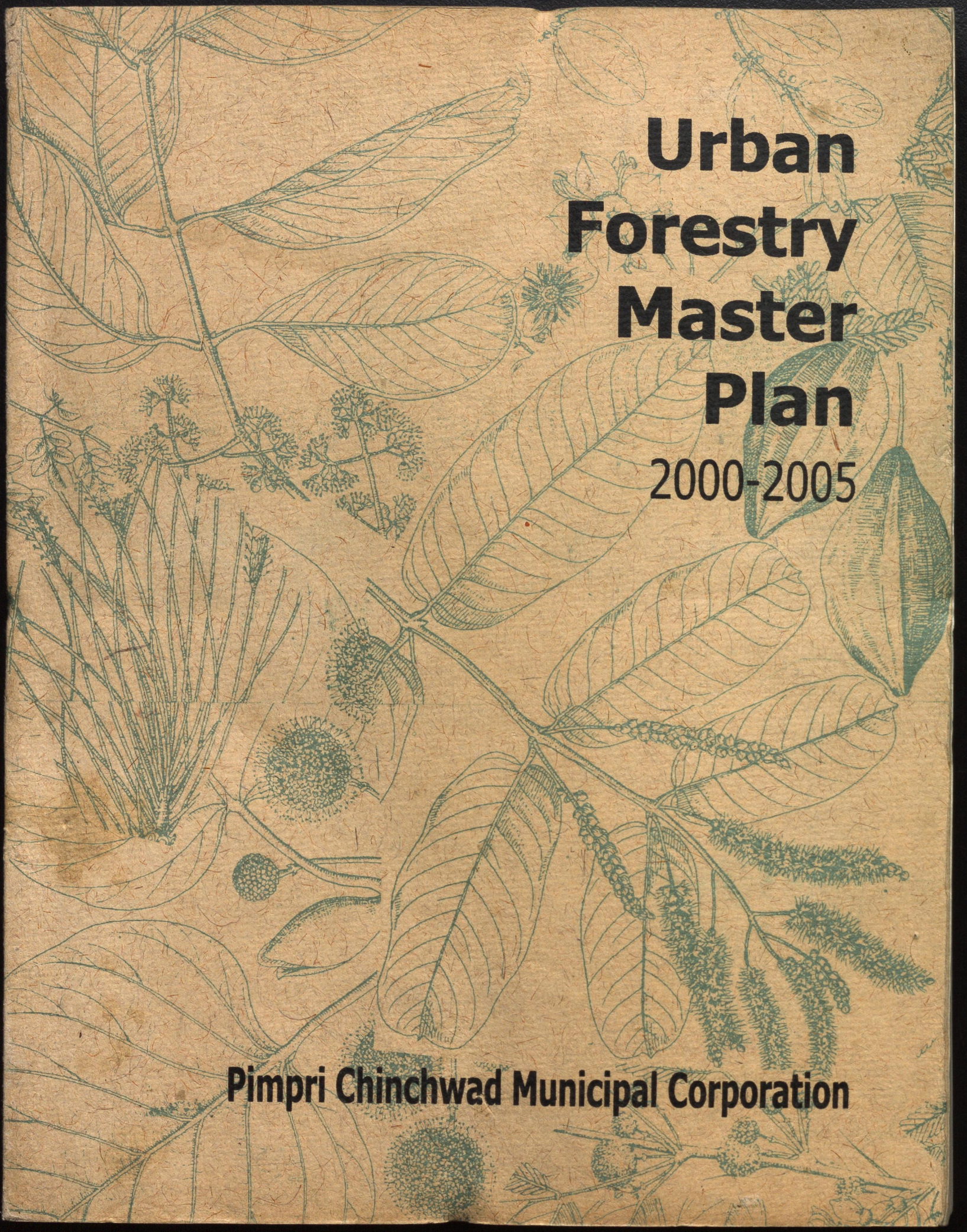
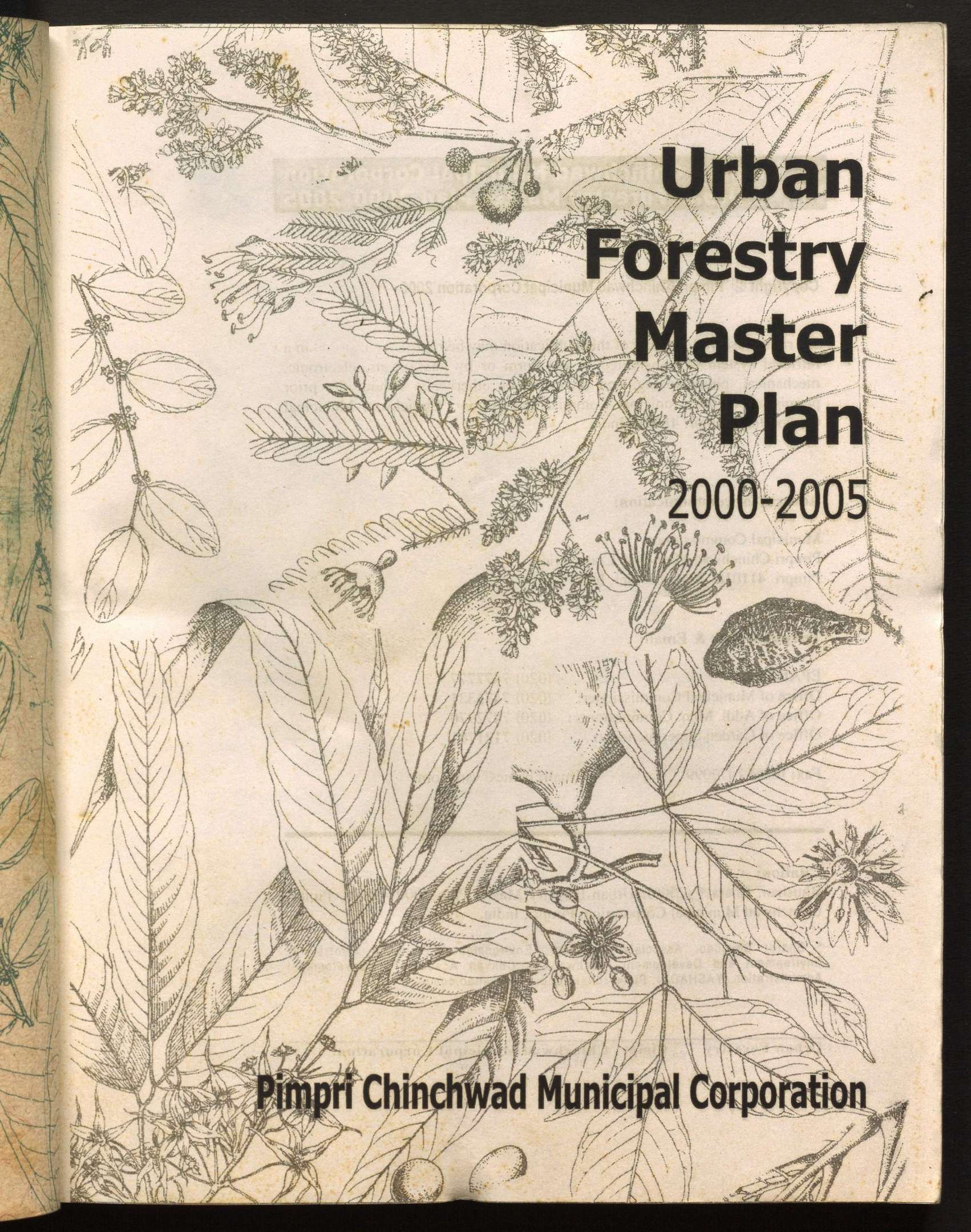


Urban Forestry Master Plan

2000-2005

Pimpri Chinchwad Municipal Corporation





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Pimpri Chinchwad Municipal Corporation
Urban Forestry Master Plan 2000-2005

Urban Forestry Working Group

The idea of launching the Urban Forestry Project (1999-2000) was mooted by the Tree Authority, which is the statutory body created in pursuance of the legal directives of the Government. The Working Group was formed for this purpose with the following members:

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A Sub-Committee of the Tree Authority provided the Working Group with the necessary authorisation and collaboration from within the Pimpri Chinchwad Municipal Corporation. The Sub-Committee comprised of the Convenor, Shri Amrut Parhad, Opposition Leader, Shashikant Chaundikar, Member, Tree Authority, and Shri R. B. Konde, Additional Commissioner, PCMC. The Sub-Committee of the Tree Authority is entrusted with the responsibility of planning and executing the project. The present manual is the result of the splendid coordination and support received by the Working Group and the Sub-Committee from the following officers and personnel of the Pimpri Chinchwad Municipal Corporation.

1. Shri S. P. Salunke, Garden Superintendent.
2. Shri E. H. Bandwal, Horticulture Supervisor
3. Shri S. D. Jadhav, Deputy Engineer
4. Shri Neelkanth Poman, Computer Officer
5. Shri Prashant Shimpi, Town Planner
6. Shri A. K. Davle, Junior Engineer

Urban Forestry, as distinct from naturally evolved forests, is an undertaking, which has its own conditionalities and prescriptions. Here, a planned and systematic human intervention is the essence of the matter. It was therefore felt that persons with experience, commitment and expertise should be brought together in the form of a Working Group. As a first step of the Urban Forestry Project, the Working Group has prepared the present Handbook, "Urban Forestry Master Plan", which will serve as a very useful guidance manual for policy makers and the administrators in understanding the nature of the proposed endeavor and carrying it out.

Tree plantation has been a pre-dominant developmental activity of the Pimpri Chinchwad Municipal Corporation since many years. Long before 'Environmentalism' became the order of the day, the Municipal Corporation evinced keen and sustained interest in enriching the natural setting of the city, vividly illustrated by the Durga Hill Project. During the recent years the

concept of the Environmental Balance, Ecosystem Preservation and Sustainable Development have become well entrenched in public consciousness. They are no more confined to fringe groups of environmentalists. They now constitute a fundamental social urge.

In the recent years, the Government of India has passed laws for the purpose of regulating and enhancing the natural resources. The 74th Constitutional Amendment and the subsequent changes in the Bombay Provincial Municipal Corporation Act have placed mandatory responsibilities on the local self-government in this respect. Placed in this perspective, the proposed Urban Forestry Programme of the PCMC is both a social and formal gesture towards the goal of building a healthy and prosperous community.

The present manual aims at providing practical guidance to the planners administrators of the PCMC on the creation and management of Urban Forestry in and around the city. The manual states that the management problems of urban forestry are more complex than the forests in the wholly natural surroundings. This is due to the greater stress to which trees are subjected in urban areas. Such a stress is all the more acute in Pimpri Chinchwad, it being an industrial township. Therefore, decisions in regard to selection of sites, plant species, plantation patterns and soil management will have to be made with scientific care. The manual contains adequate guidance on these and related issues. It further presents the plan of execution of the Project.

The process started by the manual will not run parallel to the ongoing activities of the PCMC in the field. It would rather complement and strengthen those efforts, while introducing changes wherever they are desirable.

The manual starts with the discussion on the concept of Urban Forestry, its utility and technical determinants. This is followed by the analysis of Pimpri Chinchwad City's potential for an urban forestry programme. It is gratifying that the Working Group has expressed itself positively on this point. The manual further presents an extensive discussion on the various possibilities of community participation in the programme. This is the most vital and indispensable aspect of the programme. Without it the Urban Forestry Programme just cannot sustain. Closely linked with this is the discussion of the various methods of orienting the citizens, the business and other social entities for the purpose. All this analysis along with the checklist of plant species will serve as the basis of the project.

The Sub-Committee has thus created a sound basis for the execution of the Urban Forestry Project. Generating the necessary information from the Survey, Tree Census, municipal records and many other sources, and

processing it has been a tremendous task. The PCMC officials, especially the Garden Department, have worked with full force to make the job successful.

B. I. Nagarale, IAS
COMMISSIONER
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Urban Forestry Master Plan
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Preface

Urban studies and environmental research conducted in various cities around the world, including India, have shown that stream and river degradation occurs where there is a high level of urbanization in or near a watershed. Almost without exception, streams on both sides of the Western Ghats towards cities with population densities above 700 persons per square kilometre show moderate to severe use impact as measured by biological indicators, regardless of whether regulated pollutants are restricted or present. Construction site and streambank erosion, in-place contaminants, runoff from land disposal sites, and physical habitat modifications are urban pollutant sources identified by the Maharashtra Pollution Control Board's assessments. Problems can be addressed by considering comprehensive and practical Best Management Practices (BMP's), such as stream and wetland protection ordinances, high flood level management, desiltation and silt detention basins, and effluent source controls.

This manual prepared by the Pimpri Chinchwad Municipal Corporation will empower land and property owners, organizations, and local ward officers by providing clear information regarding low-cost techniques for improving environmental conditions along waterbodies, in green zones and urban settlements. It will specifically address several key regional and city-wide concerns, including nullah and stream maintenance, river bank stabilization, flood level buffer restoration, aquatic habitat, and incorporation of roadside and hill area afforestation. The result will be improved municipal planning and management, a better and accurate public consciousness regarding the value of healthy waterbodies, and increased support for environmental improvement that will sustain and accelerate local economic development.

The techniques presented in this Urban Forestry Management Plan for the Pimpri Chinchwad Municipal Corporation have been previously used in a number of locations around the world, including the best-known urban forestry and watershed demonstration projects. These highly successful projects are the ones at Butterfield Creek and Flint Creek, which are in the upper reaches of the Illinois River basin of the United States of America. Municipal bodies need to plan and support urban forestry because the waterbodies are under severe impact and typical of many cities with irrepairable environmental problems. The purposes of the urban forestry projects are to identify and restore the causes of negative impact on waterbodies with support from people and officials.

traffic and over-crowding, loss of natural vegetation and its aesthetic value, etc. Moreover, due to high population growth and development of slums, the urban life gets degraded.

Crowded cities are an environmental hazard. Not only do the migrant end up in squalid settlements or slums, but also the growing city population uses more resources than its rural counterparts. Cities also take up valuable forest areas and agricultural lands. The increased demand for firewood and other forest products leads to deforestation processes. Forests are also denuded to make way for farming, towns, roads, human settlements, dams, industries, etc. The devastating effects of deforestation in India include soil, water and wind erosions, estimated to cost over 16,400 crores every year. Moreover congestion of cities leads primarily to air and water pollution, that are the starting points for many diseases.

The picture in the next twenty years or so would be that India would become increasingly industrial and there would be even more people (about 70%) in urban areas. Slum settlements arise in metropolitan cities due to acute shortage of housing and the migrants are not able to find a dwelling. There would be no basic amenities of foods, drinking water supply, drainage, roads, transport etc. leads to many social evils and ill health. Slum dwellers and other urban peoples face environmental, social, economic, health, educational and cultural problems.

The higher rate of urbanisation and increasing population growth rates has resulted in deforestation and also increased production of waste from both the production and consumption process. Moreover significant gaps continue in the knowledge of waste sources, its proper treatment and the effects of wastes on air, water or land and singly or in combination on population. The measures such as banning of polluting industries or the import of hazardous wastes for recycling may not prove adequate solutions and cannot wholly prevent long-term environmental damage.

Urbanisation in India and Maharashtra

The State of Maharashtra (area = 3.08 lakh sq. km. being 9.59 per cent of the country's total area) has a total population of 7.89 crores which is 9.33 per cent of the country's total population as per 1991 census. The total Urban population in the State is about 3.05 crores which is about 39 per cent of the total population of the State and13.77 per cent of the country's total population. The level of urbanisation (39%) compared to national average of 21.31% is the highest in the country.

The level of urbanisation in Maharashtra is not uniform. The Mumbai-Pune region dominates the urban scene while there are considerable regional disparities. As per 1991 census, there are 32 towns in the State having the population of 1 lakh and above. This is a benchmark for delineation of urban settlements.

The major thrusts of the industrial location and the urban development policy of the State are on containing the uneven growth and promoting growth of the economically backward areas of the State, thereby correcting the regional imbalance in growth and development.

In the urban areas of developing countries like India, there is an evident deterioration in the physical environment and quality of life, caused by the widening gap between demand and supply of essential services. Positioning identified linkages and gaps from development, with a time-bound reporting schedule would lead towards a comprehensive matrix for planning. Providing detailed linkages and identifying gaps between policy and performance would help with the creation of a holistic environmental action plan.

Localised planning for environment and development faces a repetitive problem of lack of an appropriate and organised information base. It is essential to be plan faster, create and position strategies to recover deteriorated or degraded habitats by focussing towards positive nature conservation mechanisms. The effective conservation and rational use of natural resources, protection and improvement of human environment is vital for national well being.

For effective environmental protection, appropriate planning needs much more than adequately quantified data of imminence critical environmental problems, and approximation can be made for those problems on which we must act now or soon to avoid endangering the stability of the biosphere.

Imperatives for urban forestry planning

The major negative impact of urbanisation is the degradation of forestlands. In the urban areas the natural vegetation are existing as scattered patches. As primary producers and the fundamental unit of bio-geo-chemical cycles, the plants plays a key role in the regulation of the environmental conditions such as pollution control, changing the climatic pattern, precipitation, wind, etc. Hence the preservation of ecological systems, and thereby ensuring a continued supply of life supporting resources, should be one of the main assets of environmental planning and management.

The major challenge is to make conservation and development are the twin criteria of human development, i.e. Planning to live off nature's dividend's rather than its capital. Planning is the rational and orderly thinking about ways and means for the realisation of certain goals. The planning should be comprehensive and it should include the full range of physical, biological and human factors operating the region.

The planning of an environment is for providing healthy living conditions and minimising the damages to the physical and mental health of mankind's. This can be achieved only by developing the total environment at the micro and macro levels.

Planning for harmonious development should recognise the holistic relationship between the environment and the development processes taking place in the country. Such planning is possible only on the basis of a comprehensive appraisal of environmental issues, particularly economic and ecological.

Regional planning should be based on the demands of local populations, especially the urban poor who mainly depend upon the nature for their food. Decision making on environment and development issues requires aware about the unity of nature and man and context specific information regarding both local resources and the needs of particular target groups.

The Sixth Five-Year Plan clearly emphasises the policy of environmental management as follows; " It is imperative that we use our renewable resources of water, soil, air and vegetation to sustain our economic development. Over exploitation of these resources is visible in soil erosion, floods, deforestation, siltation, floral and wildlife resources. The depletion of these resources tends to be irreversible, since the whole population depends on these natural resources to meet their basic needs i.e., fuel, fodder and land, it has meant a deterioration in their standard life."

Environment management should be demand an impeccable and accurate knowledge base of the physical interactions in nature, and a constant effort to reach acceptable and tenable trade-off between what is essential now and what is needed to secure future. Development, agricultural and industrial processes lie at the heart of the nation. For a nation to progress socially, economically as well as politically, development process in different fields are very necessary. But in developing countries like India, where hunger and poverty are still the order of day, the purpose of urban environmental management is more to secure the present.

Aims and Objectives

The aim is to provide practical advice on the development of urban and urban fringe areas by the establishment and subsequent management of urban forests or woodlands or landscapes. This Plan proposes a series of management prescriptions aimed at producing robust systems where well chosen trees planted on properly prepared sites will grow healthily with a minimum of aftercare. Chosen carefully for the appropriateness of their location and ultimate size, such trees will provide a continuous but varied setting for housing and industry and most important of all, for people.

Trees situated in urbanised areas require management techniques that differ from those trees situated in other, less developed areas. Since the trees in more developed areas are subject to greater stress (e.g., soil compaction, air and water pollution, heat accumulation, vandalism, etc.) than trees in more natural conditions, a rigorous program must be implemented to monitor, select, and maintain the tree species located in urban and urban fringe areas.

Because trees are living organisms and are susceptible to various problems (i.e., excessive age, pest attack, storm damage, and vandalism), the tree resources in urban and urban fringe areas must be managed accordingly. These difficulties may cause the health of individual trees to decline and possibly become safety hazards requiring immediate action; therefore, routine pruning, tree removal, and replacement of problem individuals or species must be part of an installation's Urban Forestry Management Plan.

Urbanised trees require perpetual attention and maintenance. This manual is concerned with the unique conservation and management of urban forest resources under either authorised government or non-governmental organisations. The manual provides general soil, climate, and cultural information relating to urban forest management and tree maintenance.

Techniques for urban forestry management under a wide range of conditions are discussed, including measures for tree and shrub selection, planting sites and preparation, transplanting trees, preserving existing trees, nutrient and soil management, pruning, tree-hazard management, integrated pest management, and street tree inventories.

