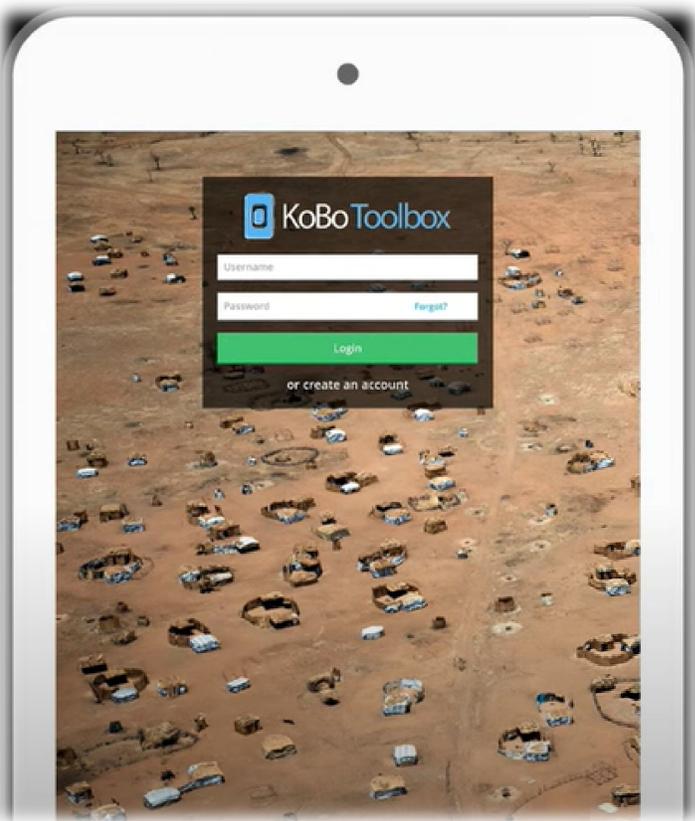
15 likes

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Technology used

GPS device along with the Tree mapping software of Trimble make was used to take GPS positioning of each tree individuals and to caporal structural parameters. ArcGIS was used as platform to create GIS based maps.



Submission Record (1 of 46)



Validation status: Select...



NEXT

Display XML names

EDIT

VIEW

DUPLICATE



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<input type="checkbox"/>	Name of ULB	Ahmednagar municipal corporation
<input type="checkbox"/>	Name of Area	Mukund nagar
<input type="checkbox"/>	Ward No.	6
<input type="checkbox"/>	Unique Id	802828H0001
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<input type="checkbox"/>	Tree Specie	Indiginious
<input type="checkbox"/>	Dimeter of Tree at Chest hight (3ft from ground) in cm	198
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<input type="checkbox"/>	Approximate age of tree	52
<input type="checkbox"/>	Health Condition of tree	Healthy
<input type="checkbox"/>	Medical Name of plant	Banayan tree
<input type="checkbox"/>	Ownership of Land	Private



Geotag Location of Plant

latitude (x.y °): 19.110256
longitude (x.y °): 74.746691
altitude (m): 0
accuracy (m): 1899.9990234375



Enter a date and time

January 4, 2023 5:50 PM



Photo of
plant



5 to 8 sec Video showing plant
and surrounding



start

2022-12-08T13:34:40.410+05:30



end

2023-01-04T17:51:39.441+05:30



today



username

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	Submitted by	

Submission Record (3 of 46)



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<input type="checkbox"/>	Ward No.	3
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<input type="radio"/>	Tree Specie	Indiginious
<input type="checkbox"/>	Dimeter of Tree at Chest hight (3ft from ground) in cm	15
<input type="radio"/>	Heritage Tree (Age More than 50 Years)	No
<input type="checkbox"/>	Approximate age of tree	10
<input type="radio"/>	Health Condition of tree	Healthy
<input type="checkbox"/>	Medical Name of plant	Delonix regia
<input type="radio"/>	Ownership of Land	Goverment

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<input type="checkbox"/>	sim serial	
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	Submitted by	

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<input type="checkbox"/>	Name of ULB	Ahmednagar
<input type="checkbox"/>	Name of Area	Ahmednagar college
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<input type="checkbox"/>	Unique Id	3
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<input type="radio"/>	Tree Specie	
<input type="checkbox"/>	Dimeter of Tree at Chest hight (3ft from ground) in cm	
<input type="radio"/>	Heritage Tree (Age More than 50 Years)	
<input type="checkbox"/>	Approximate age of tree	
<input type="radio"/>	Health Condition of tree	Healthy
<input type="checkbox"/>	Medical Name of plant	Samania saman
<input type="radio"/>	Ownership of Land	Private

<input type="checkbox"/>	Geotag Location of Plant	latitude (x.y °): 19.090508 longitude (x.y °): 74.74704 altitude (m): 583.9000244140625 accuracy (m): 68.4000015258789
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<input type="checkbox"/>	Photo of plant	
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<input type="checkbox"/>	today	
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<input type="checkbox"/>	username	
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<input type="checkbox"/>	sim serial	
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	Submitted by	

Submission Record (11 of 46)



Validation status: Select... ▼

[PREVIOUS](#)

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DUPLICATE

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<input type="checkbox"/>	Name of ULB	Ahmednagar
<input type="checkbox"/>	Name of Area	Ahmednagar college
<input type="checkbox"/>	Ward No.	3
<input type="checkbox"/>	Unique Id	3
<input type="radio"/>	New Question	
<input type="radio"/>	Tree Specie	Non Indiginious
<input type="checkbox"/>	Dimeter of Tree at Chest hight (3ft from ground) in cm	32
<input type="radio"/>	Heritage Tree (Age More than 50 Years)	No
<input type="checkbox"/>	Approximate age of tree	20
<input type="radio"/>	Health Condition of tree	Healthy
<input type="checkbox"/>	Medical Name of plant	Delonix regia
<input type="radio"/>	Ownership of Land	Open Space

Geotag Location of Plant latitude (x.y °): 19.090321
longitude (x.y °): 74.746895
altitude (m): 583.800048828125
accuracy (m): 1899.9990234375

Enter a date and time December 15, 2022 12:19 PM

Photo of plant



5 to 8 sec Video showing plant and surrounding [VID20221215121933-12_19_40.mp4](#)

start 2022-12-15T12:19:02.194+05:30

end 2022-12-15T12:22:38.103+05:30

today

username

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<input type="checkbox"/>	device ID	
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	_id	242495376
	instanceID	uuid:84a94684-1994-454f-8275-bffffb6f8885b
	Submitted by	

Submission Record (12 of 46)



Validation status:

Select...

[PREVIOUS](#) Display XML names

EDIT

VIEW

[NEXT](#)

DUPLICATE



Type	Question	Response
<input type="checkbox"/>	Name of District	Ahmednagar
<input type="checkbox"/>	Name of ULB	Ahmednagar
<input type="checkbox"/>	Name of Area	Ahmednagar
<input type="checkbox"/>	Ward No.	3
<input type="checkbox"/>	Unique Id	3
<input type="radio"/>	New Question	
<input type="radio"/>	Tree Specie	Indiginious
<input type="checkbox"/>	Dimeter of Tree at Chest hight (3ft from ground) in cm	15
<input type="radio"/>	Heritage Tree (Age More than 50 Years)	No
<input type="checkbox"/>	Approximate age of tree	10
<input type="radio"/>	Health Condition of tree	
<input type="checkbox"/>	Medical Name of plant	Azadirachta indica
<input type="radio"/>	Ownership of Land	Open Space

Geotag Location of Plant
 latitude (x.y °): 19.090192
 longitude (x.y °): 74.746928
 altitude (m): 583.9000244140625
 accuracy (m): 97.58899688720703

Enter a date and time
 December 15, 2022 12:14 PM

Photo of plant



5 to 8 sec Video showing plant and surrounding
[VID20221215121434-12_14_40.mp4](#)

start
 2022-12-15T12:11:18.091+05:30

end
 2022-12-15T12:19:01.820+05:30

today

username

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<input type="checkbox"/>	audit	
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	Submitted by	

Submission Record (20 of 46)



Validation status: Select...