Urban environmental planning and management is essential to identify and propose a process that over time should improve health of urban dwellers and encourage and sustain diverse economic productivity, reduce environmental hazards, and protect natural resources. The positive nature conservation mechanisms mainly depend on the biotic factors of the environment,

especially the plant kingdom, which show vast diversity with respect to the changing environment. The proposal on urban forestry planning and management in the project region aims to assess status and action as follows:

- Identify and list out the diversity of native plants in the Pimpri Chinchwad Municipal Corporation region.
- To record the known and perceived environmental values of native plants in the Pimpri Chinchwad Municipal Corporation region.
- Identify and list the environmental issues in the study area.
- Identify through analysis a relative matrix of urban native plant diversity and environmental values.
- To provide techniques and cultural information relating to urban forestry management and tree maintenance.
- To renew natural resources and reduce environmental problems.
- To restrict and regulate the exploitation of natural resources by increasing environmental perception and public awareness.

For sustainable development conservation and management of natural resources (forests, flora and fauna, etc.) is very necessary. Conservation has been defined as " the management for the benefit of all life including human kind of the biosphere so that it may yield sustainable benefit to the present generation while maintaining its potential to meet the needs and aspirations of future generations". Forests dominated by trees and other floras contribute substantially to the economic development of country by providing goods and services to the people. It also plays an important role in enhancing the quality of environment by influencing the life supporting system.

Justification for preparing an urban forestry master plan

Due to rapid pace of urbanisation, the pressure for demands of forest products particularly timber, fuel wood and fodder has increased manifold to the detriment of our limited forest resources. The estimated annual requirement of timber and fuel wood for the residents of the Pune district would be about 4 lakh and 40 lakh cubic meter respectively, which is expected to go up to 6 lakh and 60 lakh cubic meter by the beginning of next century. The present availability of timber from the forest areas is almost zero, where as the availability of firewood is about 10,877 cubic meters (1980-81) which is only

a fraction of the total estimated requirement. So the magnitude of pressure on these forests beyond comprehension due to wide gap between the availability and demand of these basic raw materials of almost daily use.

This huge gap cannot be expected to be bridged merely by scientific management of these forests, as the area under forests is gradually shrinking but the tide of human population is sweeping away and nullifying all efforts for afforestation done by the foresters. Hence it indicates the need for a major thrust on urban forestry or farm forestry on a war footing. This could utilise all available government as well as private wastelands suitable for plantation of trees in order to make the country side self reliant at least for meeting the needs of local people. So that the limited forest area could be preserved intact for the protection of environment to ameliorate the climate and ecological conditions and to counter natural calamities like floods or droughts etc.

Intensified improvements for overall stocking of forests could include the pasturelands, towards afforestation and regeneration of denuded areas. The protective role of these forests has also been dully recognised and measures have been prescribed to improve the stocking in protection forests. This is also help to enhance their capacity to produce at least minor forest products, which can be exploited with out any adverse effects on tree cover and deterioration of forests.

This report provides technical information for Natural Resource Management personnel engaged in urban forest management on urbanised regions. Properly applied, the principles and practices prescribed in this manual will complement ongoing management efforts, conserve natural resources on urban lands, maintain and improve the appearance of urban and urban fringe areas, and promote safety and efficiency.

The proper management of natural resources in urbanised areas is in conformance with wide array of environmental laws and regulatory requirements (e.g., the Sikes Act of 1960, National Environmental Policy Act of 1969) that mandate the thoughtful preservation of natural resources on urban lands.

2 Geophysical concerns and land use

Geophysical concerns in Pimpri-Chinchwad

The urban and its adjoining rural environment need to be in equilibrium for successful and sustainable regional development. The great exponential increase in population in the Pimpri and Chinchwad region from a rural hinterland of Pune, along with the onset of industrialisation has resulted in sharp rises of consumption levels. Industrialisation and numerous neighbouring irrigation demands have resulted in increasing consumption of water, mainly reservoir and ground water. Over exploitation of this crucial resource, increased industrialisation and changes in agricultural land tenure has led to deterioration in quality of water and unpredictable fluctuations in water levels.

Pimpri-Chinchwad (*alt.* 530 m. to 566 m. above MSL.) is located east-west between the Indrayani and Pawana Rivers. There are no two opinions that urban growth in Pimpri and Chinchwad has contributed significantly to the nation's diverse initiatives in development and self-reliance. The pace of growth, if accelerated, often leads to compromises vis-à-vis quest for more amenities and infrastructure for leading a better and more comfortable life. Industrial and agricultural development often has a net degrading effect on the natural resources, mainly essential materials like water and soil, and energy. Pune, Pimpri and Chinchwad areas along with nearby industrial areas like Ranjangaon, Talegaon, Chakan among others, have numerous small, medium and large industries creating air and smoke emissions, waste effluents, sound pollution and deforestation.

Rapid population and industrial growth leads to pollution hazards in degraded ecosystems. Groundwater poisoning becomes a reality in the near future. Industrial effluents and sewage wastes leaching into underground aquifers make groundwater unfit for human consumption. This could also be true for agricultural use. The concentration of many trace elements like lead, copper, zinc, chromium, nickel etc., need to be recorded on an annual basis. Presence of these elements in higher levels than permissible limits is an indication of degradation of water quality and sequential health hazards.

The distribution and abundance of all natural resources are determined to some extent by abiotic features of the environment. Measurement of

environmental variables forms an integral and planned part of most ecological urban studies. The choice of measurement technique is diverse, since even simple variables such as temperature can be measured with various methods. Most municipal engineering and building works are constructed on or in a relatively thin layer of the earth's crust. This thin layer comprises soils, rocks, air and water. The number of combinations of these elements and their variations can produce totally different infinite site conditions. *It is doubtful if any two sites anywhere on the surface of the earth are the same.* Each one will have its own peculiarities and each one will react in a different way to the works of the civil engineer.

Municipal planning, implementation and management in engineering works need to understand how the site will respond to design and impact of *in situ* conditions. Site investigations can be said to be the study of the environment and the ground conditions at the location of civil engineering and building works. It should be the object of all municipal engineering project profiles in the Pimpri Chinchwad Municipal Corporation to describe in practical terms, the possible impact on the environment at the site of any future project. The municipal project planning reports in future, in deference to the 74th Amendment, should recognise the difference between site investigations and ground investigations.

Site investigations for urban forestry should cover all the techniques and enquiries that can be used to gain information on a particular site whether this is by the study of maps or aerial photographs, site reconnaisance, borewell studies, or local transport infrastructure and access, urban services, rainfall etc. Ground investigations include the in-depth investigation of material beneath a project site. These reports should however be relevant to anyone connected with civil engineering, including engineers, technical officials, non-officials, architects and builders. The specialised ground survey project report and its environmental impact, should be understood by all diverse groups of citizens, officials, elected representatives and non-governmental organisations.

The role of geophysical studies for urban forestry and regional planning is symbiotic in its definition. Various important concerns and imperatives can be listed here:

(a) The variability of project sites and the need for their individual treatment.

(b) The importance of the interaction between the structure and the geophysical features on ground and in the vicinity of project sites.

(c) The development of an environmentally sustainable, safe and economic engineering project solution that includes all factors which might affect the proposed works.

(d) Need for natural resource based site investigations to be carried out as effectively as possible within a fixed budget.

It is important that site studies indicate, within the limits of practicability, a complete list of geophysical conditions that would impact on civil engineering necessities and natural resources. There cannot be any single standard methodology or a standard list of methods because the method and amount of site studies and impact assessments would vary from site to site. Intensive investigations will be necessary on sites with highly variable subsoils and on sites where the risk of failure must be kept to an absolute minimum, such as dams and bridges or subways. Serviceability criteria must consider natural resource diversity and seasonal changes. The site investigation and impact study must be as effective as possible within municipal budgetary considerations and limits. Careful planning is needed in order to ensure that compromises between site study plans and loss of natural resources are not irretrievable.

Carrying capacity and geophysical site surveys for urban forestry

The geophysical surface and below-surface survey when completed should provide recommendations regarding the suitability of the site for the proposed works with consideration being given to alternatives. It should indicate sustainability parameters for environment protection and nature conservation. The project site survey report should also provide a safe and economic design and indicate the best methods of construction by foreseeing potential environmental concerns. Predictability analyses should focus on minimising environmental problems.

Site investigations could also be carried out of an environmentally negative project to determine the cause and impact on local human settlements and the region. Investigations such as these are extremely important in terms of extending the Pimpri Chinchwad Municipal Corporation's holistic environmental interventions in ensuring that similar negative fallouts are avoided in future. The site report should also provide recommendations for any necessary remedial works. The project leader must build up his /her expertise of the advantages and limitations of various techniques and be able to recognise environment friendly strategies to use in specific conditions. The leader must also consider and provide a cost-friendly approach with options.

The Pimpri Chinchwad Municipal Corporation needs to be able to propose its development plan based on its carrying capacity. The status of natural and geophysical resources directly determines the carrying capacity with

reference to annual and geographical population growth. Carrying capacity studies need to focus on overall regional development in industrial, mining, tourism, human settlement sectors in the municipal area. This study has to be part of the Development Plan of the Corporation.

The Corporation needs to be able to provide a leadership role in enabling such studies to be carried out by local university and research agencies, non-governmental organisations and departmental officials. Critical issues need to be identified by the carrying capacity study through secondary and primary sources. Baseline status of the city's environment needs to be carried out in terms of air emission inventory, ambient air quality levels and micro-meteorological conditions. These are definite initial threshold indicators of environmental deterioration.

Air quality data needs to be estimated from numerous sample-stations, covering the entire municipal limits. Intensive air quality studies could possibly include various state-of-the-art atmospheric assimilative capacity studies, depending upon local scientific expertise. Primary data can always be included to support or question secondary data analyses.

Land use planning based on geophysical characteristics, needs to also develop predictive models of ambient noise pollution and potential unsafe locations, for example, educational or medical infrastructure near high-intensity traffic junctions, such as Jehangir Hospital and Medical Centre and Sassoon Hospital in Pune adjacent to the railway shunting yards. Planning therefore should indicate standards of noise levels in commercial, residential and silence zone areas during the day and night time. This has been achieved at various locations in Pimpri Chinchwad Municipal Corporation. However, noise-standards need to be assessed as a predictive site-specific parameter along with geophysical surveys. All annual plans and the Development Plan should therefore include carrying capacity studies on standard formats.

The Pimpri Chinchwad Municipal Corporation area between the Pawana and Mula Rivers constitutes the watershed of the Sahyadris towards the Deccan Plateau. This region is the hinterland of the catchment of Mulshi and Mawal Talukas. There are various regional watersheds identified around the Pimpri and Chinchwad settlements. However, most of the water supply originates from the Pawana reservoir, nearly 60 kilometres away. Carrying capacity studies need to be able to provide supportive capacity dimensions for the Development Report.

Industrial pollution along with intensive mining in the region has led to diverse levels of water composition. The water quality around the city's effluent discharge and quarries are reported to be highly mineralised in terms of bicarbonates, sulphates and phosphates. Limestone and other mining

contribute to high levels of dissolved minerals in the run-off and percolation. Dissolved oxygen content, including BOD and COD, needs to be monitored on a location-specific and daily basis at various sample-spots in most wetlands and waterbodies, including nallahs and borewells in the Pimpri Chinchwad Municipal Corporation area. Similar to mineral run-off, studies need to focus on impact of concentrations of solid and hazardous waste at dumpsites.

Ecosystem-specific geophysical data and planning

Understanding natural ecosystems in urban areas and surrounding regions is critical to human progress, survival and prosperity. As awareness of ecosystem interactions at all levels from global science to local management increases, greater demand is being placed on data and information resources. Ecosystem data and information activities need to be computerised and maintained on electronic databases at the Pimpri Chinchwad Municipal Corporation.

Methods are constantly being developed worldwide for data and information synthesis that can be shared between applications and across scales. The Corporation's approach in electronic information storage systems need to support the development of data and information products from a systems perspective and attempt to apply them to current programs for administration, development research, planning and management, policy, and decision making.

Ecosystem data and information activities need to be dedicated to scientific integration and publication of ecosystem databases and related information. Systemic compilation and retrieval will further Pimpri Chinchwad Municipal Corporation's mission of promoting local and participatory environmental stewardship, ecosystem health and sustainability, and description or prediction of changes in the region's environment in relation to ecosystem dynamics.

The Corporation would need to complete its electronic information database before December 1999 in order to enable all administrative functions to be completely compliant with state-of-the-art technology in civil and environmental engineering. Future initiatives at the Pimpri Chinchwad Municipal Corporation for information databases and their areas of support need to be identified, discussed and approaches defined for annual budgets and implementation. The various parameters in this regard are presented below.

Objectives for geophysical information systems and electronic databases

Rigorous methods need to be employed for data integration and quality assessment to produce useful data and information products for the geophysical resources and ecosystem sciences. Advanced multi-secotral and analysis capabilities can be achieved through the use of Geographic Information Systems and should be a central focus of the Pimpri Chinchwad Municipal Corporation. Metadata structures could focus on various critical urban sectors.

- Build regional and local ecosystem characterizations that effectively combine existing observations and model-based predictions of change.
- Better understand the effects on ecosystems of environmental or human-induced changes and the link between environmental impact and human society.
- Advance the application of appropriate methods for data integration and information synthesis in ecosystems science.
- Transfer data, information, and capabilities for ecosystems analysis to the broadest possible user base.

These inter-departmental sectors could also be across the Pimpri Chinchwad Municipal Corporation, the Pune Municipal Corporation, the Pune District, the State and Central Governments. Provision of efficient information flow derived upon sectoral utilities and status of resources can serve administrative capability within and across governments.

Metadata structures of geophysical and economic end-products.
(Enables multi-sectoral municipal data integration and quality assessments.)

Metadata Structure Impact and economics of extraction of geophysical resources	**End-Products and Data Information Sources** Sectoral and economic data sources on seasonal and monthly basis
Energy and Natural Resources Industry focused audit, tax, corporate finance and consulting services to the market segments of the energy and natural resources industries.	• Extractive industries: oil and gas, minerals, metals, coal, timber, forestry, water, quarrying • Process industries: refineries, liquefaction, petrochemicals, smelters, mills, waste management • Power generation: gas, oil, nuclear, hydro, wind. • Distribution: electricity, utilities, gas utilities, water utilities, fuel and petroleum, dealers and retailers, petrochemicals • Transportation: pipelines, grids, tankers • Service industries: drilling contractors, oilfield services, mining contractors, geological and geophysical testing
Environment Assistance in identifying and managing environmental risks	• Assessment of costs of compliance with municipal and other relevant environmental regulations, e.g. solid waste management imperatives. • Assessment of liabilities for contamination and environmental damage, e.g. water and air pollution. • environmental compliance investigations, e.g. impact analysis of civil engineering and hydroelectric projects • Development and review of environmental management systems, e.g. recycling and reuse of paper in offices • Advice on environmental reporting and disclosure, e.g. local industries and municipal effluent discharge and treatment systems. • Review and assessment of environment/regulation policy, e.g. Municipal annual environmental status and action plans.

3 Urban planning and forestry management

Definition of urban forestry

The many benefits trees provide to the communities in which they are located justify the allocation of resources necessary for the implementation of Urban Forestry programs on urban installations. Wildlife habitat, microclimate modification (i.e., wind breaks, shade, dissipation of "city heat island"), water quality enhancement, soil conservation, and aesthetic improvement are just a few of the positive attributes provided by properly selected and maintained trees in the urban landscape.

Nowadays many developed and developing countries are give priority for the urban forests and applied the term urban forestry to many situations. This has led to give an imprecise definition to the term urban forestry. The climate and geographical features of Pimpri Chinchwad Municipal Corporation area are suitable for moist deciduous forests. In the Pune district area there are six main types of forest region.

1. The first type (Type 8A/C2) is the Western Sub-tropical Hill Forests exists mainly in the rural areas. The formation lies in the heavy rainfall tract in the West, occupying the high elevations of the Sahyadri main ridge and extending to some distance on the outlying spurs of the eastern flanks. It occurs as a strip between 650-1425 m attitude, where the interference by man and cattle is minimum, true evergreen nature of the crop is evident, where the individual dominant attain a height of 27m. Along the middle slopes the forest growth is stunted, under stocked, with numerous grassy blanks. In the exposed grassy blanks, laterisation is evident. Due to Kumri Cultivation (*Cultivation of crop in the forest areas on lease basis together with planting and protection of forest tree species*) in adjoining Malki lands (*Land belonging to the private individuals*), uncontrolled grazing and heavy precipitation, the tree growth has disappeared and shrubby growth of thorny species of *Murraya exotica, Ixora parviflora, Bridella retusa*, etc. are struggling themselves to establish in areas infested with *Lantana camara* on the lower slopes and *Carvio callosa* on the middle and upper slopes. The main aim of this forest is to produce the valuable fuel wood and timber for the urban population.

2. The second type(Type 3B/ C2) is the Southern Moist Mixed Deciduous Forest, that occur in a narrow belt along the lower slopes of the Sahyadri range. Teak is occasionally found and its proportion is less than 5% predominant species are *Terminalia tomentosa* and *Bombax malabaricum*, etc.

3. The third type (Type 5A/ C-3) is the Southern Dry Deciduous Forests that cover the broad central region. Teak is the principal species. More than 50 years earlier this dry deciduous forest produce abundant small sized timber and poles. Today, due to the gradual but continual deterioration in the edaphic site factors, and due to repeated unauthorised hacking of immature teak trees and saplings along with other non-teak species for fuel, these forest areas are deteriorated in rapid pace.

4. The fourth type (Type 6A/ C-1) the Southern Thorn Forests, this sub-type is found in all isolated blanks which are surrounded on all sides by revenue villages and subjected to excessive grazing and browsing and is typical of extremely dry condition of the eastern region, and the drought prone areas. The vegetation is characterised by sparse stunted growth of Neem, Babhul, Bor, Hiver, Henkel, Amoni, and other deciduous species.

5. The fifth type (5/E3) of forests can be described as 'Bhabul forests' exists among the rich alluvial deposits along the riverbanks that nourish the corporation areas. These forests are small yet valuable and measurable patches of pure thick Bhabul growth that remain green and weeded in an otherwise open tract. These Bhabul stands owe their emergence to edaphic factors helping their establishment under waterborne environment. These forests are valuable because of the economy derive from the Bhabul trees either in the form of gum and timber. The subservient aims such as wildlife conservation, shelter for migrating birds and landscape improvement by soil conservation, etc. are still be an important consideration in management of this forests.

6. The trees grown in and close to urban areas, which we will call urban forestry embraces the third category of forest types in the municipal area. This may include the trees in streets, avenues, urban parks, and gardens, urban woodlands and on land reclaimed from previous industrial use. This forest must gets priority of management and successful planning because of their values in the landscape improvement and recreational and especially the timber production, which supposed to be the primary aim.

Professional foresters and the local peoples working in large organisations to clearly defined objectives usually manage the natural forests or the Bhabul forest. In the case of urban forestry, the planning and management of urban

forestry relies upon the intimate co-operation of the local authority, private owners including industrial occupier, voluntary groups like different NGOs and the local community. The ideas and advises of the above mentioned groups are necessary for the proper and successful planning and design of urban forestry programme.

The urban forestry practices involved a wide variety of interests and aims for improving the urban living conditions of the citizens and thereby ensuring the sustainable development of the city and the country. Because of a wide variety of interests and aims, the urban forestry practice is quite different from the other less specialised forms of forestry. Therefore, the danger on failure of projects is found to be more in case of urban forestry practices. The lack of understanding the basic technical rules for successful tree planting and the later maintenance like weeding, pruning, fertilising, etc. also enhance the danger on failure of projects. The inadequate knowledge on site selection and tree selection, further increase the depth of failure of the projects.

Marketable products

In a planned and managed activity of tree growing, outputs should be expected in forms of various valuable products and by-products. For example, In the Pune district the revenue realised from the forest products during 1980-81 was Rs 3,68,287. Thus it is necessary to plan for the sustainable use of these valuable forms that derive from the tree growing. Otherwise, the urban forestry programs find to be an uneconomical process and may instil a gap between the local community and trees. There are few cottage industries based on forest produce. The contractors purchase the minor forest products like Shikekai (*Acacia concinna*), Chilhar bark (*Caesalpinia sepiaria*), Tarwad bark (*Cassia auriculata*), Agave leaves, Hirda fruits (*Terminalia chebula*), Kadi patta (*Murraya koengii*), Kokam (*Garcinia Indica*), fruits, gum and honey in auction by the forest department, collect through the local people and supply the same to the industries.

The outputs from these forest areas in terms of saleable timber, fuel woods and other minor forest products are the usual benefits from the natural and bhabul forests. Timber production for housing and furniture purpose for urban areas from these areas is negligible and cannot fulfil even a fraction of the requirements. Teak is the principle species of timber. However supply of teak from these areas is very merge due to the low availability and the poorest quality. Teak timber is expensive for the poor families, hence use the locally available cheaper substitutes like *Mangifera indica*, Neem and *Terminalia alata* (Ain), Jambul, *Acacia arabica*, etc. In the case of firewood, *Acacia arabica* is the main firewood species occur in the private holdings situated

along the banks of Mulla and Mutha River. Deforestation of the Bhabul forests for urban development effected the shortage of firewood for local communities.

These forests or the woodlands should also be designed and managed properly, in order to preserve or improve the habitat for wild life, especially the migrating birds. Similarly, In any urban forestry programme, the valuable outputs from provisions of recreational facilities and the development of attractive woodland landscapes should be considered. In addition to the above outputs, in urban forestry some very special outputs become obtainable. For example, trees planted and cared for by the town school can have their product quite literally carried in the minds of children whose close involvement with trees will enhance and expand their understanding and appreciation of living things and their ecology.

Why conserve forests?

Conservation is the art of preserving the environment without denying the people the reasonable resources for development. It confirms that India remains a biomass-based civilisation. Across the length and breadth of our country, a large proportion of the people subsist as ecosystem people, greatly depend on local, natural living resources to fulfil their manifold requirements. Many cooks with fuel wood gathered from forests or scrublands, graze their cattle, sheep or goat on natural vegetation, collect tree leaves to manure their fields, employ herbal medicines to heal themselves or their livestock.

Many tribal families of central India live on *mahua* flowers for several months of the year. Yet others earn a substantial proportion of their small income by collecting forest produce such as canes, beedi leaves sal seeds or wild mango fruit for sale in the markets. Many landless, and therefore the weakest of the rural populace, supplement their incomes by weaving baskets or mats in the months when there is no employment as farm labourers. Yet others depend entirely on fishing. There is thus a substantial dependence on natural living resources.

Cultivation and animal husbandry are more significant to the livelihood of a majority of Indians. These husbanded plants and animals in turn interact with a number of species of pollinators, pests, parasites and weeds, and fodder plants. The farmers and the farm labourers, the shepherds and cowherds therefore not only relate to a whole spectrum of varieties or land races of husbanded plants and animals, but a large number of other plants and animals affecting them as well.

This relationship between the human and the natural world is reflected in the diversity of livelihoods present across the country. This diversity in turn has supported the continued protection of biological diversity and the various habitats where it occurs. Development efforts over the past 50 years have been pursued in total disregard of this vital relationship between different livelihoods and nature. The cruise factor is the forests on the hills are disappearing too, as world demand pressures the timber industry to enter ever deeper into this once apparently unlimited natural resource and as land less lowland migrants and upland villagers compete for what is left.

Deforestation brings immediate short-term gains to needy farmers and big profits to timber concessionaires. It generate long term losses to the environment -of the diverse and protean forest ecosystem itself, of habitat for unique animal and plant species, of livelihood for forest dwelling ethnic groups who are often displaced in the process and of watershed and nutrients for the larger ecological system. The distress of deforestation are various – topsoil unanchored by forest roots flows away with the rains and slits the lowland's rivers, lakes, and reservoirs. Rivers become unpredictable. As water regimes change so do local patterns of rainfall, bringing unexpected floods and drought. The land becomes degraded, yields decline and poverty deepens.

Landscape and urban forestry management plans

Management of the environment can be achieved through sensible and proper planning. Management is ultimately the careful identification of priorities and the marshalling of resources with which to meet them. This is very important for the wise utilisation of resources, both natural as well as economical. Management of the urban environment is a growing significance in India. Environmental management is tricky and seemingly undefined concept as far as public administration is concerned in urban and rural scenarios and well-managed environmentally sustainable urban areas contribute to the health, welfare and productive capacity of their own citizens.

Because of the long-term nature of tree growing and the multiple objectives involved, a management plan is essential to any scheme. This need not be a complicated and lengthy document. At its best it is a simple statement of the principal aspects of management, which will provide a basis for continuity of practice through changes of stewardship or ownership. In the absence of such a plan the care of trees and especially felling and replacement is often limited to crisis management.

A simple realistic management plan will not only ensure continuity of practice but, when prepared at the outset of a scheme, can overcome one of the most difficult problems in urban management, that of planning for tree development. Trees are usually represented on plans for development as though they are architectural features of fixed dimensions. Diagrammatic projections accompanying planning application documents show trees as static at a particular and very limited period in their development and at a particular time of year, e.g. summer, when their size and numbers will be appropriate to the overall design.

All the problems in urban forestry practices stem from treating trees solely as landscape objects as though they were non-living architectural elements. The professional forester's approach to tree management should, recognises the dynamic nature of trees and landscapes and plans management for not just one short period in the tree's life but for the sequence from small transplant to mature tree and with adequate provision for its succession. This approach to tree management will avoid the need for widespread preservation of over mature and dangerous trees, which creates so many difficulties in public areas.

For a healthy and balanced development of a nation, wealth in the form of material goods is, no doubt, necessary, but a beautiful environment is just as essential. Colourful trees and flowers play a great part in making the environment beautiful and refining the minds of the inhabitants.

Bioaesthetic planning may be defined as conscious planning of the flora and fauna with the object of beautifying the country. Bioaesthetic planning embraces both the animal and plant sciences. It includes the planting of ornamental flowering trees along city roads, in parks, public places and compounds of houses both in towns and villages, and development of national parks for the preservation of beautiful, non-carnivorous animals and the creation of bird sanctuaries.

Bioaesthetic planning is the projection of the systematising and planning mentality of the biologist into the field of everyday life. The planning of our cultural and aesthetic life is a necessary concomitant of the planning of our social and economic life. Professor Abercrombie has described planning as "a conscious exercise of the powers of combination and design, and not a question of unconcerned growth, even though the later may produce fortuitously happy results".

Urban planning and bioaesthetic planning should go hand in hand. Orderly and planned planting of ornamental trees can be seen to its best effect in new towns with wide roads, flanked by shady foot-paths, well laid out public parks and squares, rather than in congested old towns offer little scope for

bioaesthetic planning. Urban planning is a precondition for bioaesthetic planting. We should not allow our cities to develop like mushrooms on a dung heap without any plan or order.

The garden suburb should be our ideal in this warm tropical country. Vertical development is unsuitable, considering the summer heat; and flats are positively uncomfortable in hot weather. As far as possible, the growth of these garden suburbia or woodlands should be planned in a consummate manner, as this will mean economy in energy consumption. With the evisceration of slum quarters, development of parks and open spaces or woodlands in the decongested areas and controlled development in the suburban areas, we can make our old towns fairly attractive.

From this, Urban forestry may appear to occupy a position out of the mainstream of the forestry effort in this country. In terms of area and amount of wood produced urban forestry may seem almost insignificant. However, in terms of public use the potential for urban forestry appears limitless and there can be no doubt that urban forestry is the one category of forestry, which can truly be described as being principally for people. Bearing this in mind the need for community involvement in tree planting schemes in and around urban areas must be seen as essential. Community involvement is also a major way of avoiding or at least reducing intentional damage such as vandalism and also unintentional damage due to ignorance about trees and their needs.

In many countries 'town forests' and similar woodlands owned and managed by local communities are commonplace. This situation is rare in India and the co-operative effort between landowner, local authority, industrial interests, voluntary bodies and people living in the local community is something, which requires a special effort to develop. Evidence of failure to achieve such co-operation can be seen in our many towns and cities.

This Plan relies heavily on the practical experience of foresters and silviculturists who have first hand knowledge either of growing trees in urban conditions or of managing schemes and contracts, often involving community effort. A thread running throughout the Plan is the need to obtain sustainable development of the community, conservation of natural resources and to avoid waste.

4 The Pimpri Chinchwad Region

History of the Pimpri Chinchwad region

Inspite of the cosmopolitan nature of Bombay and Pune, the early history of Maharashtrian culture is comparatively homogeneous. There is comparatively less admixture of people (though recent anthrometrical investigations tend to show an increasingly northern racial element, comparable to other States, in certain communities of Maharashtra). This has been due to the fact that the numerous geological trap ridges have formed an effective barrier to outside influences and given to the inhabitants an isolated but independent outlook on life. The ridges have been pierced, no doubt, by a number of ghats (passages), which enable contact with the Konkan and Gujarat coast, but these have been difficult to negotiate in the past.

The Pimpri and Chinchwad region is the gateway to the Deccan Plateau while approaching from Mumbai, even before Pune city can claim the privilege. The appellation '*Deccan*' can claim a higher antiquity. It is apparently based on '*Dakhan*' which is derived from '*Daksinapatha*', meaning the 'southern road'. Since the times of Yaska, this seems to have been a general name for the country south of the Narmada upto Kanyakumari. Several *Puranas*, the *Mahabharata* and the *Ramayana*, an *Baudhayana* and *Kautilya* refer to it. Devotees like Moraya Gosavi and renowned saints like Dynaneshwar, Tukaram etc. resided in and around the city during ancient times.

Archaelogical excavations in rural areas in the region indicate that the houses during the earlier historical period *c*. 250 B. C. were simple huts, made with bamboo or wooded posts. The floors of these houses were made with sticky black clay, inter-bedded with a layer of sand. Some houses were up to three or four floors in height. Some excavations of a similar period in Nevasa and at Ter, indicate that the floor was made with lime and hemp or lime and black clay, often with a gravel bed. Some of the houses had three or four small rooms bounded by a verandah in front of it and in the rear.

The walls were about 12 feet high and the roof made with tiles that had two holes at one end. Iron nails were inserted in these holes, so that the tiles were firmly secured to the rafters. The use of bricks was also known. These bricks were usually big in size. The foundation of these houses was well made by laying large pebbles of trap or basalt in sticky black clay. The kitchen floor

was paved with bricks, while storage jars were either sunk into the floor or into the wall. Cooking was done on hearths (*chullahs*) made with three large stones, its front closed by a clay border in which ash was collected. Some houses, it appears, had one or two wells made with bricks or pottery rings. These wells seemed to have served as refuse pits, at this period.

Most inhabitants were seemingly non-vegetarian, but rice, wheat, *jvari, bajari, nacani,* or *ragi, moong, udid,* gram and *karadi* oil were also used. Roman influence is apparent from potteries and kitchenware of later periods. Iron was in general use. Plough-shares, socketed axes, tanged arrow heads, hunting knives, daggers, and swords, lamps or oil-fillers, roasting pans, etc., were found in these historical periods. Pimpri Chinchwad presents a thematic historical perspective of the evolution from a rural countryside to the urban township in the region. Grain was ground in rotary querns, also of foreign origin, of a heavy cruder type, with two side slots, running horizontally, through which was probably a wooden plank with a hole for a vertical handle, was inserted. Saddle querns with or without legs were used for preparing spices, etc.

The nearest major cave architecture to Pimpri and Chinchwad is known from Karla. The Karla *caitya-grha* was regarded as the finest in the whole of Jambudvipa by its donor, Setha Bhutapala of Vaijayanti (Vanavasi). It has been shown that the complete original excavation of the cave continued for nearly sixty years (circa 40 A.D. to 100 A. D). Kanheri caves that are better known due to their presence in Mumbai, are actually thought to be modelled on Karla, but decadent in style. Its *mithunas* though less sturdy, however, exhibit a finer proportion. Some of the Hinayana *caitya* caves, as at Karla, were tampered with in the later years.

Geological features

Geologically, the entire tract is covered by basaltic flows commonly known as Deccan trap of cretaceous Eocene age and laterites of still younger age form conspicuous rock units. In fact expect the thick laterite capping on the plateau tops forming the western edge of Sahyadri and the thick alluvial soil spread along the banks of rivers, the entire area is covered by lava flows, which are several hundred meter in thickness.

The **Deccan traps**, which belong to the types called plateau basalt, are extraordinarily uniform in composition over wide areas, and are generally dark grey to dark greenish grey in colour. The alluvial blocks comprises of pebble buds, sand and silt derived mainly from basaltic flows are utilised for raising Babul plantations for fuel.

The typical **soil** derived from Deccan trap is the 'Black Cotton Soil', which contains high proportion of Aluminium and carbonates of Calcium and Magnesium with variable amount of Potash but low Nitrogen and Phosphorus. These soils have the quality of retaining moisture for longer period. The rich alluvial soil ranging in colour from pale yellow to dark brown is deposited along the riverbanks.

The physical and **climate** conditions are mainly influenced by the Sahyadri hill ranges by their spurs, catchments, plateau's and plains. The topography determines the moisture conditions, temperature, humidity, wind, etc. The climate of the tract is generally agreeable and salubrious in the hilly Western zone. It is agreeable and pleasant in the Central zone and hot, dry and oppressive in the Eastern zone. The moisture conditions are governed by the Southwest monsoons, which bring in most of the precipitation (annual rainfall is 673mms) from July to October. The incidence of rainfall due to the Northeast monsoon is absent in the Western region and minimum in the Central and Eastern regions.

The winter season starts about the end of the November and continues till about the middle of February, mean daily maximum **temperature** in the plains is 38.10 °C while mean daily minimum temperature is 9.8 °C. During the period from mid February to the end of May, there is continues rise in temperature. The rise in temperature is marked in plains than in the hills, i.e. in May maximum temperature raise to 41.9 °C and minimum is 21.4 °C.

The atmosphere **humidity** is highest during the monsoons, but in summer and winter seasons the air is dry. Particularly strong **wind**s occur in the hills during Southwest monsoon season. During the rest of season they are light and calm. A large number of **rivers and streams** have their sources in the Sahyadri's and flows East and Southeast. The chief among the rivers is the turbulent 'Bhima'. In this tract Indrayani, Gunjawani, Mula-Mutha and Mira are its tributaries.

During the **rain**y season all these rivers carry an immense volume of water, but during the hot season they dry up completely or shrink to narrow streams in broad stretches of gravel. At many a place where cross spurs at some distances from the main ridge occur, reducing the intervening valleys to narrow necks, advantage of this topographical features has been taken to construct large dams and to create extensive lakes for hydel power and irrigation. The tract is having a number of wells and irrigation projects to cater the needs of water for drinking and irrigation in the eastern part of district.

Chronology of historical events at Pimpri and Chinchwad

The Pimpri Chinchwad Municipal Corporation has successfully established an efficient information domain on the Internet at their website http://www.pcmcindia.org. This website provides some basic historical information about the region. The important chronological events are presented here for purposes of documentation.

- 2000 B.C. = The legend goes that the first known wrestling between Bhima and Demons took place in the village of Bhosari, now a part of the Pimpri Chinchwad Municipal Corporation.

- 14th Century = A famous devotee of Lord Ganesha named Moraya Gosavi, born at Morgaon in 1375, was bestowed with Ashta Siddhi. Moraya Gosavi took Samadhi in 1561 at the banks of the Pawana river. On every Sankashti Chaturthi many devotees visit this place and worship.

- 1857 = Chaphekar brothers who were born in Chinchwad killed Mr.Rand, a British Officer, on 22nd June 1857 at Ganeshkhind in Pune, who harrassed Indians.

- 1954 = Hindustan Antibiotics, a public sector pharmaceutical company was established in Pimpri, thus starting the process of industrialisation in the PCMC area.

- 1956 = Maharashtra Industrial Development Corporation acquired large chunks of land in and around the Pimpri-Chinchwad area.

- 1958 to 1968 = Formation of multi-nationals and renowned Companies like SKF, Elpro International, Philips, Telco, Bajaj etc.

- 1970 = Establishment of a Municipal Council incorporating four village Panchayats namely Pimpri, Chinchwad, Akurdi, and Bhosari.

- 1975 = Status of Council was changed from "C" class to "A" Class.

- 1982 = Formation of a Municipal Council by merging seven surrounding villages in the Municipal Council, covering total area of 86 sq.km.

- 1997 = Increased the area of Municipal Corporation by adding 18 new villages and P.C.N.T.D.A area totalling 206 sq.km.

Annasaheb Magar : Founder of Pimpri Chinchwad

The Pimpri Chinchwad Municipal Corporation's website informs about the founder of the city area and its modern configuration. The Late Annasaheb Magar was the founder of the great city Pimpri Chinchwad. He "was well known for his outstanding and extra-ordinary social work and who devoted his valuable time in the formation and development of this city. Annasaheb Magar was the first elected M.L.A. (Member of Legislative Assembly) representing Pimpri Chinchwad city and continued his tenure from 1950 to 1960.

He was engaged in the development process of the four villages i.e. Pimpri, Chinchwad, Bhosari and Akurdi. He was an eminent personality with talent who brought unity among people and encouraged them in the process of changing the Pimpri Chinchwad area into an elite and unique city. Also he changed the face of this city through his endeavor and hardwork."

"On 4th March 1970 he established the Pimpri Chinchwad Municipal Council by merging four villages namely Pimpri, Chinchwad, Akurdi and Bhosari. Annasaheb Magar also helped in upgrading the level of city and civic life. Due to increase in population and local demands of the citizens, he started the Pimpri Chinchwad Transport Service for the benefit of people of the city in the year 1974. He was elected as the "First Chairman" of the Pimpri Chinchwad Municipal Council, and very soon became popular for his authentic efforts, foresightedness and trustworthiness."

The website also provides additional information about the significance of the logo of the Corporation. "The Slogan on the Logo "*Katibaddha Janhitaya*" explains that it is binding on this local body to provide civic amenities, primary facilities, infrastructure etc. to the citizens of this town, and play a key role in solving the various problems of its citizens. If one sees the logo minutely, it is evident that as a Local Self-Government it is an ardent follower of democracy. The main aim of this government is to provide services beneficial to all the citizens.

The factory in the logo symbolizes the industrial background of the city. In this industrial belt many industries including multinational companies are situated. The statue in the logo of Chattrapati Shivaji Maharaj in a riding horse pose signifies strength, power, bravery and activeness. The river flowing down-side in the logo indicates the purity and calmness maintained in the atmosphere so as to make city pollution free."

Current and historical perspectives for environmental interventions

Pimpri Chinchwad Municipal Corporation has been at the forefront of greening urban environment since it's inception and has undertaken a major project to educate its citizens particularly the young, about local ecological heritage. The Paryavaran Sanskar Udyan is being set up at 'T' Block No.47. Spread over thirteen acres, this park will display four terrestrial Ecosystems & one aquatic ecosystem containing the typical Flora of Maharashtra.

Table 4.2 : **Major Local Forest Types in the area.**

1.The Tropical Moist Forest Ecosystem
Garcinia indicu (kokam), *Gardenia gummifera* (Dikemali) *Ficus bengalensis* Wad, *F. religiosa* Pimple or Peepul, *Holarrhena antidyssentrica* (Kuda), *F. ruberosa* (Umber) etc.

2.The Tropical Deciduous Forest Ecosystem
Dalbergia sisoo, Diospryos melanonoxylon (Tendu), *Tectona grandis* (Teak), *Terminalia chebula* (Hirda), *T. bellerica* (Beheda), *Terminalia arjuna* (Arjun) *Butea monosperma* (Palas), *Anthocephalus cadamba* (Kadamb) and *Cassia fistula* (Bahawa).

3.Tropical Thorn Forest
Acacia species - *A. nilotica, A. prosopis* and *Zizyphus mauritania*.

4. Grassland Ecosystem
Kunda, Marvell, Khas Gavat etc.

The project will convey the richness of the region's cultural heritage, bio-resources and ethno-botanical knowledge through the trees and shrubs planted there. The project also includes two other emphasis areas, namely aquatic and medicinal plants.

The Aquatic Ecosystem has been specially created in the northern part of the park. It will support about 60 plant species, many of which are becoming rare due to the reclamation of wetlands. Over 3000 saplings of 146 species have been planted so far.