PREVIOUS

Display XML names

EDIT VIEW

NEXT

DUPLICATE

Type	Question	Response
<input type="checkbox"/>	Name of District	Ahmednagar
<input type="checkbox"/>	Name of ULB	Ahmednagar
<input type="checkbox"/>	Name of Area	Ahmednagar college
<input type="checkbox"/>	Ward No.	3
<input type="checkbox"/>	Unique Id	3
<input type="radio"/>	New Question	Babhul
<input type="radio"/>	Tree Specie	Indiginious
<input type="checkbox"/>	Dimeter of Tree at Chest hight (3ft from ground) in cm	3
<input type="radio"/>	Heritage Tree (Age More than 50 Years)	No
<input type="checkbox"/>	Approximate age of tree	10
<input type="radio"/>	Health Condition of tree	Healthy
<input type="checkbox"/>	Medical Name of plant	Vachellia nilotica
<input type="radio"/>	Ownership of Land	

<input type="checkbox"/>	Geotag Location of Plant	latitude (x.y °): 19.088462 longitude (x.y °): 74.747219 altitude (m): 581.5 accuracy (m): 45.599998474121094
--------------------------	--------------------------	--

<input type="checkbox"/>	Enter a date and time	December 14, 2022 3:11 PM
--------------------------	-----------------------	---------------------------

<input type="checkbox"/>	Photo of plant	
--------------------------	----------------	--



<input type="checkbox"/>	5 to 8 sec Video showing plant and surrounding	VID20221214151100-15_11_21.mp4
--------------------------	--	--

<input type="checkbox"/>	start	2022-12-14T15:09:29.171+05:30
--------------------------	-------	-------------------------------

<input type="checkbox"/>	end	2022-12-14T15:15:41.907+05:30
--------------------------	-----	-------------------------------

<input type="checkbox"/>	today	
--------------------------	-------	--

<input type="checkbox"/>	username	
--------------------------	----------	--

<input type="checkbox"/>	sim serial	
<input type="checkbox"/>	subscriber ID	
<input type="checkbox"/>	device ID	
<input type="checkbox"/>	phone number	
<input type="checkbox"/>	audit	
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	_id	241658403
	instanceID	uuid:f4a3733c-496c-4846-8a4e-50a9a5753615
	Submitted by	



Validation status: Select...

[PREVIOUS](#)

Display XML names

[EDIT](#) [VIEW](#)

[NEXT](#)

[DUPLICATE](#)



Type	Question	Response
<input type="checkbox"/>	Name of District	Ahamadnagr
<input type="checkbox"/>	Name of ULB	3
<input type="checkbox"/>	Name of Area	3
<input type="checkbox"/>	Ward No.	3
<input type="checkbox"/>	Unique Id	3
<input type="checkbox"/>	New Question	
<input type="checkbox"/>	Tree Specie	
<input type="checkbox"/>	Dimeter of Tree at Chest hight (3ft from ground) in cm	3
<input type="checkbox"/>	Heritage Tree (Age More than 50 Years)	No
<input type="checkbox"/>	Approximate age of tree	15
<input type="checkbox"/>	Health Condition of tree	Mechanically Cut
<input type="checkbox"/>	Medical Name of plant	Gliricidia speium



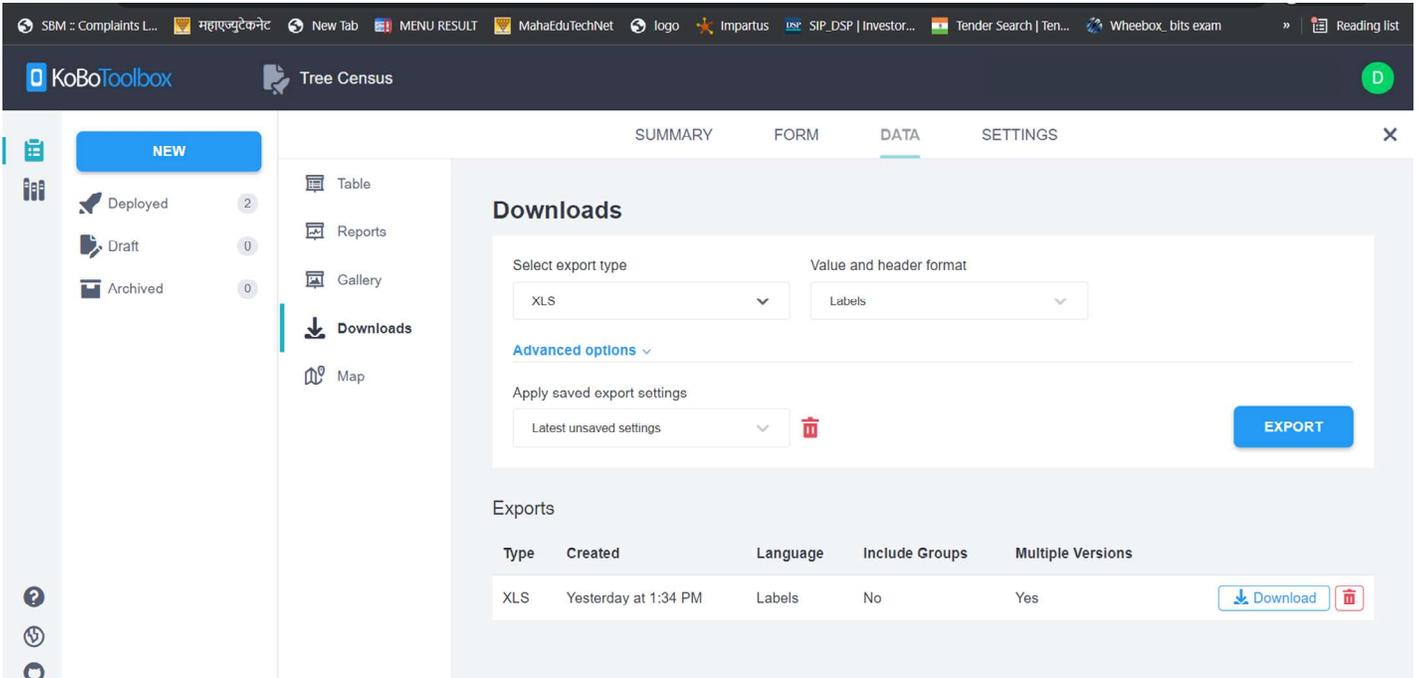
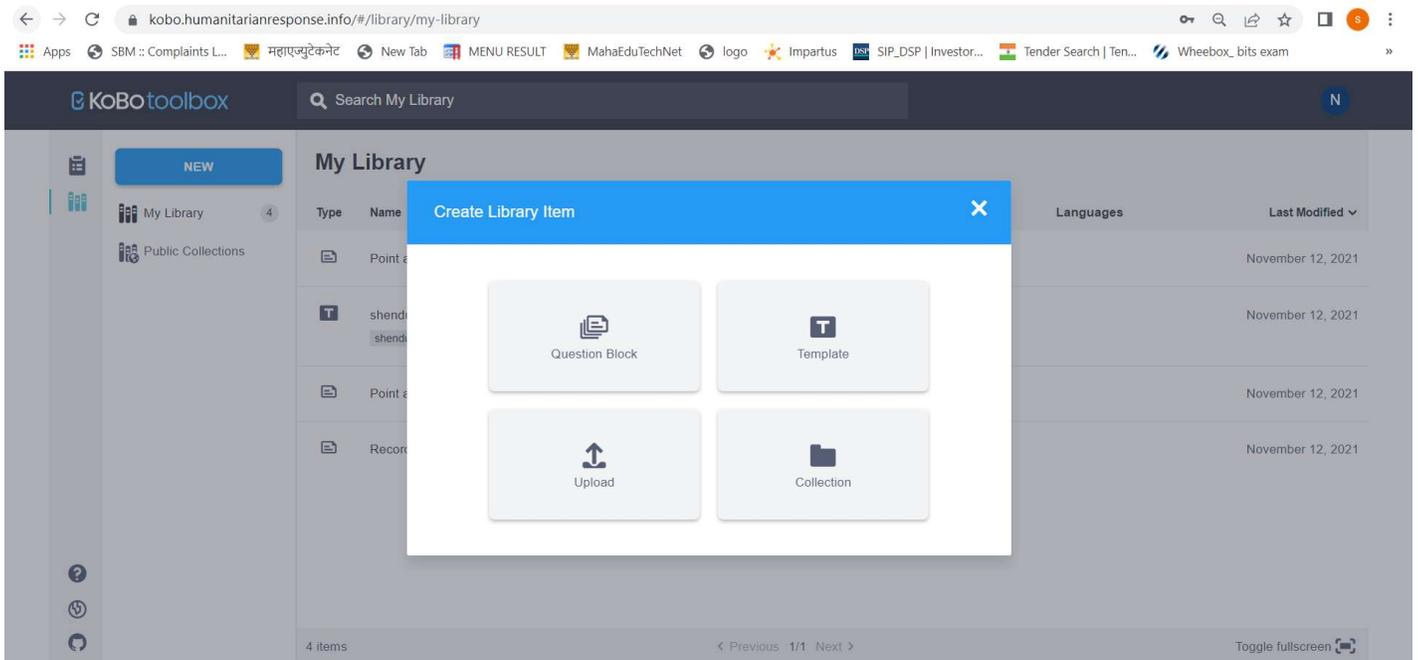
Ownership of Land

Open Space

<input type="checkbox"/>	Geotag Location of Plant	latitude (x.y °): 19.08848 longitude (x.y °): 74.747159 altitude (m): 581.5 accuracy (m): 28.100000381469727
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<input type="checkbox"/>	Photo of plant	
<input type="checkbox"/>	5 to 8 sec Video showing plant and surrounding	video_20221214_150655-15_7_6.mp4
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<input type="checkbox"/>	subscriber ID	
<input type="checkbox"/>	device ID	
<input type="checkbox"/>	phone number	
<input type="checkbox"/>	audit	
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	_id	241654728
	instanceID	uuid:742b6e8f-a09c-4fc2-93e6-688b8994583c
	Submitted by	

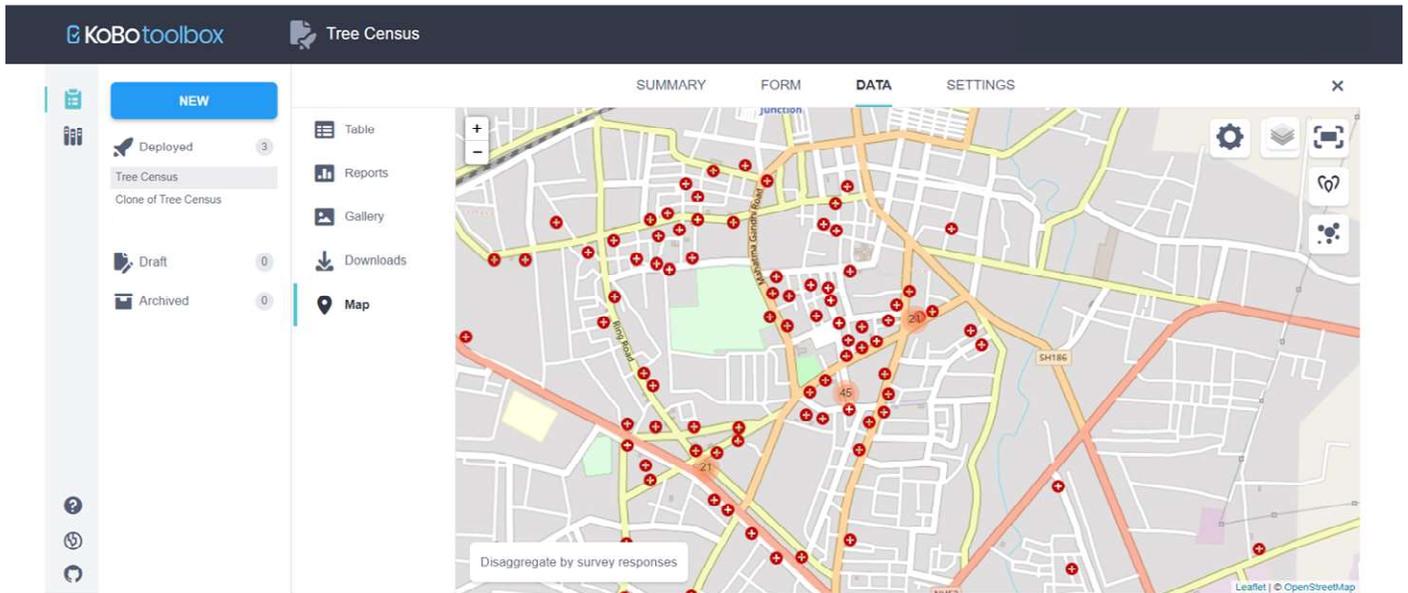
Dashboard

This option envisages various analytics and are visualized in the form of pie charts. The total number of field officers on work on a given day can be seen, the total count of the given day can be seen and thereby the total count till date can be seen on the dashboard. The timeline option is available on the dashboard which will help to understand the trend of the work being done. Similarly, a pie chart reflecting the top 5 field officers based on their tree count can be seen.

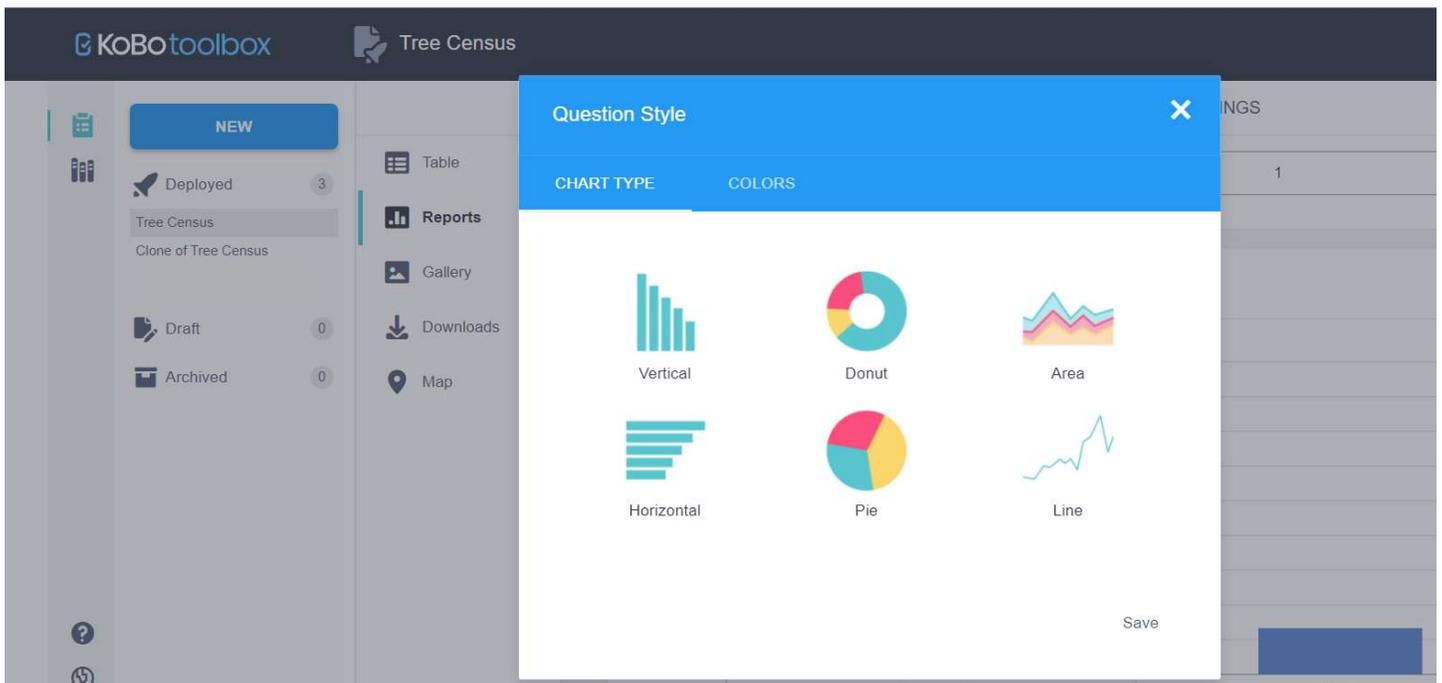


Map

The map gives the visual representation of the Heritage tree census work. The corporation and ward boundaries of the Ahmednagar Municipal Corporation are assigned in the map. Thus, based on this the area covered and percentage completion of the work can be understood.