The Medicinal Plant Garden is being developed at M.I.D.C. open space no. 15 F-2 Block (Area - 0.78 ha). Overall 350 saplings of medicinal importance have been planted such as *bardenia gummiferra* (Dikemali), Beheda, Arjun, Hirda etc. Some of the other recent projects include (a) the butterfly garden at MIDC 'T' Block, (b) quarry development into various environmental projects like unique picnic spot with adventure sports, boating, mono-rail, suspension bridge, swimming tank etc., (c) Zoological / Safari Park at Moshi in land comprising about 180 acres with facilities for environmental education and an advanced animal hospital, (d) Vermicompost project, at various sites, to convert solid waste from the city into compost. One of the initial and successful directly related environment education and awareness project of

the Corporation has been the Snake Park & Aviary at MIDC, 'G' Block, Chinchwad. This seven acre project was started in 1990 and is getting popular ever since. Over 150,000 people visit the park annually. It is recognised by the Central Zoo Authority as a mini Zoo.

Pre-Maratha rule to British India

The origins of Pune lies in a small village located in the southern part of the present Kasba Peth. The earliest mention of this city is found in the inscriptions of the *shtrakutas*. It formed an important region for trade with the Konkan ports. It was then taken over by the Yadavas of Devgiri. The Moghuls ruled over it for two centuries. In 1630, it was awarded as a jaagir to Shahaji Bhonsale. His son, Shivaji brought the region under Maratha rule in 1674. In 1713, his son Shahu Maharaj appointed the Peshwas to govern Poona under Bajirao Peshwa. This resulted in the transfer of power within the Maratha Empire to the Peths of Pune City. The Mutha River connected these early 'Peths' along a north-south road. Thus emerged a pattern of location of urban residential neighbourhoods comprising 'wadas' and 'peths' along the river. This is however not true of Pimpri and Chinchwad.

The British Forces occupied Pune around 1818 and established the Poona cantonment and the civil lines in 1819. The Khadki (Kirkee) cantonment was established in 1822. In 1858, the Pune city municipality was established. Various urban infrastructure projects such as the underground drainage system, construction of the first of the bridges across the river Mutha, introduction of electricity supply and, construction of major arterial roads, considerably helped the growth and development of the town.

Brief history of the urban and industrial growth in the area

The urban structure and architecture of Pimpri and Chinchwad cannot be compared to its neighbour city of Pune, which has centuries old history of urban growth with narrow lanes and wooden structures. Most of Shaniwarwada was a wooden structure that was burnt and rebuilt on numerous occasions. This must have been true of most of the other *wadas* in the area. Pimpri and Chinchwad were on the other hand, simple rural villages with open spaces that comprised *gaothans*. This agrarian countryside was converted through land acquisition on a large scale for industrial development. The growth was also accelerated by a phased reduction of industrial licensing in the Mumbai metropolis.

The origins of Pimpri and Chinchwad can be traced back to two rural settlements situated at the outskirts of Pune. Defence industries were in existence in the region since the World War II. Kirloskar Oil Engines in 1946 gave the real impetus to industrial growth in the Pune region. The development of Hadapsar industrial estate in 1953 provided regional industrial growth.

Over the previous three decades, industrial growth has dominated the Pune-Mumbai highway and railway corridors. The Pimpri - Chinchwad area witnessed rapid physical growth with the establishment of large-scale industrial units in the late sixties. Industries such as Hindustan Antibiotics Limited (HAL), Telco, Valcan Laval, Bajaj Auto Ltd., among others consolidated their presence.

Stringent restrictions imposed by the State Government on the industrial expansion of Brihanmumbai and Thane coupled with the availability of necessary infrastructural facilities for industrialisation attracted national and multi-national companies alike to set up major industrial establishments along this rail corridor. The Maharashtra Industrial Development Corporation (MIDC) considerably facilitated the rapid industrialisation through land acquisition of large chunks of land in the Pimpri Chinchwad area, in order to provide the basic infrastructural facilities.

The establishment of large-scale core industries has led to the growth of ancillary and small-scale industries in and around this industrial belt. The employment opportunities (skilled, semi-skilled and unskilled) generated by these industries has attracted a large work-force from other parts of Maharashtra and from other states across the country. This unplanned immigration coupled with the natural growth of population led to an exponential increase in population over a period of last four decades. Most industrial workers have been commuting from the Pune region.

Therefore, the Regional Plan prepared by the Pune Metropolitan Regional Planning Board suggested the creation of Pimpri Chinchwad Municipal Council and Pimpri Chinchwad New Town Development Authority (PCNTDA). In 1982, the State Government elevated the Municipal Council to the Status of Municipal Corporation, merging seven surrounding villages. Presently, with the merger of new villages in 1997, the area occupied by the PCMC is 206 sq.kms.

Since the mid-seventies Pimpri-Chinchwad has grown more than exponentially as evident from the analysis of growth patterns in the Pune

Urban Agglomeration area. The process of planning for the Regional Plan for Pune identified the need for planning for Pimpri and Chinchwad areas as a neighbouring industrial and urban area and was augmented in the Pune Plan under the Bombay Town Planning Act., 1954. The Development Plan came into force in 1966. At the same time, the Gadgil Committee was formulated to propose a regional plan for the Pune region.

Historical and geographical perspectives of the region's flora and fauna

Pimpri and Chinchwad lie below the crestline of the western ghat hill ranges of Maharashtra. These hills run north-south, almost parallel to the coast at a distance of 50 to 80 km, and has an average elevation of 900 metres. The Mumbai Pune highway cuts through these ghats at occasional heights of 600 to 700 metres.

The region lies in the third rainfall 'strip' adjoining the western ghats on the east, where the paddy crop is raised, and where the rainfall decreases from 375 cm to about 100 cm as one goes east, within a distance of 30 to 40 km. The fourth 'strip' of rainfall in the state, includes adjoining Pune city, and has a rainfall of 60 to 80 cm. Thus within a distance of about 65 kms from Lonavala to Pune, the rainfall drops sharply from 375 cm to 60 cm.

The forest and floral patterns are significant for urban environmental planning, including urban forestry. The rainfall patterns determine the extent and nature of the natural resources, including fauna. The Western Ghats have moist decidious forests, the best forests of this class being known from Sawantwadi, south of Ratnagiri.

This forest belt is bounded on east and west by dry deciduous forests, e.g. in Thana, Nasik, Satara and Kolhapur districts. Beyond the belt of dry deciduous forests are the thorn or scrub forests, which at one time covered the eastern parts of the above-Ghat districts but which have recently yielded to extension of cultivation in most areas; or to grazing by cattle and browsing by sheep and goats.

The forests of the Western Ghats have perhaps been denuded almost completely of wild life. Reference to the District gazetteers issued in the 19th Century and the Hyderabad State Gazetteer issued in 1909, will show that a large variety of wild life existed in almost all the districts, and areas which constitute the present Maharashtra State. While certain rare animals became extinct in other parts of India, the Pimpri-Chinchwad-Pune areas and adjoining regions in the district saw the reduction in numbers of common

wild life such as nilgai, blackbuck, chinkara and chousingha among others. Some of the factors include the following:

- Extension of cultivation, and reduction of forest areas and grasslands.
- Disturbance of wildlife habitats for firewood etc.
- Growth of industries, including chemical units.
- Use of pesticides and poisons.

Wildlife once exterminated cannot ever be replaced. Forests can be replanted, buildings and palaces and temples can be restored or rebuilt. It is beyond human power to replace extinct species. The generations to come will certainly blame current planners who allowed the great beauty and excitement of wild animals to disappear. This is however not the only reason for conservation of wildlife. Flora and Fauna are indicators of the status of environment for human utilisation.

Man has the power to conserve as well as to destroy. Are we to lose forever these wonderful beings for no fault of theirs, when with some effort it is possible to avoid their extermination and at some cost it is possible to ensure their continuance in numbers?

Any person having to deal with any aspect of fauna cannot fail to be disturbed by the destruction of wildlife that is going on and the grim prospect of extermination of many species. The world has already lost by extinction scores of species, and enough is known at the present time regarding the manner of damage to wildlife and the measures for conservation of wildlife to enable us to preserve it.

Most of the wildlife species, floral and faunal, occurring in historical Pimpri and Chinchwad localities, are known to be typically semi-arid by their habitat selection. Historically however, this was not true. Fossil records and recent historical records in the hill tracts and plains of the region have indicated presence of elephant, wild buffalo and rhinoceros species unlike that of Africa or Asia.

This would naturally enable us to presume that the vegetation types have changed during the previous four to five centuries. Progressive desiccation of the natural vegetation in the region has been extreme, similar to the southern Gangetic plains. Summers are getting hotter and winters are getting cooler. Monsoon is stretching out for longer periods with each subsequent year.

Urban forestry and investments in rural areas for watershed conservation towards diverse forest growth would become the logical need for survival of

the municipalities of Maharashtra. Knowledge of current and historical flora and fauna is an absolute imperative in this regard. Predominance in planning towards investments in exclusively endemic and local flora and fauna would ensure that the local environmental systems are respected and errors due to ignorance are avoided.

5 Community participation in urban forestry

Public participation in urban forestry

The unprecedented increase in the pace of urban development has significantly affected man's relationship with trees and forests. The trees have a significant impact in the urban areas, to Urban Forestry has developed as a specialised branch of forestry that has its objective, cultivation and management of trees in the urban environment. With the development of urban forestry has come a far greater emphasis on the sociological aspects of urban forest management. Indeed, the subject is as much about people as it is about trees.

Development problems in general and environmental management in particular have always been far more comprehensive than the areas that government mechanisms are able to reach. There are many aspects of resource management that can be well implemented through the participation of the community. Natural resources conservation, sanitation and waste management, appropriate technology development, afforestation, sustainable agriculture, etc. are only some of the environmental aspects which cannot be coped with by conventional instruments of government policies only.

A community is a group of people living in a defined, delimited area and sharing common physical resources (land, water and infrastructure). Although the members of a geographically defined community may differ from each other in many ways and disagree with each other on many issues, they are all interested in maintaining a healthful environment. The common interest arises from sharing common physical resources: the behaviour of one community member may have a direct effect on the health and welfare of other members.

Community Participation is viewed as a necessary component of making urban infrastructure projects sustainable. Participation means involving community members in identifying, characterising, and prioritising environmental problems and developing and implementing environmental management plans. The concept also includes a training community leaders and government official to conduct a sustained dialogue with each other about environmental management.

It is a paradox in India that the publicly owned urban forest has traditionally been managed with very little input from the public themselves. Admittedly there are only few cases today of successful community based system of conservation and sustainable utilisation of biodiversity resources. Community trees need to be managed with the community and not just for them. Therefore the provision of urban trees can no longer be regarded as just another public service to be operated with the same degree of detachment as refuse collection.

Community forestry programmes also called as Participatory Forest Management is a new concept that gradually taking root in India. Community forestry by its very nature is a rural development programme, which should be specifically designed to encourage the urban residents to be involved with their publicly owned trees, and is not successful without the participation by people. Community forestry programmes are now recognised as an essential element of urban forest policy. The initial success of this programme in West Bengal, Gujarat, Haryana and other states has created certain confidence amongst the policy makers.

People's participation can be ideally construed as referring to a process in which the people are facilitated in analysing any given problematic situation, in deliberating on an action plan to solve the same and in executing the blue print of action to its logical end. In the bargain sufficient emphasis may get placed on the utilisation of the local resources to their fullest potentials. Even if this cannot be achieved in such an idealistic manner, it should at least mean a discernible role for the people in the decision making process in any project that concerns their life and also a significant role in the implementation of the said project. People thus must have an unmistakably important role in the evaluation of any project that affects their lives.

Community forestry in India involves raising of bio-resources on all available private, public and other degraded lands. The objective is to achieve self-sufficiency in fuel wood, small timber and fodder. The programmes is operative through various sub-programmes, viz. tree plantation in courtyards, field bunds, block or staggered plantations on river or canal banks, roadsides, railway sides, and block plantations in waste lands, industrial areas, grazing lands and degraded forests. It is also attempted to raise decentralised nurseries to facilitate supply of seedlings particularly to private individuals mainly for agroforestry.

The management efforts in most cases should direct towards facilitating the increase in the productivity of hitherto degraded forests, through active involvement of local communities in project formulation, implementation, harvesting, benefit sharing, marketing and monitoring. The usual partners in the programme include the foresters, the NGOs, the communities and

researchers. To sustain the programmes a few development institutions too, at times are summoned to volunteer their expertise or inputs. Fig. X depicts how communities can improve the quality of the environment in which they live by changing their own behaviour, advocating change in government policies and the pollution generating practices of industry and other sources and advocating improvements in environmental services to the community.

Therefore the community have both the right and the obligation to take part in various stages and aspects of development. The urban planner should be aware about the importance of the people's participation in the various stages of designs. Reasons why the planner should be aware of people's participation needs in urban environmental planning and design stages can be summarised. Each community will know from its own experience what is means of enlisting citizen participation have proven most successful; what groups and local leaders can provide effective support; the type of information that will promote the understanding and interest of local citizens.

Active and sustained community participation

Active participation implies that all the resources available within the community i.e. land, forest, water, people, etc. (both governmental and non-governmental) are utilised to the optimum for the benefit of the community. Non utilisation or wastage of any available resource by anybody is non-participation to the extent it is under utilised or wasted.

The environmental deterioration that effects communities arises from two types of source: public and private institutions that are external to the community and the community itself. The former are affected by Government policies and regulations; the later by regulations and environmental services. Communities may influence this process via three pathways:

1. By advocating changes in government regulations that control external sources.
2. By advocating changes in government regulations and services directed to the community and;
3. By changing the degradation causing behaviour of community members.

The pragmatic approach suggested envisages co-operation among all sections of the community and encourages activities related to the available resources. Thus the members of the community are engaged in various informal

activities, which do not demand a major deviation from their daily routine, and neither put any extra responsibility of a formal organisation on them, e.g.

a) Planting trees of local use in small numbers on their field or river bunds or courtyards (this single activity by the community would be able to solve a great problem of forest related needs in developing countries). For example, In Kerala, the supply of woods from homesteads accounted for about 80% of the total wood supply in the State.

b) Small soil and water conservation works and adoption of integrated organic farming practices on private fields.

These activities are going to benefit the individuals as well as the community as a whole, which is a reflection of the participation of the people in the well being of the community.

Role of Government Organisations: Forest Departments

The Forest Department or the formal organisation of the government (represented by its officials) has to play its part in participation is to continue. The participatory activities of such a person, irrespective of the ownership of the forest lands, may be:

a) Advising and helping the members in their participatory activities.

b) Advising on the management of private forests (if there are private forests in the community).

c) With the co-operation and consensus of the members of the community, estimating the forest related needs and devising strategies to meet these needs.

d) With the co-operation and consensus of the members of the community, chalking out he forest and natural resource management guidelines.

e) Drawing up the technical management plans for government and community forests with the involvement of the community and getting its approval. Besides the forests being managed as a large ecosystem, a community and natural resource micro-plan will have to be prepared to cater to the needs and interests of the community.

f) With the help of the community implementing protective measures. The regulatory measures regarding distribution of usufructs may be decided and carried out by the members of the community themselves. The government officials will be there to advise and help them.

g) Ensuring that smooth flow of information, effective communication and the overall participatory process continues with zeal.

Thus, a pragmatic participatory approach puts an extra responsibility on the government and its officials. But due to participation from the local people this responsibility will not necessarily involve much extra burden of work. What is really envisaged is a co-operative environment with the government official working as a part of the community and not as an outsider. Once the process of participation, as proposed has started, it will by itself effect the essential changes required in the working of the different organisations and groups. Although interactive learning will be a continuous process, a few special interactive sessions of the different groups in the very beginning will be helpful in accelerating the process. It is in the initial stage that much more dedication and work is required to create an atmosphere of Active Participation.

Approaching the Community

Even if one is very empathetic while approaching a community one may often forget a basic point of human psychology. In one's enthusiasm, one may be busy in probing the wants and desires of the individuals. Unknowingly, one is unnecessarily mixing up needs with wants. Human needs and human desires are two different things. If we do not differentiate between the two, we may come up with a list of desires, which may not at all be needed in the community. For example, if you ask a person, "Which tree species do you like most?" –you may get the name of a species. But if you ask, "Which species do you think is the most useful for the whole village?" – you may get the name of another species. The first answer gives the likeness of that particular person for that particular species. The second answer is the response of the person as a responsible member of the community. According to the humanistic psychology, a human being consists of a dual self. He is simultaneously that which he is and that which he yearns to be.

When one approaches the community, one should approach the people giving them the dignity of a responsible human being. They do not have just personal desires. Besides self-interest, they also have mutual interest. If we are not careful, we may come up with a cluster of self-interests only. A correct approach should elicit points of mutual interest, which incorporate the self-interest of individuals. The questions put to the people should be such so that they feel important as somebody who can suggest not only what he or she wants, but also what is beneficial to the society at large.

Essentials of Working with the Community

Encouraging participation and participatory appraisals are very challenging works, especially in developing countries. In participatory appraisal there is a tendency to go and meet people in pubs and in places of social gathering. Here the atmosphere is of leisure and entertainment. It is not necessary that people will respond very responsibly in such environment. Participatory appraisal will give the best results only if the people contacted agree to give some time especially for the purpose. That will require extra time and effort of course.

Secondly working with the community requires a sense of empathy both from the person involved in participatory appraisal and the person involved in the implementation of a plan or project. We have not approached the community properly. We have taken the perception of people regarding their individual desires but not what is beneficial for the whole community. The work itself may be very entertaining, but if it is done as fun or is associated with fun making, then it loses its essence.

Finally public participation should not be performed as a mock exercise. Even if it is to be done as an exercise, it should be associated with an actual plan of the community, so that it has real consequences and people do not feel as if they have been experimented upon. Therefore few new tools will have to be developed which may be able to reflect the very responsible perceptions of the individuals giving a direct clue to procedures and planning.

Role of Non Governmental Organisations (NGOs)

The rapid growth of the voluntary sector over the past decade has resulted in large numbers of locally based environmental and conservation organisations, amenity societies and other community groups all wanting to be consulted and involved in the management of the trees in the urban area. NGOs embrace a bewildering group of organisations varying in terms of innumerable parameter. Originally voluntarism was a doctrine which held that the will is a dominant factor or it was a principle relying on ones free will for an action. Voluntary efforts stood for services independent of state.

It is worth mentioning that environmental NGOs defined as an organisation which develops in a self-reliant manner, based on its own initiative and desire, with in the community, and is concerned with and active in the field of the living environment. These are voluntary organisations, which is a conglomeration of volunteers joined together with shared values of concern

for a specific goal. Organisations are likely to generate and maintain a sense of common purpose among their members. The mobilisation of upper status citizens can take place on an individual level but lower status need a group based process of mobilisation if they are to catch up with upper status groups. They need a self-conscious ideology as motivation and need organisation as a resource.

But the NGO movement has failed to weld itself into a powerful and well co-ordinated nation wide movement which goes beyond a group of people fighting projects to a group of people who can change the environmental governance system and its policies. NGOs have built a powerful 'amorphous' movement with a focus on certain heroes and heroines but it has no national institutions of the kind of Green Peace and Friends of the Earth in the West. The Indian NGO movement remains strong in the political dimensions of the environmental concern but weak in its policy and scientific dimensions. A lot of the power of the NGO movement has, in fact come from local social mobilisation, media and the courts.

Role is the ascribed or actual function played by an individual or organisation in the relevant unit of society. NGOs and other amenity societies are expected to play a critical role in all conceivable aspects of development. People as well as policy makers alike attribute innumerable roles to NGOs and pressure that NGO activity is a remedy to all problems in the society. The role expected for NGO is complimentary but distinct from government and other informal organisations.

The major development roles ascribed to NGOs are to act as:

1. Planner and implementers of development programmes.
2. Mobiliser of local resources and initiative.
3. Catalyst, enabler and innovator.
4. Builder of self-reliant sustainable society.
5. Mediator of people and government.
6. Supporter and partner of governmental programmes in activating delivery system, implementing urban and rural development programmes, etc.
7. Agent to demystify technology and disseminate information.
8. Factor of transformation, conscientisation and improvement of the poor.
9. Facilitator of development education, training, professionalisation, etc.

Development is transformation and no government can transform a society. NGOs are looked as mobilisers, transformers and catalysts in society. An NGO is nowadays not expected to deliver directly some benefits to people, but to motivate people, mobilise resources, initiate leadership and participate in development programmes for self-reliance.

How to Motivate the Community?

Our environmental resources are get degrading is mainly due to lack of understanding the values of forest and the trees, by common people. People should realised that protection and development of forests will bring about development and prosperity of village and this realisation has increased their stake in management of forests sustainable way. The significance of the relationship between human beings and other species lies in the unique role that the human beings can play. Among all species, human beings alone can cause changes which can threaten other forms of life, at the same time only they can intervene to protect endangered species, and help in restoring the ecological balance.

The success of community participation depends on the direct dialogue with the people at various levels of work (i.e. pre-project, project and post project). Three axiomatic principles of any community programmes are: -

a. Community acceptability

b. Community affordability, and

c. Community adequacy.

Community participation does not mean the participation of the community in government programmes, but the involvement of the government in community programmes as well. So the new approach to people's participation should be based on people. This new emphasis on people is emphasis on development. Such an approach emphasis not things, but relationships – that between peoples, between people and trees and the landscapes they live in. The new approach has to be flexible, people centered, democratic, active and horizontal. The government has to increasingly involve people in the management of the woody biomass in and outside notified government forest areas. They now, advocate multi-purpose trees and shrubs and facilitate local tree generation.

6 Education and awareness for urban forestry

Education and Information

The motivation of community to raise trees for meeting their requirements is urgently needed in order to reduce the pressure on our natural resources. Motivating of community to take up urban forestry is perhaps one of the ways of promoting peoples participation in afforestation in the country. Mobilisation of people involves a number of factors that go into organising communities for planned action. It should be do mostly through community development activities such as the construction of demonstration plots, dissemination and informal education programmes, legal assistance's monitoring of environmental impact together with the affected community's and others.

"Invest in people rather than in land" in order to bring back the old informal authority of community elders is the concept floated by human developers. During the past ten years we have seen a remarkable growth of interest in our environment and in the need for people, especially young people, to learn about it. But to act effectively, communities need knowledge and information on three types:

1. The sources and the causes of deterioration of their environment.
2. The government policies for the prevention of environmental deterioration.
3. The nature and extent of environmental deterioration resulting from environmental deterioration has on community health and welfare.

It would however be unrealistic to expect large numbers of urban residents to respond immediately to the opportunity to help plant and care for their publicly owned trees. Of course, there will be members of environmental and conservation groups who will welcome this chance; but for the majority of urban residents, trees are of little significance in their everyday lives. This is especially true in areas dominated by tower blocks and tenements, and in the neglected and depressed inner cities. Since these residents have virtually no contact with trees they will have little concept of the benefits of urban

forestry. The most difficult task for those that engaged in promoting community forestry programmes is to generate sufficient interest in trees to motivate residents to become involved. It requires a long-term strategy of education and information.

People need to know what is happening to their community, what neighbourhoods are going downhill, what is causing blight, what is being done to fight deterioration and what more can be done. They must have every opportunity to take constructive action. They learn to create channels for communication with government agencies so that they may participate in, advocate, and even help develop legal and regulatory procedures. Negotiations, workshops and discussions between municipality staff and NGOs and national level policy makers will result in a social programme in a locals governments environmental management or public works development that is responsible for participation initiatives.

Urban Forestry education and training must be the process of recognising values and clarifying concepts in order to develop skills and attitude necessary to understand and appreciate the inter relatedness among human being, his culture and forests and other biophysical surroundings. Another aspect of the forestry education is the education for the environment. It means teaching about all the components and the constituents of environment. It means teaching about all the components and the constituents of the environment, i.e. learning to understand the environment, establishing proper ecological equilibrium that entails proper use and conservation of resources and also includes proper environmental planning.

The education should cover mans relationships with forest as well as social and man-made environment. It should also include relationship of population, industrialisation, pollution, resource allocation and depletion, conservation and management, technology, energy and urban and rural planning with the total biosphere. Further education should be a life long process and should aim at not merely imparting knowledge and understanding of man's total environment and the methods and their application for improving our near surroundings. It should aim at inculcating skills, attitudes, and values necessary to understand, appreciate and improve our biosphere. It should be interdisciplinary in its approach, drawing on the specific content of each discipline in making possible a holistic and balanced perspective.

Objective of forestry education like any other education is to prepare for complete living not in the material sense but in the widest sense. It should prepare a person for self-fulfilment and be a tool for social development. . It should enable learners to have a role in planning their learning experiences and provide an opportunity for making decisions and accepting their consequences It should help in self preservation and preservation of human

race. It should help understand ecological balance in nature. It should make a person not to look at a tree merely as an innate object or a structure to be exploited for material gain or individual well being.

Educational Institutes

Education in schools is an important mode for motivation. Youngsters are receptive to new ideas and hence, the social forestry concept and the need for planting a tree or raising a forest for our own survival should be made known to them through regular educational programmes. They should be taken out for nature study periodically and the direct and indirect values of forests should be taught to them.

In the beginning, the main objectives should be:

1. To develop the love for nature amongst youth;
2. To train their ability in living and working in nature to enable them to organise nature expeditions;
3. To train their ability in adjusting themselves to local communities and;
4. To develop their ability in utilising their expeditions or study results for creating community awareness.

The programme also attempted to provide concrete skills in examining and analysing environmental issues as well as solving local problems by focusing on specific topics like forest conservation, land rehabilitation, marine conservation, etc.

Communication and Awareness

Awareness raising programmes should be to create respect for our "common future" i.e. to our environment and forests. It has been possible to bring people formally into management system through communication and awareness raising programmes. Joint management of urban forests, however is a new concept for which a communication system has to be built up. Communication consists of all the process by which information is transmitted and received. The subject matter may include –facts, intention, attitudes, etc.

A communication is not complete unless it is received and understood. The usual result of the understanding is a change in the behaviour. The joint management system may consist of several agencies and institutions but will not come to life unless communication effectively link all these parts together and co-ordinate their activities.

It is three facets –literacy, functionality and awareness and their learning contents are best promoted through communication. For better communication, also needs the support of mass media. So that the messages are understood, perceived and favourably treated by the intended audience.

To the mass media a major role should be ascribed in arousing among people everywhere an awareness of the common social, economic and cultural forces affecting their way of life. The media could provide not only instruction, but also valuable information and cultural enrichment.

Modern audio-visual methods are very effective for better awareness programmes. They can easily reach large number of people without laborious and personal contacts. The programme should be designed to bring the participation of all mass media communication into it: newspapers, radio, television, cinema, and little media like leaflets, posters, pamphlets, etc.

Brochures, charts, posters, stickers and other methods displaying the values of trees, requesting people to plant and highlighting the incentives are available. Book labels are attractive for children and schools could organise tree planting functions during Vanamotsava and give prizes to the children whose work have been good. They can arrange lectures, symposia in colleges and schools, including painting competition. Free supply of seedlings through educational institutions requesting each child to plant in the backyard of their houses is also a very effective form of motivation.

In creating community awareness, NGOs and other associations activities include information dissemination and awareness, building through contests, exhibitions, media exposures, publications, theatre and other cultural media, nature walks and expeditions, talks/seminars/workshops, youth camps and others.

Advocacy work includes parliamentary hearing dialogues with decision makers, media campaigns, facilitating investigative journalism, surveys and fact findings, information exposures through meeting or seminars representation on government working committees, technical teams, etc.

Community of notification of proposed work

When major planting works has to be carried out, particularly in residential areas, the local community and the amenity societies should be consulted about the work and given a brief explanation of why it is necessary. This is not only good for public relations; it helps to create interest in trees and reminds the residents that the trees are significant features in the neighbourhood. Unless the work has to be undertaken immediately to ensure the safety of the public, this notification should be given several days in advance so that any questions or objections can be adequately considered.

Notification need not be an expensive or time-consuming exercise, just a small card or standard letter through the door when the tree has been inspected and the work decided. Alternatively, notification can be given through local community groups, NGOs, voluntary nature clubs or through cable operators and other local newspapers. This avoids the necessity of contacting individual residents and strengthens the role of these groups in the community.

It is today commonly acknowledged that technology is the key to future success in the delivery of services. It improves the quality and availability of information. It enables us to brigade our services together more effectively. The local authorities and the non governmental organisations or institutions produce advisory literature such as posters and leaflets on different technological aspects about tree planting, care and protection.

They are usually directed at property owners with a view to encouraging planting and improving the standards of maintenance on private lands and homesteads. However, they can be equally valuable in stimulating interest and providing technical guidelines for community forestry work. Even if they are not used in any practical activity they serve to educate the public about the importance and also the needs of trees.

Exhibitions and displays

Static exhibitions can be mounted in civic centre foyers, libraries, schools and other public buildings. They provide a means of displaying general information, making use of posters and leaflets, or more specific information relating to a particular site or forthcoming event. The organisers see them as potential future decision makers and their basic love for nature makes strong motivation to do more for the environment, given enough insight and access to information. Some local authorities and voluntary organisations (NGOs) should organise mobile exhibitions and dramas relating to the theme, which

travel around the urban fringe areas and degraded industrial areas in support of local community forestry initiatives. Demonstrations of tree planting, climbing and pruning can be staged, which will give the public an insight into the range of new equipment's and skills required to plant and care for trees. The publics have a chance to meet the people who look after their urban forest and ask questions about the work.

Talks and guided walks

Although time consuming to organise and deliver, a talk illustrated with slides can be far more stimulating than an unmanned exhibition. Posters, leaflets, and pamphlets can be displayed at the venue but the presence of a member of the forest department staff provides a personal point of contact for the public. Talks should avoid becoming formal lectures, expect where appropriate, but attempt instead to create a relaxing and informal atmosphere with plenty of time for discussion and social contact. Guided walks can be conducted through parks, gardens and even streets where there are trees of special interest. Its basic objectives have to be carried to the people in the quickest possible time and this has to be done by a judicious combination of mass media and interpersonal media, through multimedia and multi-exposure campaign.

The programmes emphasised the importance of reaching decision-makers like politicians, government officers, the army, industrialists and other leading groups with the correct message. They were to become target groups of the project. The general public is important also, as it was necessary to simultaneously promote public pressure on certain issues, while different approaches were being made towards community leaders. To be able to fulfil it is necessary to gather and analyse all the existing information on natural resources: watersheds, energy, forestry, pollution, national parks, flora and fauna, institutional responsibilities, etc.

Consultation

Consulting the local community about their tress, like educating and informing them, is an important step towards encouraging their full participation. These consultations demonstrate to residents that they have a responsibility for their trees and effective voice in influencing management. Where residents have been consulted they are also more likely to accept and appreciate the work that follows. Unfortunately their views are often overlooked when designing new planting schemes or formulating management decisions. Obviously few residents have much arboricultural

expertise but this does not mean they are incapable of expressing an opinion when presented with a choice of feasible alternatives. It may not be possible, or desirable, to consult residents on an individual basis, except perhaps where the proposed work would have a dramatic effect on their immediate surroundings. However, residents should be consulted regularly on a group basic about major decisions, which affect the treescape of their area. A number of methods can be used.

Public meetings

All too often public meetings are called simply to calm angry residents following a controversial decision where they were not consulted. If convened by the local authority in the first instance they can usually defuse a potentially difficult situation before it develops. Apart from their 'trouble shooting' role, public meetings also allow residents to engage in open and frank discussion with officers and councillors on a range of issues affecting the urban forest. Unfortunately, there is the danger of public meetings turning into 'informing' sessions only, providing superficial information, discouraging questions or even giving irrelevant answers.

A poor attendance may mean that a lack of publicity has left many residents unaware that the meeting is taking place. But it can also be a reflection of the public's mistrust in the purpose of the meeting and a belief that nothing will actually change as a result. However, when meetings are organised in a genuine effort to consult the public they can be very constructive. A small attendance need not indicate a lack of interest as many of the people present may be acting as spokespersons for local voluntary organisations and community groups. In this way the views of a large number of people can be represented without the need for them to attend the meeting itself. This can even speed up the process of consultation.

Community group discussions

These are usually far more successful than public meetings in allowing individuals and groups or organisations to make personal contact with officers. Formal public meetings can inhibit people from expressing their views. But these more informal gatherings with fewer people present stimulate better communication. This form of consultation can take place in the home of a local resident or at the particular site that is the subject of the discussion. They are especially appropriate where a difficult decision may have to be taken to remove or drastically prune trees. The presence of the

trees will assist the officer to explain the problem and reach an understanding with the residents. This type of meeting is also useful in community tree planting schemes where the initial response may have been through a reply slip on a leaflet.

A follow-up telephone conversation can culminate in an on-site meeting between an officer and representatives of the local group expressing an interest in the scheme. The meeting assesses the needs of the community and leads to advice and discussions about plans for the site.

Nature Clubs or Committees

An increasing number of local associations or non governmental organisations are establishing borough-wide nature clubs or committees made up of representatives from interested voluntary organisations and the larger community groups together with officers and a few councillors. In some cases the local authority side may only be present in an advisory capacity or as observers. The committees meet regularly and serve as a forum for consultation and discussion about topical issues affecting the urban forest.

They suppose to make recommendations to the local authority, which may or may not, choose to follow. But these committees losing interests, particularly if their recommendations are frequently ignored. However, the potential exists to develop these nature committees into a genuine partnership between the community and the local authority where the public can participate in the development of urban forestry policy.

Non Governmental Organisations or Social Forestry Committees were constituted as grass root level institutions to work as interacting agency between the Forest Department and the urban dwellers. Their functions include:

1. Consultation with urban community about the programme.
2. Selection of areas to be planted.
3. Selection of species.
4. Organising and supervising planting works.
5. Distribution of produce among urban poor.
6. Propaganda and education.

Participation in a practical way

Direct public participation in the work of the forestry and its management services is one of the most beneficial forms of community involvement, especially for those residents without their own trees and gardens. In selecting and planting trees they gain the satisfaction of improving their environment and making a personal imprint on the landscape. By caring for their own trees they develop positive attitudes towards other trees. Their increased awareness and appreciation encourages a sense of responsibility for trees that motivates a concern for their care and protection. Participation in community forestry activities can also have a beneficial effect on the social life of the community. It improves social contact between residents by bringing them together in a creative atmosphere.

Participation need not be restricted to the planting of trees. Although there are obvious limitations imposed by safety and the degree of training required, the scope is still considerable. However, the actual level of community involvement in these activities can vary enormously as much depends on how they are organised and operated.

Training programmes

The training programmes are normally conduct in an informal and participatory method. Participants were usually sleeping in tents, to be close to nature. Seminar type discussions were held both indoors and outdoors, where participants discussed conservation principles or shared experiences and concerns. They held outdoor exercises and practices, also conducted field studies, in accordance with the theme of the programme. These ranged from practising the right way to plant trees for soil conservation, the after care and management of the existing woodlands and the avenue trees, to exercises in photography, landscape planning, survival in the forest, first aid, making communicative reports, etc.

Sponsoring tree schemes

Government authorities run sponsorships schemes, which allow individual residents, community groups and industries to make donations for tree planting. However, these schemes rarely involve the public in the actual planting of the trees and are simply a request for funds to facilitate tree planting by local authority staff. A few schemes do allow some choice in the

selection of species and planting site. Although these schemes may have a valid purpose in getting trees are planted, in their present form the level of community involvement is usually minimal. The opportunity exists to dramatically increase their impact by not only allowing direct participation in the planting but actually encouraging it.

Community tree planting

Involving residents in the selection and planting of trees is perhaps the most common form of public participation. It is a creative and educational activity in which almost everyone can take part, often in large numbers. But the success of community tree planting events depends on careful planning and organisation. The details of the site and the size, number and species of trees to be planted should be agreed between officers and representatives of the community group well before the planting date. The event must then be given plenty of advance publicity to ensure the attendance of sufficient numbers of residents. A supply of tools and planting materials has to be organised together with the arrangements for adequate supervision of the work by experienced personnel. Locally based conservation organisations can often help with these aspects of the event thus easing the burden of the work on the local authority.

Community tree planting events should do more than simply provide an opportunity for people to plant trees. With a little imagination and enterprise they can be transformed into colourful social occasions. Community artists and musicians can be invited to entertain the crowd and amuse the children. Conservation and environmental organisations can be asked to erect stalls and small displays. The forestry section itself can give demonstrations of tree care equipment and techniques. These and other ideas can be used to create an atmosphere that is entertaining and educational. Inviting local dignitaries or a well-known personality to attend the event can substantially increase attendance. However, the fact that people turn up to an event does not constitute their full participation; everyone should be encouraged to take an active part in the tree planting.

Aftercare

Participation need not end once community has planted their own trees. The community or organisational groups that carried out the planting should be encouraged to undertake the post-planting should be encouraged to undertake the post planting work necessary to ensure that the trees survive and become

established. Adjusting tree ties and removing stakes (where these are used), even weeding and formative pruning can all be done by volunteers provided they have been given some instructions. However, the work needs to be monitored carefully to be certain that the trees receive attention and are not just forgotten. Someone in the community group should be nominated to organise sufficient volunteers or inform the local authority if additional help is needed.

Residents may also be interested in working on trees they did not plant themselves. Every year thousands of young trees planted by local authority staff either die or are severely damaged because it has not been possible to ensure adequate maintenance. A little help from the community could dramatically improve this situation.

Tree wardens

Establishing a system of voluntary tree wardens is an extremely useful way of allowing a limited number of residents to become quite heavily involved. Each warden covers a small part of the local authority area such as a neighbourhood, housing estate or electoral ward. Their main role is to act as a link between the local authority and the public and generally take a lead in developing community forestry activities in their area.

Being the local tree warden can be quite demanding, and not just in terms of time and commitment to the work. It requires someone who not only has a reasonable knowledge of trees but also the necessary social skills to communicate with residents and community groups. But it can be enormously rewarding work and it should be possible to find enough suitable volunteers from among the membership of local conservation and environmental groups and amenity societies.

Tree nurseries

A number of community tree nurseries have recently been set up, often on local authority land but run by local conservation groups (NGOs). They involve in a wide range of activities from collecting seed through to the distribution of the trees for community planting schemes. They often have close links with the schools in their area and parties of children regularly visit the nursery to help with the work and receive instruction in nursery as part of their studies.

Initiating and implementing programmes

In this chapter a range of community forestry initiatives has been described. Each initiative should not be viewed in isolation but as part of an overall community forestry programme containing a wide variety of measures. To attempt to encourage the more sophisticated forms of participation without also promoting a wide-ranging education and information programme can lead to rather limited results.

Those organisations and individuals that are already interested in trees will tend to dominate the programme while the vast majority of residents continue to remain unmoved. To achieve widespread community involvement also requires a long-term effort, particularly among residents who have little awareness or experience of trees. It is the residents living in the neglected and depressed slum areas, where there are few trees or gardens that will the benefits obtained most from long-term involvement.

Initiating and implementing a community forestry programme will require publicity and additional financial resources and manpower. Fortunately, most do not have to start from scratch but can build on the various activities already taking place. They can also make the most of existing resources and facilities.

Publicity and the media

For successful implementation of any programme, publicity is a pre-requisite. But in practice very little importance was given to this subject during the scheme implementation particularly at the urban level. In the absence of publicity, people do not know much about the programmes. The type of publicity which the urban authorities had chosen was mostly a traditional type like a public notice, which were not able to communicate to the masses what it was supposed to. These techniques did not project the importance of the project in a proper perspective to the community.

Considering these observations, it is suggested the urban authorities must adopt the latest publicity methods, which could communicate more information in the given time to more people. The Municipal Corporations can seek the help of educational institutions, cinemas, libraries, hostels, restaurants, local newspapers, etc. to provide wider publicity about the project. They can use the District Public Relation Department, which has the mass education wing.

The Department of Public Relation through its Monitoring and Evaluation (ME) wing can do better job. Similarly the Municipal Corporation can approach the NGOs and other local organisations or associations for giving wider publicity to the programme.

Community forestry is a programme that must be widely publicised. The programmes and projects are published through mass media's such as newspapers, radio, television, cinema, multimedia, and other design posters and leaflets, etc. The government or non-governmental organisations should prepare and distribute press releases and liase with the local media. The participation of the media can dramatically increase the impact of a programme by giving advance publicity to events and activities, reporting on them when they happen and highlighting the positive results achieved.

Local newspapers should be asked to carry items of interest about trees, regularly featuring items such as a report on a particularly rare or historic tree, or a feature on the work of the environmental section. It provides valuable support for other activities by keeping trees in the public eye. Many of the larger community groups will have their own contacts with the local media and will generate their own publicity for events and activities where they are involved.