Various other pie charts depicting the Tree condition, the ongoing wards, common and uncommon trees can be seen on the dashboard.



3.0 Observations

3.1 Trees in count

The census study was carried out during the month of Nov- 2022 to create an inventory of Tree species. During the study, a total of 46 trees were mapped and measured. Of the 46 individuals counted, 0 were dead.

The 14 number of Trees that were observed during the survey belonged to 12 species and 4 families.

There were few areas in the project location which were had fewer number of trees while there are few forested regions which had trees in large numbers and were densely covered by Tree species.

The overall survey area was divided in to the 5 following sections on the basis of population of Trees:

1. Orchards and Residential Areas
2. Mountainous and forested areas
3. Agricultural land with mixed tree species
4. Agricultural land
5. Land with no tree species

It can be seen from the below given map that there are several sections in the study area which are low in density and diversity of Tree species.

Most of the tree individuals observed was in the forested areas.

Maximum number of the tree species is forest based and native species. Also, most of these dominated species are restricted in the forested patches only. The trees observed in the agricultural zones are less in diversity and mostly dominated by Bombax cieba (kate savar).

List of Tree individual as observed along with details is attached in the Annexure 1 of this report.

Also, a Google earth compatible KML file is provided as a soft copy.

The GPS positioned of all the tree individuals observed in the study is super imposed on the AutoCAD map of the project. The soft copy of this superimposed file is provided.

Outcomes of the Heritage tree census work

It is one of the best tool for the management and maintenance of Village's green cover as well as native biodiversity. It also helps in understanding the species composition of the studied area, tree to human population ratio, monitoring and maintenance, management of defective trees, carbon sequestration potential, etc.

List of Plant: -

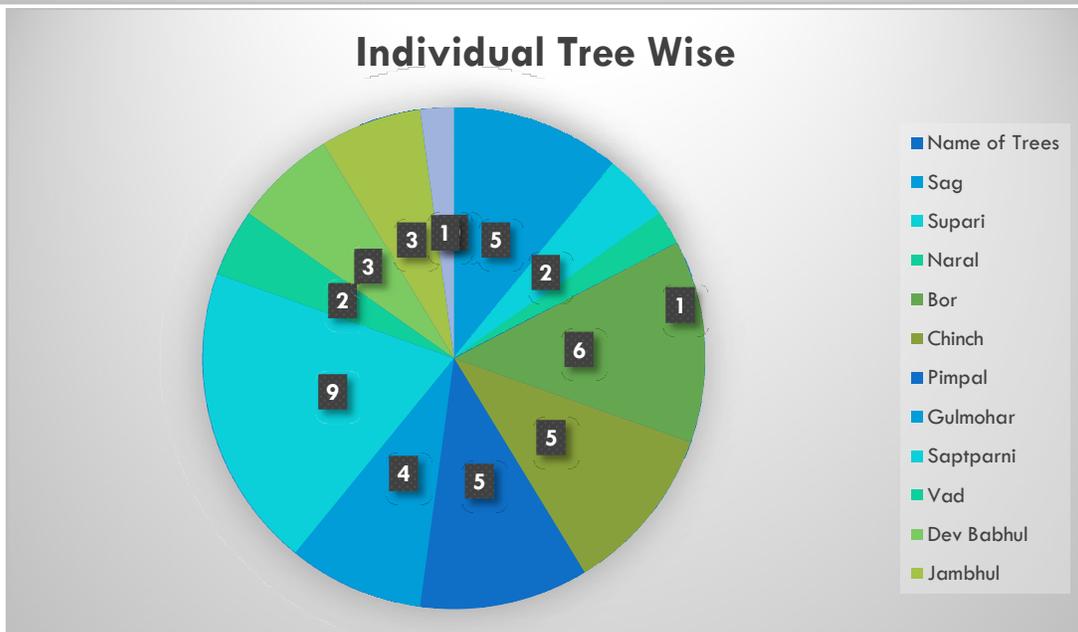
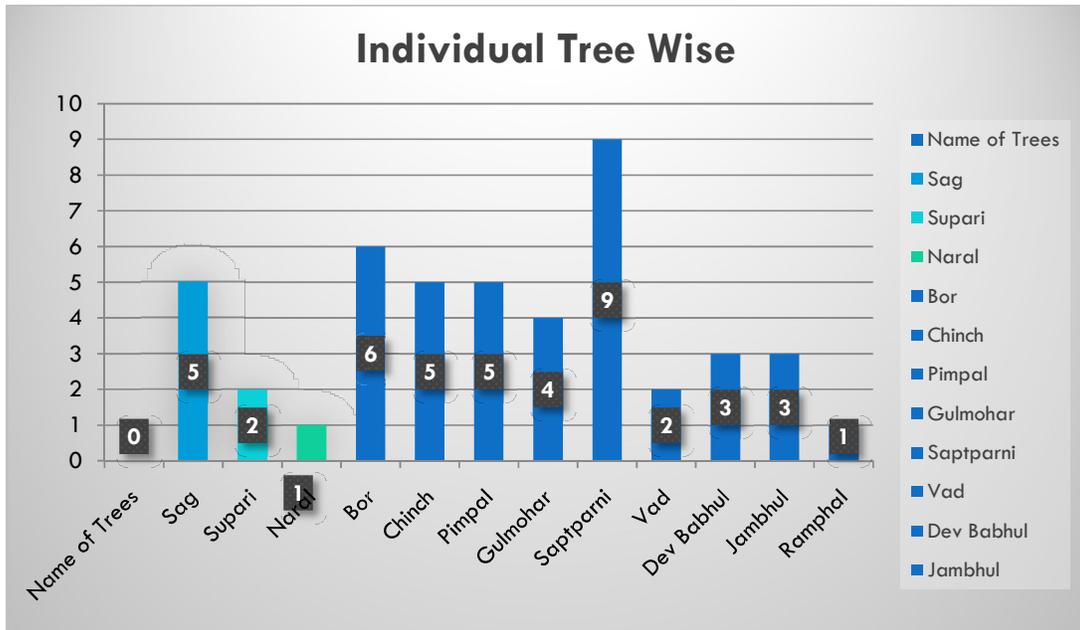
Sr. No.	Name of Trees	Government	Industry	other	Park	Private	Roadside	Grand Total
1	Sag	2	0	1	0	2	0	5
2	Supari	1	1	0	0	0	0	2
3	Naral	0	0	0	0	0	1	1
4	Bor	1	2	0	0	3	0	6
5	Chinch	3	0	0	2	0	0	5
6	Pimpal	2	0	0	0	2	1	5
7	Gulmohar	2	0	0	0	2	0	4
8	Saptarni	0	2	2	0	3	2	9
9	Vad	1	0	0	0	1	0	2
10	Dev Babhul	0	2	0	0	1	0	3
11	Jambhul	2	0	0	0	0	1	3
12	Ramphal	0	0	1	0	0	0	1
		14	7	4	2	14	5	46