Co-operation with private sector

In the long term, community forestry can make a valuable contribution to the resources available to the forestry section but it does require an initial investment. There has to be the political will on the part of councillors to make that investment and protect it. A stop-start approach to community involvement can be almost as damaging as no policy at all. The Central governments should encourage the community-based environmental projects, particularly in inner-city areas. State government and the Bank initiatives the community forestry by finances the project in different forms like subsidy and loan.

Since the very beginning, funds for the programmes were raised by and from environmentally concerned corporate/business leaders. The fund raising drives also endeavoured to create environmental awareness among the private sector and to implement it with in companies. The major voluntary organisations who are keen to participate can often obtain grants on their own behalf and sponsorship from local businesses is an important source of funding which is increasingly being explored.

Manpower

The most effective way of initiating a community forestry programme would be to create a post of urban forestry officer and appoint someone who has experience in this field. Unfortunately, for many local authorities this may not be possible unless funding for the post can come from an outside source. The initial burden of starting the programme may have to be carried by existing staff.

However, it would be a mistake to believe that once interest has been aroused the major part of the work in evolved in promoting and running the programme would continue to fall on the local authority. The underlying aim of community forestry is to encourage residents to do as much as possible for themselves.

Local authority staff should act as a catalyst for community action by buildings contacts with organisations and individuals who are already sympathetic and encouraging them to take a lead in the development of the programme. The major voluntary organisations that are concerned with conservation and the environment can be particularly helpful. Many of their full-time staff are funded by government sponsored employment schemes and participation in community forestry initiatives offers them an excellent opportunity to increase their numbers. They can offer training in a wide range of skills to individual residents and community groups who want to take part in the programme.

With the depleting forest resources, the governments, especially in the developing countries are struggling with the twin problem of conserving their forest resources and meeting the needs of their people. A pragmatic approach of government should be to create an environment of co-operation at all levels in the society and to engender a spirit of resource utilisation. This is possible at the community level irrespective of the political vicissitudes and the diversity of socio-cultural factors around the world.

What is really required is smooth information exchange and effective communication. The aim of involving the people should be to meet the physical and psychological needs of the people. Thus the effectiveness of participation has to be measured on some human needs scale and not by an abstract parameter. Working with the community requires empathy and dedication. The appraisal tools should be used in such a way that responsible responses of people giving direct clue to procedures and planning may be obtained.

The potential of community participation in sustainable urban forestry can be summerised as follows: -

⇒ The forest resources are inadequate and the resource dependent urban poor located in slums have socio-cultural potentials of participation.

⇒ There are sensitive zones of bio-diversity, wetlands and important flora and fauna.

⇒ There are fragile edaphic zones, detrimental to very existence of communities and urban agglomeration.

⇒ The forestry objectives include the national growth, local growth and concentration of eco-zones for betterment of environment.

⇒ The development of watershed, the biodiversity and sustainable forestry are synonymous.

⇒ The role of foresters is required to be oriented for the sustainable development of human and bio-resources.

⇒ The participation from community can strengthen the present management of urban trees.

⇒ The participation in productive forests, recreational areas, degraded areas and reclamatory areas should be distinct and suitably crafted.

⇒ Community participation in Community forestry is a misnomer. It should be peoples programme preferably through cooperative action.

⇒ The community participation can lead to sustainable forestry through appropriate motivation and technological inputs.

⇒ The site-specific micro planning with in the broad plan of watershed development has chances of success.

⇒ The non-governmental organisations, the traditional or local leader and city councils can help big way in the programme. The presence of pressure group can hasten the process.

⇒ There is necessity of strong political will to take the programme ahead. The politics should be developmental.

⇒ "Any investment in forest development is the investment on community needs" requires to be highlighted.

⇒ An open system of research and technology development for indigenous species is necessary. Presently there are significant gaps.

⇒ Appropriate mass mobilisation process need to be given high priority.

⇒ A well crafted training and education programme is necessary.

Community forestry programme is not simply in the interests of the local authority although improved public relations; greater accountability, reduced levels of vandalism and the availability of voluntary labour undoubtedly contribute to a more efficient and effective service. Most importantly, being involved is of benefit to the community itself. Though community forestry programmes, residents develop a greater awareness, appreciation and sense of responsibility for their trees. They become part of the decision makes process that shapes their environment and can make an active contribution to its improvement.

Community participation is a right. People have a right to participate in decision making which directly affects their living conditions. Community participation is a form of grass roots democracy. Since people themselves know best what they need, what they want and what they can afford, only close co-operation between authorities and community can result in projects which satisfy both the community and the authorities. No central body can efficiently govern a development project, which requires knowledge of local conditions demands immediate decisions and depends on contact with the local people.

Hence it is now clear that effective implementation of welfare programmes for the betterment of the community requires active participation of the people in the designing and implementation process. Though the philosophy of the community participation has its own trickle down effect on the performance of the programme, it has its own disadvantages too. However, the community participation has more plus points than negative points. From the point of advantages, by involving the people they can be easily made to accept the programme. From the point of negative impact, too much involvement of community leaders and the people creates lot of hurdles in the day to day functioning of the municipal functionaries.

7 Soil and sites

Soil and site preparation

The soil is the most important prime factor, which has to be considering in the tree-planting programme. Many failures or success are due to certain soil conditions, unfavourable or otherwise and for that reason some knowledge of the soil is both essential and interesting. In order that a plant shall thrive the soil must be kept friable, that is to say, open and easily crumbled for only on this condition can the roots explore freely for foods. Many urban sites is characterised with soil compaction and poor drainage, which will require substantial site preparation, including the importation of soil materials or the modification of existing ones.

Sites for tree planting

The sites available for urban forestry are so diverse as to test the skill of the most experienced forester. Even in the densest of modern cities, it would be possible and would make social, economic and environmental sense to keep some land for growing trees. Such areas of land within city would improve the whole quality of city life –its air, its water as well as its social qualities. They range from grass verges between suburban roads and pavements, and urban renewal schemes to old landfill sites, regarded colliery spoil tips and restored gravel pits. In these examples soil materials and site conditions are likely to be very different from one site to another.

Tree planting in urban areas is notoriously prone to failure; in many cases this is due to inhospitable site conditions. However, although failure can be caused by problems such as toxic soil materials in most instances it is a lack of understanding of a tree's needs that is at the centre of the problem. Too often simple procedures for site improvement before tree planting are missed out, and bad site preparation will increase the chance of failure; poor choice of soil materials imported on to the site, or compaction of soil by heavy machinery, are examples of bad practice.

Different factors are responsible for tree growth. Tree growth rates on each site would be different and can be predicted. These predictions for tree height or volume at different ages for a uniform-aged forest are called site indices.

There are nearly 50 different factors responsible for the rate of growth of trees, in which most important basic requirements are –

1. Soil depth
2. Soil texture
3. Water supply
4. Soil air (Oxygen supply)
5. Soil pH
6. Temperature
7. Soil fertility

Before implementing any urban tree planting programmes one must have a complete understanding about its cultural requirements. The rate at which trees grow and the kinds of trees that grow on a given area depend mainly upon the above factors of site, which is defined as the combination of soil, moisture, and climatic factors present.

The intended purpose of every plant grower, then is to properly adapt and continue to manage the existing soil so that it will support normal plant growth. Even though each soil is different in some aspect from every other soil, all productive soils must be composed of five basic ingredients. They are:

- Minerals or compounds of chemical elements obtained from the decomposition of the original rocks.
- Organic matter or former living material that is in the process of decay.
- Microorganisms, such as bacteria, fungi and small animals that aid in the decomposition of the organic matter.
- Water, which is necessary for all living things.
- Air or oxygen, which is needed for the proper growth of plant roots.

For increased familiarity with the existing soil, any grower should perform several tests before planting is started. These tests will enable the grower to correct any soil problems by making the necessary corrections or additions to the soil.

Where to plant trees: examples of locations and opportunities for tree planting in and around towns and cities related to scale of planting

	Large scale Individual schemes Greater than 0.25ha or 500 trees	*Medium scale* Individual schemes Around 0.25ha or 500 trees	*Small scale* Individual schemes of fewer than 500 trees and down to single trees
Locations	▪ Urban fringe ▪ Farm woodlands ▪ Reclaimed spoil heaps ▪ Reclaimed mineral workings ▪ Abandoned quarries ▪ Old allotments ▪ Major road schemes ▪ Existing urban woodlands ▪ River, Nallas & lakes banks	▪ Parks ▪ Other recreation/ play areas ▪ Urban road and street schemes ▪ Reclaimed industrial sites ▪ Housing and commercial/industrial developments ▪ Railway land ▪ Inner city development ▪ Golf courses	▪ City centre developments ▪ Office blocks ▪ Shopping precincts ▪ Formal gardens ▪ Private gardens ▪ Out of town supermarkets ▪ Recreation grounds ▪ Housing estates ▪ Car parks ▪ Roundabouts
Opportunities	▪ Timber production/ firewood ▪ Major recreation developments ▪ Wildlife conservation	▪ Landscape improvement ▪ Screening ▪ Shelter ▪ Development of urban green space	▪ Decorative and ornamental plantings ▪ Softening of harsh architectural features ▪ Development of small scale green space in heavily developed zones
Species choice	See species lists	See species lists	See species lists

Soil Depth

The depth of soil is important in predicting the capability of soil to support tree and shrub growth. Tree growth and health are very dependent upon the tree's ability to develop an extensive root system with which to extract water and nutrients from the soil. Deep and prolific rooting is a necessity for tree stability as the tree grows and puts up greater resistance to the wind. In natural soils, mature trees of most species will root to at least 1m in depth and some deep rooting ones may root 3 m.

The depth of soil may be observed in excavations, along road cuts and embankments, or it may be obtained with a soil auger. Also, the penetration of grass and tree roots indicates effective soil depth, and the range in which water from rain or irrigation is stored. Depth of urbanised tree roots should be observed at trenches recently made through typical grassy areas where trees and shrubs are to be planted. Deep lying roots indicate favourable soil structure (drainage, aeration, and texture).

Soil texture

It is one of the most important soil properties. Soil consists of mineral fragments varying in size from coarse particles (gravel and sand), to fine (silt), and very fine particles (clay). Classification of soil texture is based upon the relative percentages of sand, silt, and clay, which are determined by hydrological and mechanical analysis. Excessive sand may prevent soils from retaining moisture and applied fertilisers. Clay loams retain three to six times as much water for plant use as sandy soils. Soil with high clay content may be excessively dusty when dry or excessively plastic when wet. Disproportionate silt (40 percent or more) creates poor interior drainage and shallow root penetration.

A rich fertile soil is classified as a loam, is the most desirable soil for plants and is characterised by a mixture of sand, clay and organic matter. Loams have good drainage, but are able to retain sufficient moisture for plant growth, and at the same time to provide plant roots with adequate aeration.

The soil texture effect on moisture conditions is very significant. The percentage of clay determines both field capacity and the wilting point of the soil, thus delimiting the range of available moisture. Texture also determines the soil structure to a great extent.

The first test that should be made on a soil is a determination of texture. This is easily accomplished by squeezing a moist sample of the soil between the

fingers. A soil that has a predominance of sand will feel harsh and gritty, and the individual particles will be visible to the eye, feel coarse, and barely hold together. A clay soil is easily squeezed, feels very smooth and sticky, and has no visible particles. The desirable loam should feel smooth to the fingers, be somewhat sticky, and feel coarse at the same time and be easy to roll between the fingers.

Water requirements

Water is an essential nutrient for plant growth. It is needed in much larger quantities than any other nutrient. Water is the life of soil and is also crucial in biochemical reactions and for the transport of dissolved materials within the tree, and from the soil into the tree. All most all the mineral nutrients become available only, when certain amounts of water are present in the soil. Certain activities e.g. grazing and compaction of soil mass by any other means result in poor infiltration.

Watering requirements vary with the type of plant, the texture of the soil, the time of year, and the growing temperature. Soils vary considerably in the amount of water they can contain. As a general rule, the more coarse particles the soil contains, as in sands and gravels the less water is held in the pores between them. So clay soils, mostly composed of particles less than 2µm, hold considerable amounts of water and hold it so strongly that only a proportion is released for uptake. In contrast, loamy soils hold sufficient amount of water and also allow much of their water to be taken up. The organic matter content and soil structure or lack of these will also affect water content and supply to plants.

The symptoms associated with under watering are the following: Crisp, Brown leaf spots form, Older leaves drop, Leaf colour becomes bleached, Wilting of plant, Flowers do not last and buds may drop, Stems become weak and limp, suggesting a general lack of plant vigour, and the soil becomes dry and hard packed.

Over watering is also harmful to the proper growth of plants. It may produce the symptoms like: Leaves become curled and drop, Leaf tips turn brown and die back, Soft dark areas form on the leaf surface, New leaves grow soft and sometimes become discoloured or even rotten, and the plant wilts because of root deterioration caused by a water logged soil. Over watering damages the root hairs by depleting their necessary oxygen supply, while too little water may totally dehydrate the roots, causing water to leave the roots rather than enter them because the concentration of water within the roots exceeds that in the soil.

Soil air (Oxygen requirements)

Soil air constitutes the atmospheric gasses filled in the soil pores. Gases present in the soil atmosphere are more or less similar to those found in the external atmosphere. However, the oxygen concentration is less and carbon dioxide concentration is higher than from the atmosphere. All plants need oxygen to respire and trees are no exception.

Respiration takes place throughout the living parts of a tree including the roots. In natural well-drained soils, oxygen can account for 15-20% of the total soil gases, and respiration takes place unhindered.

From surface towards the water table, oxygen content gradually falls and the CO_2 concentration rises proportionately. Carbon dioxide is produced mainly by respiration of microorganisms and plant roots. Most plants can make vigorous growth if CO_2 concentration is not too high around the root zone of plants. All roots are generally killed by high CO_2 concentration. For optimum growth, CO_2 concentration may be below 1.0 %.

Root development appears to be affected if the Oxygen content fall below 8 to 12%, depending upon the species of plants. Root development ceases if it falls below about 5%. Oxygen demand of roots and sensitivity to CO_2 seem to increases with increase in temperature.

Trees obtain sufficient oxygen, nitrogen, and carbon dioxide either from the soil air or atmospheric air. However, in many urban soils subject to water logging or compaction, little pore space remains to contain oxygen. These soils are very susceptible to anaerobism, and tree roots may die when this occurs. In perpetually waterlogged soils, the root system and in due course, the whole tree will die. Tree species vary to some extent in their tolerance of waterlogged soils, the root system and in due course, the whole tree will die.

Tree species vary to some extent in their tolerance of water logging; alders are well known examples of trees able to grow in seasonally wet soils. However, tolerant trees are usually shallow rooted and therefore prone to summer drought and wind-throw. In general all trees grow better in aerated soils.

In order to have low percentage of CO_2 it is necessary to have proper diffusion of gasses from soil pores spaces to the atmosphere and vice versa. Good aeration can occur only in well-drained soil.

Soil pH

Receiving an ample supply of the essential chemical elements is no guarantee that a plant's growth will be normal. Acidity or alkalinity degree of soils greatly affects growing plants. Most plants thrive best in the pH range of 6, which is slightly acid or sour, to pH 7, which is neutral, being neither acid nor alkaline, since within these limits all the necessary nutrients for normal plant growth available.

Acid loving plants are able to thrive in acid soils where the nitrogen is unavailable, because the mycorrhiza fungi on their roots helps change the existing ammonium nitrate into the desirable nitrate nitrogen. Most plants are unable to accomplish this feat, and when they are grown at a pH below 5.0 for an extended time they have their growth seriously retarded and eventually die.

A highly alkaline soil having a pH above 8.0 is unfit for the growth of plants. In these soils, most soil organisms do not thrive too well. Certain plants may also suffer from iron chlorosis, a condition identified by yellow green leaves with dark green veins, because the iron may be trapped in the soil and be thus unavailable to the plant. This chlorotic condition usually disappears as soon as the pH is lowered.

In extremely acid soils, iron and aluminium may become toxic to some plants. Growth of fungi may increase under these same conditions at the expense of the soil bacteria, bringing their ability to decompose organic matter to a complete halt.

Temperature requirements

The growing temperature is another important consideration. Plants grown outdoors must be able to withstand wide fluctuations in temperature and still survive, whereas indoor plants are usually more specific in their temperature requirements. When the growing temperature is specified for a plant, it usually means the night temperature that will produce the best plant. These same plants are usually not affected by daytime temperatures 10-15°F (3-4.5°C) above the specified night temperature.

Soil fertility

Soils are a mixture of mineral and organic materials, which are taken from the soil, are generally known as nutrients. All tree species require the same basic set of nutrients, although these requirements will vary both in total and relative proportions between species. Plants take up carbon, oxygen and hydrogen from the air or from the water and both the organic and inorganic nutrients that a tree takes up via its root system.

Plants absorb more than 40 elements during their growth, but all of them are not essential for the growth and development of plants. Such elements, which have been proved to be essential for the growth and development of plants, are usually called essential elements. The nutrients, which are, require in larger proportion are called 'major nutrients' and those required in smaller amounts are called 'minor nutrients'.

Major nutrients – Carbon, Hydrogen, Oxygen, Nitrogen (as nitrate and ammonium), Phosphorus (as phosphate), Potassium, Sulphur (as sulphate), Calcium, Magnesium, and Iron.

Minor nutrients – Molybdenum, Boron, Zinc, Cobalt, Chlorine (as chloride) and Manganese.

Natural soils differ somewhat in their ability to supply these nutrients. The greatest differences are between soils containing free calcium carbonate (alkaline soils) and those, which do not (acidic soils). Soil fertility tests are usually conducted on soils to determine the available supply of the three most important chemical elements required by plants in order to live, grow, and reproduce. These three are nitrogen, phosphorus and potassium. The amount in any soil of any of these plant food elements is extremely small and must be replaced periodically by fertilisation.

Fertility of soil is dependent on the structure of the soil, the presence or absence of nutrients, and soil pH (degree of acidity or alkalinity). Soil pH, cation exchange capacity, and anion exchange capacity largely determine the capability of a soil to adsorb nutrients and relinquish these nutrients to plants.

The growth nutrients most likely to be deficient are nitrogen, phosphorous, and potassium. Soil may also be deficient in magnesium, calcium, and iron. Soils are tested to determine the fertility of the soil and the soil conditions, which affect plant growth.

Tests for Nitrogen

Due to the high solubility of nitrogen bearing material in the soil, laboratory tests for nitrogen are recommended only in geographic areas where the annual precipitation is less than 20 inches per year.

Tests for Phosphorous and Potassium

Most laboratory reports give phosphoric acid and potash in pounds per acre. The amounts of soluble rather than available nutrients are shown, as each species of woody plant or grass manifests a different potential for using these nutrients. Some laboratories report soluble nutrients as low, medium, and high for phosphoric acid and potash. However, reports may also be in terms of the elements, phosphorous and potassium rather than as phosphoric acid and potash. The aligned ratings of these elements in pounds per acre as follows:

Substance	Low	Medium	High
Phosphoric acid ($P_2 0_5$)	0-100	100-150	Above 150
Phosphorus (P)	0 - 44	44- 65	Above 65
Potash ($K_2 0$)	50-150	150-250	Above 250
Potassium (K)	42-124	124-208	Above 208.

Several laboratories report on the basis of parts per million (ppm), which may be converted into pounds per acre by multiplying by two (for example, 40 ppm equals 80 pounds per acre). Others report in terms of percentages by adding two decimal places and multiplying by two million (for example, 0.0025 percent is 0.000025, and this figure multiplied by 2,000,000 gives 50 pounds per acre).

Tests for Organic Matter

Organic matter is one of the important constituents of soil. It helps the plant growth in a number of ways by supplying nutrients and improves most of the physical and chemical properties of soil.

Tests for organic matter in soil are made by laboratory methods, and the findings are expressed in percentages of dry weight. Most well drained soils contain 5 percent or less organic matter. Sandy soils tend to have lower percentages than other soils, while clay and peat soil may contain more than 50 percent organic matter.

8 Urban soil Properties

Urban soil properties

A thorough understanding of urban soil characteristics and conditions is essential to a successful urbanised tree-planting program. Certain qualities of soils determine their ability to support vegetative growth. Soil texture determines how well it can resist erosion and how much water can be retained for plant growth. The organic, physical and chemical characteristics of the soil determine how well plants will grow. Man-made or altered soils are often deficient in some essential elements. The permanent removal of topsoil does the most damage to a soil's ability to grow trees, because most of the nitrogen and phosphorus exist in this upper layer. Requirements for soil amendments and improvements depend upon the soil structure, soil pH, and the kinds of plant nutrients available in a given soil.