Results and Conclusions: -

A data set consisted of tree data of (Total No. of tree) individuals. The results are obtained based on individual tree count, ward wise tree count, ownership wise, height wise, age wise, canopy wise and condition wise. The results obtained are as follows

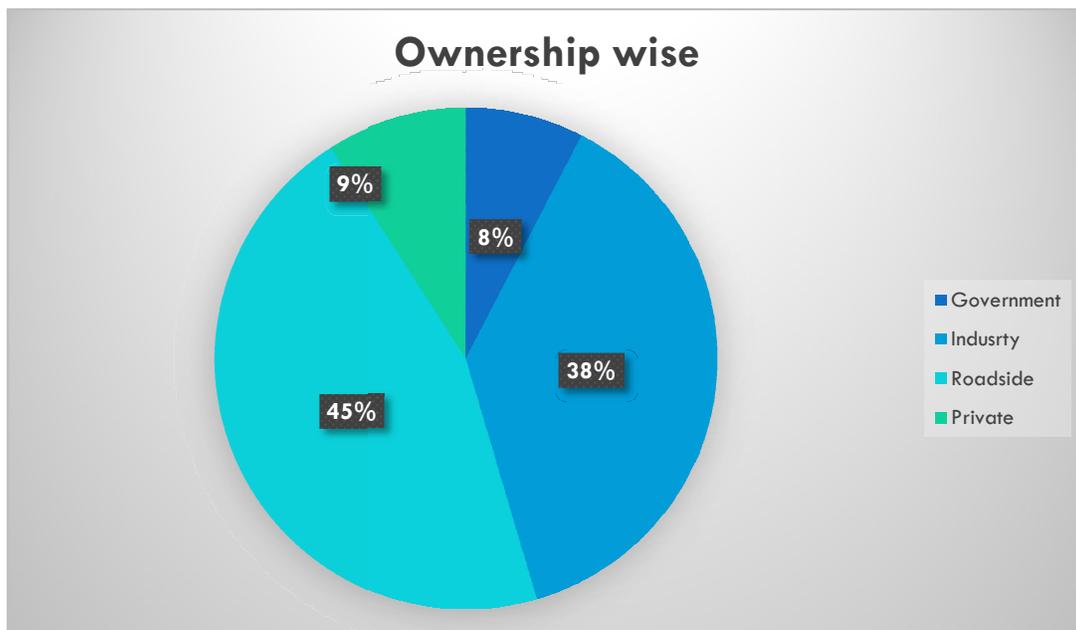
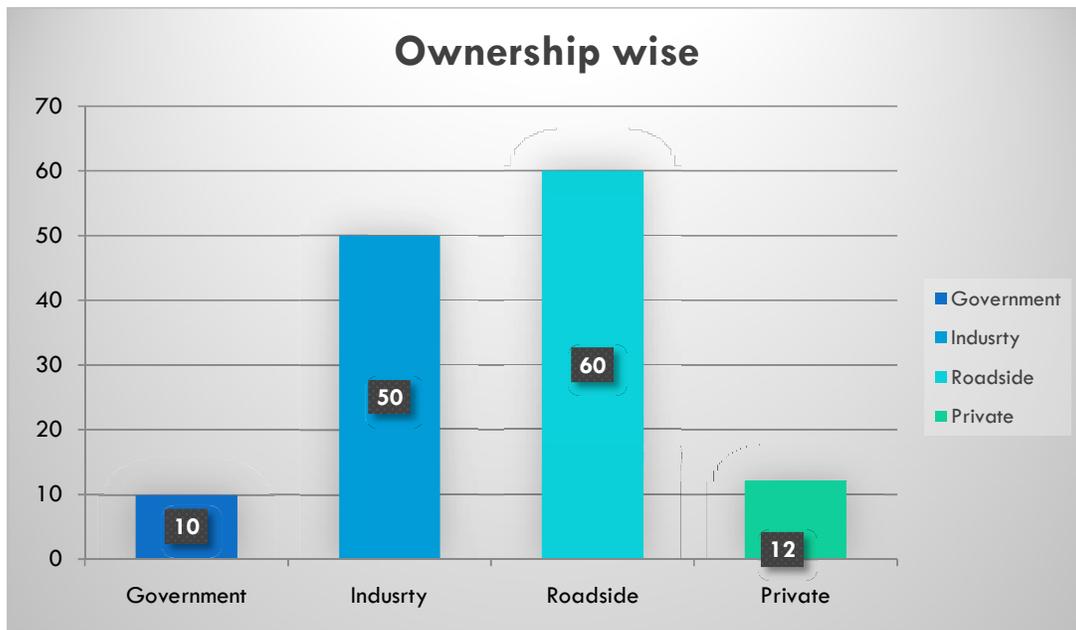
Individual Wise Tree data:

Pimpal was the most dominant tree species with occurrence to the entire population of trees within the Village. It was followed by Vad ,Amba , Kaduneem and etc.



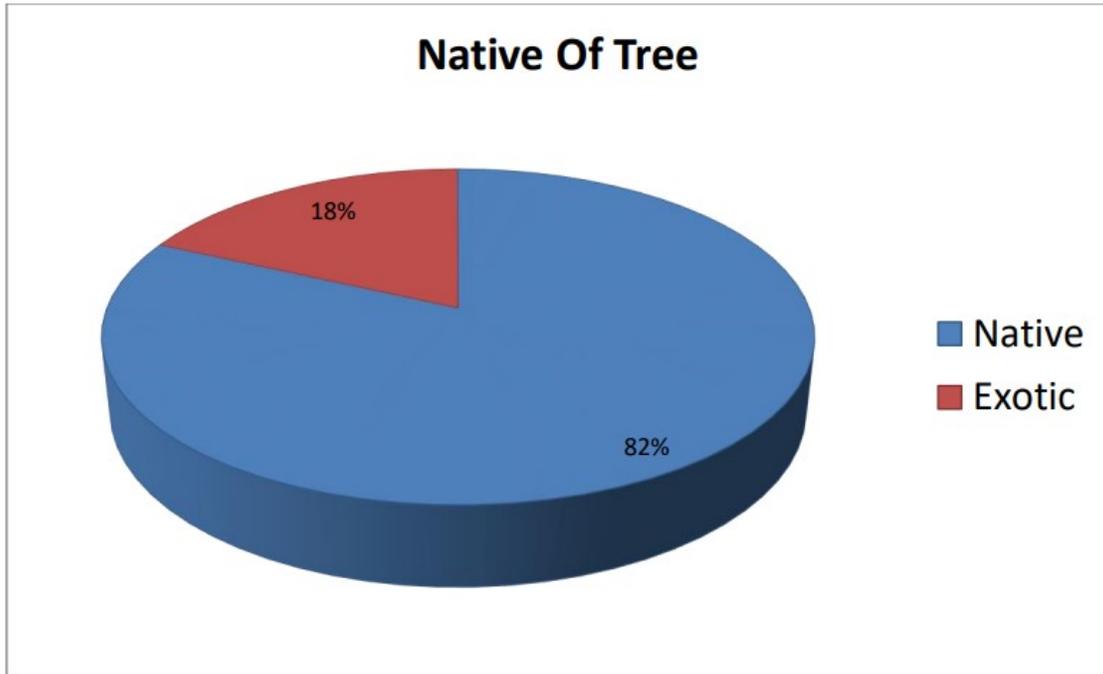
Ownership wise tree data:

Maximum trees were recorded from Private sector as on privately owned land followed by Government, Roadside and other. The Government land is divided into Forest land, Defence land and land under Ahmednagar Municipal Corporation.