Urbanised soils consist of areas where soil materials have been disturbed by fill or excavation. Within the Classification of Grounds, Improved Grounds, Semi-improved Grounds and some groups of Unimproved Grounds are usually considered as made urban land. Such land can no longer be identified by soil series, or as a single named soil, and generally requires special treatment to establish and maintain vegetative cover. Human activity, by modification of the natural soilscape, is the predominant active agent. Made land or urbanised soils display the following characteristics:

* Great vertical and spatial variability.
* Modified soil structure leading to compaction.
* Presence of a soil crust on bare soil, usually water-repellent.
* Modified soil reaction (pH) usually elevated.
* Restricted aeration and water drainage.
* Interrupted nutrient cycling and modified soil organism activity.
* Presence of anthropogenic or man-created materials and other contaminants.
* Modified soil temperature regimes.

Urban soils may contain a wide range of materials not normally found in natural soils. These may be landfill materials like domestic wastes or sewage sludge or a wide range of industrial products and wastes. The most offensive materials contain phytotoxic elements such as cadmium, lead, nickel and mercury; some sites may contaminate by coal tar, cyanide or phenolic compound. Some so-called inert materials like builder's rubble, concrete and asphalt can be tolerated in the soil, but many pollutants will kill trees if present in anything more than very small amounts. They are few guidelines on critical levels of factors like pH and organic matter content and partly because tree species differ in their uptake and tolerance of such materials. EEC threshold values for heavy metals, which should be used as guidelines are shown in the following table.

Limit value for concentrations of heavy metals in soil

Metal	Limit value (mg/kg dry matter)
Cadmium	1-3
Copper	50-140
Nickel	30-75
Lead	50-300
Zinc	150-300
Mercury	1-1.5
Chromium	100-200

Natural soils develop over thousands of years. During this time the action of plant roots and soil animals, together with wetting and drying and freezing and thawing cycles, have led to soils with well-developed soil structure. Soils comprise aggregates of mineral and organic matter, which vary widely in size, and are separated from one another over much of their surface by pores, fissures and cracks.

As indicated above, the natural process of structure formation and the operations to maintain it may be lacking in urbanised soils. In fact, most conditions present within urbanised situations tend to destroy structure and increase bulk density, thus compacts the soil. Soil materials are may be compressed by heavy machinery or even pedestrian traffic. Most compaction is induced if soils are moved about especially when wet. Soil movement is commonplace on sites used for excavation and soils may be transported several times before final replacement.

The important conditions exist with in the urban centres include:

- Most urbanised soils have been disturbed or displaced, at least partially destroying structure and reducing pore space, especially macro-pores.
- Low organic matter contents which disfavour aggregation. The aggregating effects of soil organism activity are also reduced.
- Low frequency of structure enhancing, wet-dry or freeze-thaw cycles.
- Urbanised soils may be subjected to surface traffic or other forces over a range of moisture conditions that may contribute to compaction.
- Vegetation is subject to damage and reduction of cover, possibly leaving the soil bare and susceptible to crust formation, compaction, and erosion.

All of the preceding conditions may detrimentally influence other soil properties. These properties include water infiltration and permeability; water-holding capacity; aeration status, and root penetrability, especially of the upper soil layers where tree and shrub roots are concentrated. Unless remedial action is taken before planting, trees will only root in the uppermost soil layers on these sites, and tree growth and health will be put at risk. There is no evidence that trees can penetrate compacted soils better than other plant types.

Improving the site for tree planting

Some urban forestry sites have little soil material *in situ* either soils are buried by concrete, asphalt, brick or similar materials, by waste from mineral extraction, or they have been exported from the site. Alternatively, contamination may make existing soils unusable. In these circumstances it is likely that other soil or soil forming materials will need to be imported on to the site. It is necessary to distinguish between different types of soil material commonly used, particularly 'topsoil', 'subsoil' and 'overburden'.

Topsoil is the darker organic rich material, commonly up to 20 cm thick, which occurs at the soil surface. Subsoil is the soil material below the topsoil, generally to about 100 cm depth. Both materials are usually well structured, though the former is by far the most fertile. The term overburden is commonly used for materials overlying workable minerals or aggregates; overburden is usually massively structured and far less fertile than either topsoil or subsoil. It should only be used as a material for tree planting if soils

are not available or unstable; its use is likely to restrict the range of species that can be grown.

The following table outlines desirable soil properties in imported material. Clays should be avoided whenever possible as they are likely to lead to problems of water logging. It is important too, to ensure that imported materials are not themselves contaminated and toxic to trees.

Desirable soil properties in imported soil materials.

Texture: sands, silts and loams with less than 40% clay (<2μm)
Soil reaction: pH 4.0-8.0
Stone content: less than 30% by dry weight; stones less than 50mm in size
Other inclusions: free of weed seeds, roots of perennial weeds, sticks and foreign matter
Electrical conductivity: below 2 mS/cm (1:1 spoil : water suspension)
Heavy metal content: below EEC limit values

Site preparation

Site preparation is a necessary component for taking up tree planting programmes. A well-prepared plantation site may help in proper growth and development of trees. The vegetation existing on the area is thinned or sometimes cleared so that there is minimum competition for moisture, nutrients and light. The extent of site preparation depends on various factors such as nature of site (e.g. sloppy areas should be protected from erosion), type of planting, species to be planted, availability of funds and labour, etc. The objectives of site preparation are –

(a) Clearing the site by removing unwanted trees and shrubs to facilitate planting and establishment,

(b) Removal of weeds,

(c) Suitable soil conservation works for preventing soil erosion and surface run off,

(d) Conservation of soil and moisture,

(e) To create conditions for development of roots,

(f) Promoting germination and growth of seedlings by proper soil working and,

(g) Improve drainage and irrigation conditions.

In order to achieve the above objectives good site preparation consists of the following operations: -

1. Clearing of site

Most of the urban fringe areas and the degraded industrial areas are occupied with little vegetation. The vegetation may comprise of scattered trees, thorny shrubs, weeds, woody climbers, exotics like *Lantana camera*, etc. The dead, dying and diseased trees and woody climbers should be cleared by cut and removed from these areas. The felling may be done departmentally or through contractor agency. In felling efforts should be made to make stumps as low as possible. After felling and logging all portions of trees must be removed from the site.

2. Removals of stumps

In some areas stumps are uprooted for proper working of soil. Removal of stumps is necessary to avoid the infections of fungi in new crop. It is reported in UP that *Acacia catechu* has infected by *Ganoderma lucidum*, fungi that exist in the plantation area. Removal of stumps manually may be costly operation. Machines may be used for the purpose.

3. Disposal of slash and debris

Logging wastes, bushes, debris, etc. should be removed or burnt. Its presence will pose problems in efficient urban forestry works. This material can both be harmful and beneficial. Slash and debris it not removed may become cause of: (a) fire hazard, (b) stunted growth of seedlings due to improper soil working and (c) heart rot, root rot, (d) source of infection of insects and fungi, etc.

4. Burning and re-burning

This is usually not done within city limits. There should be sufficient material to be used as rab. The burning should be carried out as soon as the material is dry enough to give a good hot fire. The direction of wind should be noted before firing rab. The fire should be started up the wind along the periphery so that burning advances inwards and there is no risk to the materials lying on the periphery. Inspite of careful burning there are some materials left unburnt, these are collected in heaps and are reburnt.

Soil working

Soil working to the mineral soil is essential for loosening of the soil. A good and proper soil working is required for the success of tree planting programmes. Complete soil working is carried out by deep ploughing with the help of new techniques like sub-soiler, tractor, etc.

The weeds are completely removed in the process but complete soil working is not economical. Good forest soil requires very little soil working but in urban situation it is totally different, where the soil is compacted and degraded. On sloppy areas soil working should be minimum to avoid soil erosion and eradication of weeds and grasses completely may not be necessary. Too much soil working in high rainfall areas may create conditions suitable for water logging. On the contrary in dry climates deep soil working is necessary to keep the soil loose. The extent of soil working depends on soil conditions, slope of the land, climatic conditions, precipitations, species selected for planting, etc. The various types of soil working are:

- Deep ploughing
- Pits
- Ridge-trench or ditch

Deep ploughing

The disc plough or subsoilers may be used to plough the whole area or ploughing may be confined just to strips or patches. Hard soil should be hoed into clods and allowed to dry out in the cold weather, for drought and the blazing sun in India do the same for the tilth of the soil as do the frosts in cold lands. It is stressed, however, that the land must not be left bare too long. Soil exposed to rain alternating with hot sun rapidly deteriorates, in that plant food is washed out. In dry areas deep working is necessary. It improves soil aeration, water-holding capacity, mixes well the over burnt area and improves other physical properties of soil. On sloppy areas deep ploughing is not be carried out. For deep ploughing the area should be flat or gentle deep with sufficient soil depth.

Pits

Digging of pits is common under various edaphic and climatic conditions. Many species such as bamboo, neem, eucalyptus, chir, etc. are planted in pits. Ordinarily pits of 30 x 30 x 30 cm are dug but on special sites and for some species pits up to the size of 60 x 60 x 60 cm are also dug. Ordinary pits are

recommended for clayey and saline alkaline soils. Ring pits are dug in areas with comparatively less rainfall and very sandy soils

Ridge-ditch or Trench

It is a partly filled trench with a ridge along it and is preferred for sloping areas. The ridge is on the lower side of trench. The sides of ridge-ditch can be vertical or slanting. It can be 45 cm wide and 30 cm deep suited for moist dry zone with large number of rainy days, 60 cm wide and 45 cm deep for low and ill-distributed rainfall areas with deep soils, and 60 cm wide and 30 cm deep for sloppy areas where soil depth is poor and rocks are exposed.

9 Checklist of plant species for urban forestry

Choice of species

There is an enormous diversity of size, habit, foliage and other characteristics among the range of species and cultivars, which are available in the nursery trade. This can make the planners task of choosing the right plant seem overwhelming. The decision on which species to plant should not be made hastily nor should the species simply be used out of habitat. One preliminary point should be made before design and plantings is the conservation of existing woodlands. On some urban sites there may be existing trees, which might serve the purpose just as well as newly planted ones. For example, where natural regeneration of tree and shrub species is present, it will often be both more economical and more rewarding to make the best of this woody growth than to clear it and then carry out new planting.

Landscape planting of ornamental trees, which has close relationship with plant ecology and its study is essential for the urban forestry planner. The texture of the soil, availability of water resources, amount of rainfall, rivers, canals and tanks, and the temperature play an important role in the growth of trees. Plants must be placed in habitats, which approximate to their natural surroundings and the trees are physically and physiologically adapted to cope with diverse environmental conditions.

The efficient and successful choice of plants is best made by a selection procedure in which the planner makes increasingly fine distinctions between group of plants on the basis of their characteristics. These characteristics can be conveniently placed under three headings:

1. Plant growth habitat and cultural requirements
2. Functional and structural characteristics
3. Visual and other sensory properties

Plant selection can never be arbitrary because all plants are site specific in their requirements for growth and survival. Growth habit and cultural requirements help determine the habitat and ecological niche a species can occupy. This applies both to spontaneous vegetation communities and to

contrived or managed associations. The urban soil is characterised with soil compaction, water logging, and the presence of toxic substances, etc. In choosing a species the moisture and soil type requirement are very important. Such characteristics are an essential consideration for the designer at the time of selection of species, if they are to create plant associations, which are vigorous, healthy and sustainable.

The functional and structural characteristics are those which determine the ability of a species to perform its working role in the urban landscape. For example, a plants form and foliage density will affect its ability to shelter, screen or shade an area, the density of root growth near the surface will determine its ability to bind the soil and protect against erosion in river banks or nallas, etc. or the surface area of plants to determine the ability to reduce the air pollution, etc. These functional characteristics allow planting to produce a functional landscape, one which provides a fitting environment for human activities whilst avoiding damage to the ecology of the landscape, like roadsides, railway sides, canals, etc.

The structural characteristics determine the spatial functions that can be performed by planting. The structural characteristics of plants are those aspects of form, which can contribute to the spatial structure of the landscape. Mature size, density, shape, and speed of growth are all essentially structural characteristics. These spatial qualities are of primary importance to the aesthetic effect of planting.

The visual properties of stems, foliage, fruit and flower are also important ingredients in planting of high sensual quality in parks, gardens, other recreational areas, etc. Their importance and the care needed when choosing and combining these characteristics will vary according to the importance of the ornamental function on the site and the visual sensitivity of the location. For example, when we plant a garden we except to spend a great deal of time and effort creating beautiful scenes. In an office courtyard a similar visual impact may be required, especially if the client wants an impressive showpiece for visitors.

A shelterbelt or woodland in an urban area although it would not require the same attention to detail as intricate planting in a courtyard or garden, must still be designed with sensitivity to the existing character of the landscape and in particular, the indigenous vegetation, the character of foliage, flower and branch form of the chosen species should harmonise with their setting. Locations such as reclamation sites may, on the other hand, be far less demanding when it comes to the visual and other aesthetic qualities of plants.

Indeed, to get anything to grow at all may be a major challenge on sites with difficult or badly polluted substrates. In such cases the technical considerations of establishing plants would far outweigh the visual properties, when it came to selecting the species.

While choosing a species for landscape the size, form of crown, height of tree, flowering season, period of leaflesseness, etc. have to be kept in view. Plants selected for planting close to buildings must have the qualities of light crown, fragrant flowers, small to medium size trees. Species choosen must be of assorted varieties, which is necessary to get flowers at different times and to get flowers of various colours. As such phenological and ante-ecological qualities of a species both the short term as well as long term effect of planting of a particular species are to be kept in mind.

To summarise, the procedure of design and plant selection consists of first determining function, followed by growth habitat, spatial form, and finally visual character. Only then can appropriate species be confidently selected and arranged to perform each of these roles.

Criteria for selection of tree species

The choice of species is based on the adaptability to the site, early returns, multiple uses, complimentary role to the system and its possible role during the lean/critical periods. The key factor contributing to the success of tree planting is the selection of suitable tree species. Some of the considerations for selection of tree species are:

- Multipurpose species that provide food, fodder, fuel, poles, timber and industrial raw material.
- Adaptation to local soil and agro-climate conditions.
- Fast growing species like *Leucaena, Peltophorum, Thespesia, Albizzia*, etc.
- Drought resistant species that can survive long dry periods.
- Species that can serve for soil and water conservation like thick planting of *Leucaena, Acacia*, etc. on contour bunds and cutting it low for use as fodder or green manure.
- Species generating income by producing fruit, nut, fodder, honey, gum, resin, dye and medicine.

- Species that are harmless to the neighbouring field crops with their shade, leaves and roots.
- Species that help in building up soil fertility like *Acacia, Albizzia, Subabul*, etc.
- Deep rooted species that draw moisture and nutrients from lower levels without competing with field crops.
- Species that have good coppicing ability.

A mosaic of different aged stand of trees gives great beauty as well as the widest range of habitats. Mixed age, mixed species planting is often desirable. Sometimes a pure stand of a single species can have a beauty and character of there own; light crowned trees sometimes are preferable to thick and dark crowned trees. Choice of species to screen dust, absorb sound, provide shade, besides proving beautiful foliage and fragrant flowers are the need of the urban days.

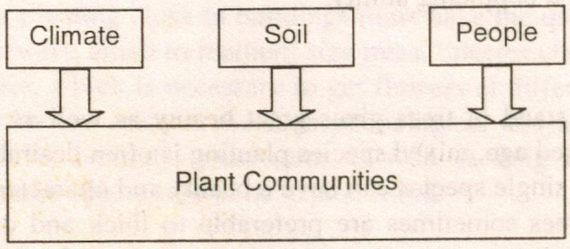
Importance of native species

It is generally only when we become concerned to conserve nature and the integrity of a landscape or to keep the costs of landscape maintenance to a minimum that we realise the importance of using native and not exotic species. The current tend is the choice of indigenous tree species which are endemic to the area rather than exotic tree species. The indigenous tree species, which are called 'sons of the soil', have better chances of survival than the exotics which have to grow in a totally different environment.

Wherever it is the intention to conserve nature or produce a naturalistic landscape, it is necessary to work with natural plant communities. Native vegetation will support the greatest range of native wildlife. It also has the added advantage that it 'fits' the local landscape, its form (shape) is characteristic of the local landscape, its colours blend with the local landscape. Therefore, when the aim is to conserve to local landscape, it is appropriate to use the native species of plants. In addition, native vegetation has the advantage of being more resistant than exotic species to the plant growth problems associated with local fungi, aphids, and plant diseases. It is therefore, sensible to use it where possible to minimise the long-term management costs associated with the care of all landscapes.

To understand the usefulness for urban environmental planning of identifying the locally appropriate native plant communities, try to remember a long

journey undertaken recently. There are distinct vegetation changes in different parts of the countryside. These vegetation changes are because plants are tolerant of a certain range of conditions, some a wide range, others a narrow range. This means that the survival plant communities are determined by local climate and soil and influenced by the way, in which people have tended the land in the past and present. The major factors that influence the distribution of plant communities are indicated as: -



In order to produce natural looking landscapes and to conserve the local wildlife, the urban planner has to know the range of plants that are locally important and to understand how they can be grouped together in communities, to function as support for different types of wildlife and the local people.

Shrubs in urban landscaping and improving quality of environment

In modern days landscaping, the choice of species must in most cases is influenced by ecological facts. The species should naturally adapt to the site, should be aesthetic in their forms and in production of flower and pattern of foliage. Local species should get preference over exotics. Shrubs and trees are part of the urban scene. One derives visual pleasure looking at individual shrubs or trees. But in urban scenes it is more often the visual play of a mass of natural foliage contrasted with the built forms, which is important.

Shrubs, like trees, provide contrasts of colour, texture and form in a built environment, introducing the shapes, colours and feelings for nature into the manmade geometric pattern of roads and buildings. In the change of colour with the change of season, shrubs provide endless variety and delight, with fresh greenery and gay blossoms in rains, autumn and spring.

Few shrubs in this country will be leafless for any length of time. Some plants shed their leaves, but even then they provide visual pleasure in the delicate sculpture of named branches casting intricate shadows on brick or concrete walls and pavings against the sky.

Shrubs also have evocative qualities or associations. Shrubs and climbing shrubs have more than simply a visual appeal. The wind rustling through leaves is a sound evocative of village and a welcome diversion from city noises. The smell of the flowers, sight of colourful petals, ripening fruit or dying leaves all have the association with nature and temper the artificial appearance of urban surroundings. Shrubs do not have crown as the trees and cannot reduce temperature as trees. But they sometime do cover soil in a better way than the trees.

In urban areas especially in residential areas, gardens, parks, institutional compounds and industrial compounds there may be very limited scopes in planting trees and in such sites shrubs and flowering shrubs can only give the landscape an aesthetic appearance. Tall shrubs are suitable to replace the trees that required large space, which is very limited in city centers.

Shrubs if properly selected are capable to block out unwanted features (garage, car park and industrial sites) and can demarcate various areas. Shrubs and ground cover form an integral part of the overall design in which trees, by virtue of their size are often considered to be dominant features.

Bougainvillea species are one of the best shrub and climbing shrub in India, which stand unique amongst very many other shrubs. The species are very tough, resistant to drought and grazing, quick growing and have many assorted colours. Croton spp. should be considered as one of the best ornamental foliage shrub for Indian gardens.

Unlike flowering plants the colourful leaves of croton maintain its colour round the year. It has many varieties, which suit to assorted types of sites. Where grown in dense formation it forms an ideal barrier (if grown to a width of 30m) to absorb vibration and sound to the extent of 20 dB.

Tall and intermediate shrubs

Of all tall shrubs *Nerium odoratum, Tabernaemontana coronaria, Mussaenda erythrophylla, Murraya exotica, Ixora coccinea, Ixora parviflora, Ixora pilgrimii, Hamelia patens, Thevetia nerifolia, Artabotrys odoratissima* etc. are best suited to forming dense rows either in hedge or isolated rows to serve aesthetic need and arrest air pollutants to a considerable extent. Shrubs like

Acalypha marginata, Acalypha colorata, Hibiscus spp. Caesalpinia pulcherima, Cestrum aurantiacum, etc are several species with intermediate height suitable for planting. All these species can be pruned to manipulate size according to design and functional needs.