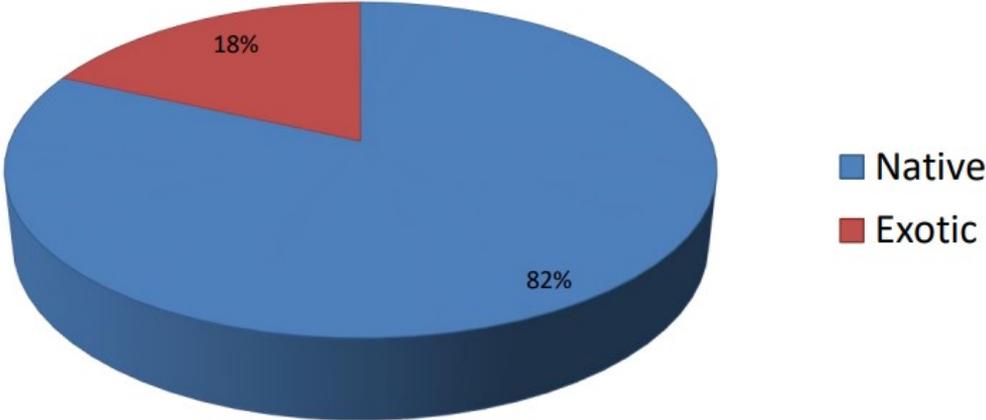


Native Wise Tree data:

Out of the total (Total No. of Tree) trees 88% of trees are indigenous and 12 % of trees are Exotic in Nature.



Native Of Tree



Recommendations

Plantation

- Tree count in park and industrial premises is very low. These two areas have good scope of new plantations.
- Prabhagshave large open space and should be considered 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 Village 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 Village's tree diversity.

Removals

- Subabul which is considered as a major invasive tree species in India should not be further planted and removal of them is recommended.

Maintenance:

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

Geo Tag Photo Graph of the Trees







पुरातन वृक्ष (हेरीटेज ट्री)
अहमदनगर (वृक्ष क्र. १२ पिपळ)

अहमदनगर महानगरपालिकेने सदर वृक्ष हे पुरातन वृक्ष (हेरीटेज ट्री) म्हणून घोषित करण्यात आले आहे. सदर वृक्षांचे जतन व संवर्धन करावयाचे आहे. सदर वृक्षास कुठलीही इजा, हानी अथवा तोड करण्यात येणार नाही, असे करपा-न्यास महापाटू (नागरी क्षेत्र) शाखाचे संरक्षण व जतन अधिनियम, कलम (९) अन्वये एक सन्नापयित दंड करण्यात येईल.
याची नोंद घ्यावी.

आयुक्त यांचे आदेशावरून
अहमदनगर महानगरपालिका
अहमदनगर

 GPS Map Camera

Ahmednagar, Maharashtra, India
5930, Amardham, Nalegaon, Ahmednagar, Maharashtra 414004, India
Lat 19.094926
Long 74.729286
26/03/22 05:38 PM



पुरातन वृक्ष (हेरीटेज ट्री)
अहमदनगर (वृक्ष क्र. १४ पिंपळ)

अहमदनगर महानगरपालिकेने सदर वृक्ष हे पुरातन वृक्ष (हेरीटेज ट्री) म्हणून घोषित करण्यात आले आहे. सदर वृक्षांचे जतन व संवर्धन करावयाचे आहे, सदर वृक्षास कुठलीही इजा, हानी अथवा नुकसान करण्यात येणार नाही, असे करणाऱ्यास महाराष्ट्र (नागरी क्षेत्र) झाडांचे संरक्षण व जतन अधिनियम, कलम (१) अन्वये एक लाखपर्यंत दंड ठरवता येईल.
याची नोंद घ्यावी.

आयुक्त यांचे आदेशावरून
अहमदनगर महानगरपालिका
अहमदनगर

GPS Map Camera



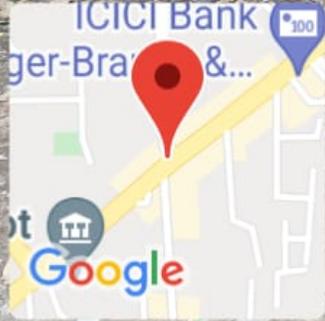
Ahmednagar, Maharashtra, India
Shop No. 7, Hareshwar Yatra Company, Amardham Shopping Complex, Nepti Naka Chauk, Amardham, Nalegaon, Ahmednagar, Maharashtra 414001, India
Lat 19.095195
Long 74.729677
26/03/22 05:28 PM



Ahmednagar, Maharashtra, India
3PWJ+269, Amardham, Nalegaon, Ahmednagar,
Maharashtra 414001, India
Lat N 19° 5' 44.1348"
Long E 74° 43' 50.1708"
13/12/21 03:22 PM



Ahmednagar, Maharashtra, India
4PJH+875, Savedi, Ahmednagar, Maharashtra
414003, India
Lat N 19° 7' 50.6892"
Long E 74° 43' 40.4616"
13/12/21 01:33 PM



Ahmednagar, Maharashtra, India
Maliwada Bus Stand, Maliwada, Ahmednagar,
Maharashtra 414001, India
Lat N 19° 5' 7.5048"
Long E 74° 44' 7.6848"
13/12/21 02:37 PM

ANNEXURES

Annexure1:NativeTrees

S. N.	TreeName	BotanicalName	Family
1	Supari	<i>Arecacatechu</i> Linn.	Arecaceae
2	Naral	<i>Cocosnucifera</i> Linn.	Arecaceae
3	Kala umber	<i>Ficushispida</i> Linn.f.	Moraceae
4	Amba	<i>Mangiferaindica</i> Linn.	Anacardiaceae
5	Kharoti	<i>Streblusasper</i> Lour.	Moraceae
6	Shevga	<i>Moringapterigosperma</i> Gaertn.	Moringaceae
7	Asupalav(D)	<i>Polyalthialongifolia</i> var. <i>pendula</i> (Sonn.)Thw.	Annonaceae
8	Tad	<i>Borassusflabellifer</i> Linn.	Arecaceae
9	Dhatriphal	<i>Barringtoniaacutangula</i> (Linn.) Gaertn.	Lecythidaceae
10	Bhend	<i>Thespesiapopulnea</i> (Linn.)Sol.ex Cor.	Malvaceae
11	Karanj	<i>Pongamiapinnata</i> (Linn.)Pierre	Fabaceae
12	Phanas	<i>Artocarpusheterophyllus</i> Lamk.	Moraceae
13	Kaduneem	<i>Azadirachtaindica</i> (Linn.)A.Juss.	Meliaceae
14	Katesavar	<i>Bombaxceiba</i> Linn.	Bombacaceae
15	Shindi	<i>Phoenixsylvestris</i> (Linn.)Roxb.	Arecaceae
16	Akashneem	<i>Millingtoniahortensis</i> Linn.f.	Bignoniaceae
17	Jambhul	<i>Syzygiumcumini</i> (Linn.)Skeels	Myrtaceae
18	Bherlimad	<i>Caryotaurens</i> Linn.	Arecaceae
19	Kadipatta	<i>MurrayaKoenigii</i>	Rutaceae
20	Umbur	<i>Ficusracemosa</i> Linn.	Moraceae
21	Dhaman	<i>Grewiatiliaefolia</i> Vahl.	Tiliaceae
22	Asana	<i>Brideliaretusa</i> (Linn.)Spreng.	Euphorbiaceae
23	Sonmohar	<i>Peltophorumpterocarpum</i> (DC.) Bk.exHyn	Caesalpiniaceae
24	Asupalav (S)	<i>Polyalthialongifolia</i> (Sonn.)Thw.	Annonaceae
25	Sonchapha	<i>Michelliachampaca</i> Linn.	Magnoliaceae
26	Ankul	<i>Alangiumsalvifolium</i> (Linn.f.) Wangerin	Alangiaceae
27	Bhokar	<i>Cordiadichotoma</i> Forst.f.	Boraginaceae
28	Ambada	<i>Spondiaspinnata</i> (Linn.f.)Kurz	Anacardiaceae
29	Otamb	<i>Artocarpuslakoocha</i> Roxb.	Moraceae
30	Rai Avla	<i>Ciccaacida</i> Linn.	Euphorbiaceae
31	Kakad	<i>Garugapinnata</i> Roxb.	Burseraceae
32	Vavla	<i>Holoptelaintegrifolia</i> (Roxb.)Planch	Urticaceae
33	Apta	<i>Bauhiniaracemosa</i> Lamk.	Caesalpiniaceae
34	Saptparni	<i>Alstoniascholaris</i> (Linn.)R.Br.	Apocynaceae
35	Tuti	<i>Morusalba</i> Linn.	Moraceae

S. N.	TreeName	BotanicalName	Family
36	Bartondi(P)	<i>Morinda pubescens</i> Sm.	Rubiaceae
37	Pimpal	<i>Ficus religiosa</i> Linn.	Moraceae
38	Petari	<i>Trewia nudiflora</i> Linn.	Euphorbiaceae
39	Shemat	<i>Lannea coromandelica</i> (Houtt.) Merrill	Anacardiaceae
40	Kuda	<i>Wrightia tinctoria</i> (Roxb.) R.Br.	Apocynaceae
41	JungliBadam	<i>Sterculia foetida</i> Linn.	Sterculiaceae
42	Ain	<i>Terminalia acrenulata</i> Roth.	Combretaceae
43	Kumkum	<i>Mallotus philippinensis</i> (Lamk.) Muell.-Arg.	Euphorbiaceae
44	Tetu	<i>Oroxylum indicum</i> (Linn.) Vent.	Bignoniaceae
45	Vad	<i>Ficus benghalensis</i> Linn.	Moraceae
46	PandharaKhair	<i>Acacia ferruginea</i> DC.	Mimosaceae
47	Khair	<i>Acacia catechuoides</i> (Roxb.) Benth.	Mimosaceae
48	Palas	<i>Butea monosperma</i> (Lamk.) Kuntze	Fabaceae
49	Parijatak	<i>Nyctanthus arbor-tristis</i> Linn.	Oleaceae
50	Lokhandi	<i>Ixoraparviflora</i> Lamk.	Rubiaceae
51	Pangara	<i>Erythrina variegata var. orientalis</i> (Linn.) Merrill	Fabaceae
52	Avla	<i>Emblica officinalis</i> Gaertn.	Euphorbiaceae
53	Beheda	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae
54	Moha	<i>Madhuca indica</i> Gmel.	Sapotaceae
55	Shivan	<i>Gmelina arborea</i> Roxb.	Verbenaceae
56	Bahava	<i>Cassia fistula</i> Linn.	Caesalpinaceae
57	Bel	<i>Aegle marmelos</i> (Linn.) Correa	Rutaceae
58	Bivla	<i>Pterocarpus marsupium</i> Roxb.	Fabaceae
59	Atrun	<i>Flacourtia montana</i> Graham	Flacourtiaceae
60	Arjun	<i>Terminalia arjuna</i> (Roxb.) Wt & Arn.	Combretaceae
61	Ritha	<i>Sapindus marginatus</i> Vahl.	Sapindaceae
62	Vaivarna	<i>Crataeva tapia</i> Linn.	Capparidaceae
63	Sisam	<i>Dalbergia sissoo</i> Roxb. ex DC.	Fabaceae
64	Kahandol	<i>Sterculia aurea</i> Roxb.	Sterculiaceae
65	Humb	<i>Milliusa tomentosa</i> (Roxb.) Sinclair	Annonaceae
66	Bakul	<i>Mimusops elengi</i> Linn.	Sapotaceae
67	Khirni	<i>Manilkara hexandra</i> (Roxb.) Dubard	Sapotaceae
68	Shirish	<i>Albizia lebeck</i> (Linn.) Willd.	Mimosaceae
69	Chari	<i>Casearia elliptica</i> Willd.	Flacourtiaceae
70	Tamalpatra	<i>Cinnamomum tamala</i> Nees & Eberm.	Lauraceae
71	Putranjiva	<i>Drypetes roxburghii</i> (Wall.) Hurus.	Euphorbiaceae
72	Nirphanas	<i>Artocarpus incisa</i> Linn. f.	Moraceae

S. N.	TreeName	BotanicalName	Family
73	Kadamb	<i>Neolamarkianacadamba</i> (Roxb.) Bossler.	Rubiaceae
74	Kokam	<i>Garciniaindica</i> (Thou.)Chois.	Clusiaceae
75	Samudraphal	<i>Barringtoniaasiatica</i> (Linn.)Kurz.	Lecythidaceae
76	Kanakchampa	<i>Pterospermumacerifolium</i> (Gaertn.) Willd.	Sterculiaceae
77	Taman	<i>Lagerstroemiaspeciosa</i> (Linn.)Pers	Lythraceae
78	Kalamb	<i>Mitragynaparvifolia</i> (Roxb.)Korth	Rubiaceae
79	Kumb	<i>Careyaarborea</i> Roxb.	Lecythidaceae
80	Alu	<i>Meynaspinosa</i> Roxb.exLink	Rubiaceae
81	Haldu	<i>Haldiniacordifolia</i> (Roxb.)Ridsdale	Rubiaceae
82	Kala Kuda	<i>Holarrhenaantidysenterica</i> (Roth)A. DC.Kurchi	Apocynaceae
83	Bibba	<i>Semecarpusanacardium</i> Linn.f.	Anacardiaceae
84	Tendu	<i>Diospyrosmelanoxylon</i> Roxb.	Ebenaceae
85	Dev Babhul	<i>Acaciafarnesiana</i> (Linn.)Willd.	Mimosaceae
86	Dalchini	<i>Cinnamomumverum</i>	Lauraceae
87	F tsiela	<i>Ficustsiela</i> Roxb.	Moraceae
88	Varas	<i>Heterophragma quadriloculare</i> (Roxb.)K.Schum.	Bignoniaceae
89	Dandus	<i>Dalbergialanceolaria</i> Linn.f.	Fabaceae
90	Surangi	<i>Mammealongifolia</i> Planch.&Triana	Clusiaceae
91	Kavas	<i>Firmianacolorata</i> (Roxb.)Br.	Sterculiaceae
92	Mahogani	<i>Swetiniamacrophylla</i> King	Meliaceae
93	Padal	<i>Stereospermumchelonoides</i> (Linn.f.) DC.	Bignoniaceae
94	Kusum	<i>Schleicheriaoleosa</i> (Lour.)Oken	Sapindaceae
95	Chandan	<i>Santalumalbum</i> Linn.	Santalaceae
96	Datrang	<i>Ehretialaervis</i> Roxb.	Ehretiaceae
97	Chanda	<i>Macarangapectata</i> Muell.-Arg.	Euphorbiaceae
98	Ixorabrachiata	<i>Ixorabrachiata</i> Roxb.exDC	Rubiaceae
99	Karvat	<i>Ficusaperima</i> Roxb.	Moraceae
100	Ashok	<i>Saracaasoka</i> (Roxb.)deWillde	Caesalpiniaceae
101	Sisvi	<i>Dalbergialatifolia</i> Roxb.	Fabaceae
102	Madhucalongifolia	<i>Madhucalongifoliavar latifolia</i> (Koenig)McBride	Sapotaceae
103	ChinaiMendhi	<i>Lagerstroemiaindica</i> Linn.	Lythraceae
104	Jaiphall	<i>Myristicafragrans</i> Linn.	Myristicaceae
105	Asupalav(M)	<i>Polyalthialongifolia</i> (Sonn.)Thw. <i>varangustifolia</i>	Annonaceae
106	Dalbergiapaniculata	<i>Dalbergiapaniculata</i> Roxb.	Fabaceae
107	Bhorsal	<i>Hymenodictyonorixense</i> (Roxb.) Mabberley	Rubiaceae

S. N.	TreeName	BotanicalName	Family
108	Kavath	<i>Feronialimonia</i> (Linn.)Swingle	Rutaceae
109	Dikemali	<i>Gardeniaresinifera</i> Roth	Rubiaceae
110	Karmal	<i>Dilleniaindica</i> Linn.	Dilleneaceae
111	Shami	<i>Prosopiscineraria</i> (Linn.)Druce	Mimosaceae
112	Payar	<i>Ficusarnottiana</i> (Miq.)Miq.	Moraceae
113	Nana	<i>Lagerstroemiaparviflora</i> Roxb.	Lythraceae
114	Jambha	<i>Xylixycarpa</i> (Roxb.)Taub.	Mimosaceae
115	Charoli	<i>Buchanania</i> alanzanSpreng.	Anacardiaceae
116	Phalsa	<i>Grewiaasiatica</i> Linn.	Tiliaceae
117	ChotaTaman	<i>Lagerstroemiathoreli</i> Gagnepin	Lythraceae
118	Kajra	<i>Strychnousnux-vomica</i> Linn.	Loganiaceae
119	Tembhurni	<i>Diospyros</i> malabarica(Desr.)Kostel	Ebenaceae
120	Rudraksha	<i>Elaeocarpussphaericus</i> (Gaertn)K Schum	Elaeocarpaceae
121	Litsea	<i>Litsea</i> involucrata(Retz.)Almeida	Lauraceae
122	Pendri	<i>Catunaregamuliginosa</i> (Retz.) <i>Sivaranjan</i>	Rubiaceae
123	Pipli	<i>Ficus</i> infectoriaRoxb.	Moraceae
124	Tambada Kuda	<i>Wrightia</i> arborea(Dennst.) Mabberley	Apocynaceae
125	Bondara	<i>Lagerstroemia</i> lanceolataWall.	Lythraceae
126	Ficusparasitica	<i>Ficus</i> parasiticaKoen.exWilld	Moraceae
127	Gela	<i>Catunaregam</i> spinosa(Thunb.) Tiruveng	Rubiaceae
128	Hansoli	<i>Microcos</i> paniculataLinn.	Tiliaceae
129	Ixoraarborea	<i>Ixora</i> pavettaAndrews	Rubiaceae
130	Raktachandan	<i>Pterocarpus</i> santalinusLinn.F.	Fabaceae
131	Tabernaemontana	<i>Ervatamia</i> alternifolia(Linn.) Almeida	Apocynaceae
132	Yellowsilkcottontree	<i>Cochlospermum</i> religiosum(Linn.) Alston	Cochlospermaceae
133	Chiknelimbu	<i>Triphasia</i> trifolia(Burm.f.)Wils.	Rutaceae
134	Kapur	<i>Cinnamomum</i> camphora(L.)Sieb.	Lauraceae
135	Acacialeucophloea	<i>Acacia</i> leucophloea(Roxb.)Willd.	Mimosaceae
136	Dhavda	<i>Anogeisus</i> latifolia(Roxb.ExDC.) Guillemin&Perottet	Combretaceae
137	Ficus Nitida	<i>Ficus</i> nitidaThunb.	Moraceae
138	Hirda	<i>Terminalia</i> chebulaRetz.	Combretaceae
139	Kydiacalcina	<i>Kydiacalcina</i> Roxb.	Malvaceae
140	Lavang	<i>Syzygium</i> aromaticum(Linn.) Merrill&Perry	Myrtaceae

Annexure2:TreespeciessuggestedforRoadsideandIndustrialPremises

S. N.	BotanicalNames	Family	CommonName	Pollutant
1	<i>Acacianilotica</i>	Fabaceae	Babhul	SO2, Flyash
2	<i>Aeglemarmelos</i>	Rutaceae	Bel	SPM, SO2, NO2
3	<i>Alstoniascholaris</i>	Apocynaceae	Saptparni	SPM, SO2, NO2
4	<i>Artocarpusheterophyllus</i>	Moraceae	Phanas	SPM, SO2, NO2
5	<i>Azadirachtaindica</i>	Meliaceae	Neem	SO2
6	<i>Cassiasiamea</i>	Fabaceae	Kashid	SPM,SO2
7	<i>Cordiadichotoma</i>	Boraginaceae	Bhokar	SPM
8	<i>Dalbergiasissoo</i>	Fabaceae	Sisam	SO2
9	<i>Ficusbenghalensis</i>	Moraceae	Vad	SPM, SO2, NO2
10	<i>Ficusreligiosa</i>	Moraceae	Pimpal	SPM, SO2, NO2
11	<i>Lagerstroemiaspeciosa</i>	Lytraceace	Taman	Dust
12	<i>Mangiferaindica</i>	Anacardiaceae	Amba	SPM,NO2
13	<i>Mimusopselengi</i>	Sapotaceae	Bakul	SPM, SO2, NO2
14	<i>Peltophorumpterocarpum</i>	Fabaceae	Sonmohar	SPM
15	<i>Phoenixsylvestris</i>	Areaceae	Shindi	SPM
16	<i>Pithecolobiumdulce</i>	Fabaceae	Vilayatichinch	SO2
17	<i>Plumeriaalba</i>	Apocynaceae	Chapha	SO2
18	<i>Saracaasoka</i>	Fabaceae	Ashok	Dust
19	<i>Sesbaniasesban</i>	Fabaceae	Agasti	SO2
20	<i>Tamarindusindica</i>	Fabaceae	Chinch	SPM, SO2, NO2

Annexure3:TreespeciessuitableforPark

S. N.	BotanicalNames	Family	CommonName
1	<i>Albizialebeck</i>	Fabaceae	Shirish
2	<i>Buteamonosperma</i>	Fabaceae	Palas
3	<i>Careyaarborea</i>	Lecythidaceae	Kumbha
4	<i>Cassiafistula</i>	Fabaceae	Bhava
5	<i>Couropitaguianensis</i>	Lecythidaceae	Kailaspati
6	<i>Dalbergialanceolaria</i>	Fabaceae	Dandus
7	<i>Dilleniapentagyna</i>	Dilleniaceae	Karmal
8	<i>Gardeniajasminoides</i>	Rubiaceae	Anant
9	<i>Meliaazardirach</i>	Meliaceae	Bakneem
10	<i>Millingtoniahortensis</i>	Bignoniaceae	Akashneem
11	<i>Mimusopselengi</i>	Sapotaceae	Bakul
12	<i>Nyctanthesarbor-tristis</i>	Oleaceae	Praijatak
13	<i>Saracaasoka</i>	Fabaceae	Ashok
14	<i>Thespesiapopulnea</i>	Malvaceae	Bhend

Annexure4:TreespeciessuitableforGovernmentandPrivatePremises

S. N.	BotanicalNames	Family	LocalName
1	<i>Aphanomyxispolystachya</i>	Meliaceae	Rohitak
2	<i>Artocarpusheterophyllus</i>	Moraceae	Phanas
3	<i>Dilleniapentagyna</i>	Dilleniaceae	Karmal
4	<i>Diospyrosmelanoxylon</i>	Ebenaceae	Tendu
5	<i>Drypetesroxburghii</i>	Euphorbiaceae	Putranjiva
6	<i>Ficusbenghalensis</i>	Moraceae	Vad
7	<i>Ficus elastica</i>	Moraceae	IndianRubberTree
8	<i>Ficusreligiosa</i>	Moraceae	Pimpal
9	<i>Holopteliaintegrifolia</i>	Ulmaceae	Vavla
10	<i>Madhucaalongifolia</i>	Sapotaceae	Mahua
11	<i>Mammeasuriga</i>	Clusiaceae	Surangi
12	<i>Mangiferaindica</i>	Anacardiaceae	Amba
13	<i>Manilkarahexandra</i>	Sapotaceae	Khirni
14	<i>Schleicheraoleosa</i>	Sapindaceae	Kusum
15	<i>Syzigiumcumini</i>	Myrtaceae	Jambul
16	<i>Terminaliabellerica</i>	Combretaceae	Beheda
17	<i>Terminaliachebula</i>	Combretaceae	Chebula




Dy. Commissioner
Ahmednagar Corporation, Ahmednagar