Shrubby climber

In a urban, industrial or such other areas where extensive species are not available, and vegetation cover is necessary to cover ugly sites, warehouses, godowns or to erect green screen of foliage to arrest dust or polluted fumes, etc., the role of climbing shrub is unique and unparallel. These shrubs are quick growing have colourful flowers and easy to grow. The species like *Ipomoea palmata, Ipomoea rubrocaerulea, Tecoma grandiflora, Thunbergia grandiflora, Vallaris heynei, Quisqualis indica, Clerodendrum thomsoane, Gloriosa superba, etc.* are suitable climbing species that can be employed efficiently.

Operation planning

Tree planting schemes in urban areas will usually form part of an overall plan in the development or re-development of the location concerned. At the stage of drawing-up that plan it should be possible to identify the objectives of the tree planting, and then desirable tree characteristics necessary to achieve those objectives should start to become clear. Consideration of the approximate size, rate of growth, shape, color, shade-bearing characteristics and other key features, will quickly narrow down the range of species suitable for the purpose so that a short list of potentially useful trees can be drawn-up.

At the design stage itself, selection will be made from suitable native species and decisions will be made on the basis of the site requirements of the trees (will the trees grow easily and with minimum maintenance on the chosen site?). The cost and availability of suitable species will need to be considered together with a careful look at any disadvantages, which may arise in future management. If the choice of species has been wise so that the trees are at home on the site, are growing to the size and shape envisaged and are not in conflict with other features of the development, then regular maintenance should be simple and not costly. It is important that the designers should consult with the foresters or silviculturists in order to fulfil a proper selection of the plant species for different urban conditions.

Appropriate trees

When considering the choice of species in a wide range of situations from near rural, peri-urban locations at one extreme to city centre development at the other. It is a good plan to consider a group of native species with desirable characteristics and then to select from this group, especially suited to specific locations. The trees are highly adapted to the different environmental conditions exist in the nature. Some trees are adapted to survive in highly polluted areas, some are tolerant to acid and saline soils, few are suited to water logging areas, etc. Some trees are celebrated for its ability to ameliorate the environment, its aesthetic value for roadside planting and parks, providing food and fuel wood for the peoples. A summary of the qualities of these trees is as follows.

Drought resistant trees suitable for arid and semi-arid regions

- *Acacia nilotica*
- *Albizzia lebbek*
- *Albizzia procera*
- *Azadirachta indica*
- *Boswellia serrata*
- *Butea frondosa*
- *Cassia fistula*
- *Dalbergia spp.*
- *Ficus spp.*
- *Hardwickia binata*
- *Melia azadarach*
- *Morus indica*
- *Pongamia pinnata*
- *Syzygium cumini*
- *Zizyphus mauritiana*

Salt resistant trees

- *Azadirachta indica*
- *Bassia latifolia*
- *Butea frondosa*
- *Phyllanthus emblica*
- *Psidium guava*
- *Thespesia populnea*

Trees for swamps and marshy areas

- *Acacia catechu*
- *Acacia nilotica*
- *Bombax ceiba*
- *Dalbergia sissoo*
- *Salix tetrasperma*
- *Sesbania grandiflora*

Ornamental flowering trees suited to moist conditions

- *Amherstia nobilis*
- *Bauhinia purpurea*
- *Bauhinia variegata*
- *Lagerstromia parvifolia*
- *Peltophorum ferrugineum*
- *Samanea saman*
- *Saraca indica*

Ornamental flowering trees suited to dry conditions

- *Butea monosperma*
- *Cassia fistula*
- *Cassia siamea*
- *Cochlospermum gossypium*
- *Cordia sebestena*
- *Erythrina indica*
- *Keleinhovia hospita*
- *Melia azadirach'*
- *Plumeria alba*
- *Pongamia glabra*
- *Spathodea companulata*
- *Spathodea nilotica*
- *Sterculia colorata*
- *Tecomella undulata*
- *Thespesia populnea*

Ornamental trees for avenues

- *Azadirachta indica*
- *Bauhinia purpurea*
- *Bauhinia variegata*
- *Butea frondosa*
- *Cassia fistula*
- *Gliricidia maculata*
- *Grevillea robusta*
- *Klienhovia hospita*
- *Thespesia populnea*
- *Lagerstromia parvifolia*
- *Melia azadirachta*
- *Peltophorum ferrugineum*
- *Polyalthia longifolia*
- *Samania saman*
- *Spathodea nilotica*
- *Sterculia alata*
- *Tamarindus indica*

Dwarf ornamental trees and shrubs for small compounds

- *Bauhinia purpurea*
- *Bauhinia variegata*
- *Butea frondosa*
- *Caesalpinia pulcherima*
- *Cassia fistula*
- *Cochlospermum gossypium*
- *Cordia sebestina*
- *Erythrina indica*
- *Gliricidia maculata*
- *Kleinhovia hospita*
- *Lagerstromia parvifolia*
- *Mesua ferrea*
- *Mussaenda erythrophyla*
- *Nerium odorum*
- *Plumeria rubra and P. alba*
- *Pongamia glabra*
- *Saraca indica*
- *Spathodea nilotica*
- *Sterculia colorata*
- *Tecomella undulata*
- *Thespesia polulnea*
- *Thevetia nerrifolia*

Fragrant trees and shrubs

- *Alstonia scholaris*
- *Artabotrys odoratissimus*
- *Gardenia spp.*
- *Ixora parviflora*
- *Lawsonia alba*
- *Magnolia grandiflora*
- *Michelia champaca*
- *Murraya exotica*
- *Mesua ferrea*

Ornamental trees for large compounds

- *Azadirachta indica*
- *Bombax malabaricum*
- *Cassia nodosa*
- *Colvillea racemosa*
- *Diospyros spp.*
- *Ficus glomerata*
- *Ficus retusa*
- *Kigelia pinnata*
- *Lagerstromia flos-reginae*
- *Melia azadirach*
- *Millingtonia hortensis*
- *Mimusops elengi*
- *Peltophorum ferrugineum*
- *Phyllanthus emblica*
- *Sterculia colorata*
- *Tamrindus indica*
- *Terminalia arjuna*

Beautiful crown forming trees

- *Alstonia scholaris*
- *Cocos nucifera*
- *Dalbergia Sisson*
- *Erythrina indica*
- *Ficus bengalensis*
- *Ficus elastica*
- *Grevillea robusts*
- *Madhuca latifolia*
- *Polyalthia logifolia*
- *Pongamia pinnata*
- *Tectona grandis*
- *Terminalia arjuna*
- *Terminalia catapa*
- *Thespesia populnea*

Fruit trees for human consumption

- *Anacardium occidentale*
- *Annona reticulata*
- *Annona squamosa*
- *Artocarpus hirusta*
- *Citrus spp.*
- *Cocos nucifera*
- *Dyospyrus embryopteris*
- *Emblica officinalis*
- *Mangifera indica*
- *Psidium guva*
- *Syzygium cumini*
- *Terminalia catapa*
- *Ziziphus mauratiana*

Species suitable for Green Belt and pollution barrier

- *Acacia nilotica*
- *Alstonia scholaris*
- *Anacardium occidentale*
- *Annona squamosa*
- *Azadirachta indica*
- *Bauhinia purpurea*
- *Bombax malabarica*
- *Butea monosperma*
- *Cassia fistula*
- *Dalbergia sissoo*
- *Ficus spp.*
- *Hibiscus spp.*
- *Holoptelea integrifolia*
- *Ixora parviflora*
- *Lagerstromia speciosa*
- *Leucaena leucocephala*
- *Mangifera indica*
- *Melia azadirach*
- *Murraya exotica*
- *Polyalthia longifolia*
- *Pongamia pinnata*
- *Sterculia alata*
- *Syzygium cumini*
- *Tamarindus indica*
- *Tectona grandis*
- *Terminalia arjuna*
- *Terminalia belerica*
- *Thespesia populnea*
- *Trema orientalis*

Shade trees

- *Albizzia lebbeck*
- *Artocarpus heterophylla*
- *Azadirachta indica*
- *Bassia latifolia*
- *Dalbergia latifolia*
- *Diospyros spp.*
- *Ficus spp.*
- *Hardwickia binata*
- *Kigelia pinnata*
- *Macaranga peltata*
- *Mangifera indica*
- *Millingtonia hortensis*
- *Peltophorum pterocarpum*
- *Samanea saman*
- *Syzigium cumini*
- *Tamrindus indica*
- *Terminalia arjuna*
- *Terminalia belerica*
- *Terminalia catapa*

Species checklists for ward-specific urban forestry plan for 2000 to 2005

Status of floral species and distribution in Pune District

The pressure for demand of forest products particularly timber, fuelwood and fodder has increased manifold to the detriment of the Pune district's forest resources. The total area of Pune district is 15640 sq. kms. of which the area under forests is 1990 sq. km being only 7.85% of the total area. These forests are currently scattered in patches amidst agricultural and industrial areas. With an estimated human population of more than 50 lakhs in the district, the approximate estimated annual requirement of timber and fuelwood would be about 5 lakh cubic meters of timber and more than 45 lakh cubic meters of firewood. This demand is expected to go up to 6 lakh cubic meters of timber and 60 lakh cubic meters of firewood, whereas availability of firewood is comprising about 10,877 cubic meters (in 1980-81) which is only a fraction of the total estimated requirement.

This deficit clearly indicates the magnitude of pressure on these forests as beyond comprehension due to the wide gap between the availability and demand of basic natural resources. The gap cannot be expected to be bridged merely by forestry or forest department's management of existing forests. Again, the previous paragraph merely emphasises on the gap between existing forests and the need for firewood and timber. There is another important role that forests play in maintaining the watershed capability of the region, the preservation of environmental stability and the need for aesthetic urban forestry within municipal limits.

There is a clear need therefore for determining tree species according to local environmental situations, and being able to provide the species stock for local plant species and enabling nature conservation within the district. Urban forestry needs to limit itself to selecting, planting and managing local plant species on an emergency basis. This will enable the local urban inhabitants and neighbouring rural settlements sustain their root-stock and seedling stock with endemic or locally occurring plant species. Natural biological systems and pollination will also enable intervention through supporting the growth and spread of local plant species. Cities can therefore act as a bank-deposit for fast disappearing district level plant species.

The Pune region and its forest and floral species

The Pune forest division working plan provides information about the reserved and unclassed forests of Pune and Bhor Forest sub-divisions. The area covered under this plan lie between 17 deg 52' to 18 deg 48' north latitudes and between 73 deg 18' to 75 deg 8' east longitudes. The areas covered under the plan include:

North: Khed and Shirur Talukas of Pune district and also to a larger extent bordered by river *Bhima*. In the North-East it is bounded by Ahmednagar District.

East: Solapur district.

South: Satara district, where to a greater extent river *Nira* forms the delineation line.

West: Raigad district.

The area covered under this plan is divided into three distinct topographical regions as follows:

The Western Belt: This region stretches between 15 to 32 kilometres east of the Sahyadris locally known as *Maval* or the sunset land. This region is extremely rugged.

The Central Belt: This comprises of a chain of hills stretching between 16 to 32 kilometres east of the western belt, which tend to sink into plains where the valleys become straighter and wider. The broad valleys are fertile and yield good crops.

The Eastern Belt: This tract stretches upto 144 kilometres east of Pune. It comprises of open plains with barren soil-less hillocks with boulders and sheets of basalt which portray bleakness and barrenness except during the rainy season.

The following forest types are found in the Pune and Bhor sub-divisions:

1. (8A/C2) Western Sub-tropical hill forests.
2. (3B/C2) Southern Moist Mixed Deciduous Forests.
3. (5A/C3) Southern Dry Mixed Deciduous Forests.
4. (6A/C1) Southern Thorn Forests.
5. (5/E3) Babul Forests

Species checklists for ward-specific urban forestry plan for 2000 to 2005

List of urban forestry categories

A = Trees.
A1 = Avenue Plantations.
A2 = Riverside Plantations.
A3 = Nullah Plantations.
A4 = Roundabouts /Road Islands.

B = Ornamental Plants And Garden Shrubs.

C = Forest Plantations.
C1 = Quarries And Rocky Areas.
C2 = Hills And Foothills.
C3 = Industrial Green Belt.
C4 = Fuelwood Depots.
C5 = Nurseries.

D = Agro-Forestry.
D1 = Horticulture.
D2 = Vegetable Cultivation.
D3 = Forestry On Agricultural Lands.

E = Special Areas.
E1 = Slums.
E2 = Schools And Educational Institutions.
E3 = Community Areas And Commercial Complexes.
E4 = ETP /STP And Garbage Dumps.

A = Trees.

A1 = Avenue Plantations.

➢ *Samania saman*	रेन ट्री
➢ *Spathodia campanulata*	स्पॅथोडीया
➢ *Casuarina equisitfolia*	सुरू
➢ *Delnix regia*	गुलमोहोर
➢ *Peltophorum ferrugineum*	पेल्टोफोरम
➢ *Ailanthus excelsa*	महारूख
➢ *Bombax malabarica*	बांबु
➢ *Ficus bengalensis*	बनयान वड
➢ *Ficus religiosa*	पिंपळ
➢ *Millingtonia hortensis*	आकाशनीम
➢ *Cassia fistula*	बहावा
➢ *Azadirachta indica*	नीम
➢ *Bauhinia purpurea*	कांचन
➢ *Butea frondosa*	पळस
➢ *Melia azadirachta*	निंबारा
➢ *Pongamia pinnata*	पांगारा
➢ *Ficus retusa*	फायकस स्पेसिज
➢ *Tamarindus indica*	चिंच
➢ *Mangifera indica*	आंबा
➢ *Jacaranda mimosaefolia*	जकारांदा
➢ *Thespesia populnea*	भेंडी

A2 = Riverside Plantations.

➢ *Acacia catechu*	बाभुळ
➢ *Tamarindus indica*	चिंच
➢ *Mangifera indica*	आंबा
➢ *Bombax ceiba*	बांबु
➢ *Dalbergia sisso*	शिशम
➢ *Sesbania bispinosa*	
➢ *Phoenix sylvestris*	
➢ *Caryota urens*	क्रिस्टेल पाम

- *Acacia arabica* रामकाठी
- *Zizybhus rugosa* बोर
- *Bauhinia purpurea* कांचन
- *Salix tetrasperma* वाळंग
- *Casuarina equisitifolia* सुरू
- *Leucaena leucocephala* सुबाभुळ
- *Pongamia pinnata* करंज
- *Ficus retusa* फायकस
- *Erythrinia indica* पांगारा

A3 = Nullah Plantations.

- *Artocarpus hirsuta* रानफणस
- *Azadirachta indica* नीम
- *Bauhinia purposa* कांचन
- *Bauhinia racemosa* आपटा
- *Bauhinia variegata* कांचन
- *Casearia gravelens* बोकर
- *Dalbergia latifolia* शिशम
- *Ficus glomerata* उंबर
- *Caryota urens* क्रिस्टल पाम
- *Ficus retusa* फायकस स्पेसिज
- *Terminalia crenulata*
- *Salmalia malabarica*
- *Mitragyna parviflora* कळंब
- *Casuarina equisetifolia* सुरू

A4 = Roundabouts /Road Islands.

- *Vitex negunda*
- *Lantana camera* लॅन्टेना
- *Adathoda vasica* अडुळसा
- *Caesalpinia pulcherrima* शंकेश्वर
- *Crotolaria retusa* डिंगला

- *Opuntia elatior*
- *Ricinus communis*
- *Hibiscus rosasinensis* जास्वंद
- *Michelia champaca* चाफा
- *Murraya exotica* एक्झोरा
- *Gardenia latifolia*

B = Ornamental Plants And Garden Shrubs.

- *Lagerstroemia flos-reginae* गुलमेंदी
- *Millingtonia hortensis* आकाशनीम
- *Spathodea campanulata* स्पॅथोडिया
- *Jacaranda mimocifolia* जाकरांडा
- *Anthocephalus indicus* कदंब
- *Cassia grandis* कॅशिया
- *Cycas circinalis*
- *Roystonea regia*
- *Araucaria excelsa* रिव्रसमस
- *Ficus benjamina*
- *Polyalthia pendula* अशोक
- *Saraca indica* सीता अशोक
- *Bauhinia purpurea* कांचन
- Croton Varieties क्रोटन
- Rose Varieties गुलाब
- Ferns फर्नस्
- Cactii for rocky gardens कॅक्टस्
- *Callistemon lanceolatus* बॉटलब्रश
- *Cane Palms* पाम
- *Bamboo* बांबू
-

C = Forest Plantations.
C1 = Quarries And Rocky Areas.

- *Dalbergia melanoxylon* शिसम
- *Glericidia* spp. ग्लिरीसिडीया

- *Zizyphus* spp. बोर
- *Lawsonia alba* मेंदी
- *Casuarinia* spp सुरु
- *Cactii spp.* कॅक्टस्
- *Acacia nilotica* बाभुळ
- *Acacia catechu* खैर
- *Albizzia lebbek* शिरस
- *Albizzia procera* किन्हाई
- *Azadirachta indica* निम
- *Boswelia serrata* सालेर
- *Bombax ceiba* बांबु
- *Butea frondosa* पळस
- *Cassia fistula* बहावा
- *Dalbergia* spp शिशम
- *Ficus* spp. फायकस
- *Hardwickia binata*
- *Melia azadarach* लिंबारा
- *Morus indica*
- *Pongamia pinnata* करंज
- *Syzygium cumini* जांभुळ
- *Bassia latifolia*
- *Phyllanthus emblica* फायलंथस
- *Psidium guava* पेरु
- *Thespesia populnea* भेंडी

C2 = Hills And Foothills.

- *Dalbergia melanoxylon* शिशम
- *Glericidia* spp. ग्लिरीसिडीया
- *Zizyphus* spp बोर
- *Lawsonia alba* मेंदी
- *Casuarinia* spp. सुरु
- *Cassia auriculata*
- *Cochlospermum gossypium*
- *Acacia nilotica* बाभुळ

- *Acacia catechu* खैर
- *Albizzia lebbek* शिरस
- *Albizzia procera* किन्हाई
- *Azadirachta indica* नीम
- *Boswelia serrata* सालेर
- *Bombax ceiba* बांबु
- *Butea frondosa* पळस
- *Cassia fistula* बहावा
- *Dalbergia* spp. शिसम
- *Erythrinia indica* पांगारा
- *Ficus* spp. फायकस
- *Hardwickia binata*
- *Melia azadarach* लिंबारा
- *Morus indica*
- *Pongamia pinnata*
- *Syzygium cumini* जांभुळ
- *Tecoma stans* टिकोमाटान्स
- *Bassia latifolia*
- *Phyllanthus emblica* फायलंथस
- *Psidium guava* पेरू
- *Thespesia populnea* भेंडी
- *Ehretia aspera*
- *Annona squamosa* सिताफळ

C3 = Industrial Green Belt.

- *Dalbergia melanoxylon* शिसम
- *Dalbergia sisso* शिसम
- *Glericidia* spp. ग्लिरिसिडीया
- *Lawsonia alba* मेंदी
- *Casuarinia* spp. सुरू
- *Cassia fistula* बहावा
- *Cassia auriculata*
- *Cochlospermum gossypium*
- *Acacia nilotica* बाभुळ

➢ *Acacia catechu*	खैर
➢ *Acacia scholaris*	
➢ *Albizzia lebbek*	शिरस
➢ *Albizzia procera*	किन्हाई
➢ *Anacardium occidentale*	
➢ *Azadirachta indica*	निम
➢ *Boswelia serrata*	
➢ *Bombax ceiba*	बांबु
➢ *Bombax malabaricum*	बांबु
➢ *Butea monosperma*	पळस
➢ *Butea frondosa*	
➢ *Cassia fistula*	बहावा
➢ *Erythrinia indica*	पांगारा
➢ *Ficus* spp.	फायकस
➢ *Hardwickia binata*	
➢ *Melia azadarach*	लिंबारा
➢ *Morus indica*	
➢ *Pithecolobium dulce*	
➢ *Pongamia pinnata*	करंज
➢ *Spathodea campanulata*	स्पॅथोडिया
➢ *Syzygium cumini*	जांभुळ
➢ *Tecoma stans*	टिकोमाटान्स
➢ *Bassia latifolia*	
➢ *Phyllanthus emblica*	
➢ *Psidium guava*	पेरू
➢ *Thespesia populnea*	भेंडी
➢ *Ehretia aspera*	
➢ *Annona squamosa*	
➢ *Nerium* spp.	कण्हेर
➢ *Thespesia populnea*	भेंडी
➢ *Bauhinia purpurea*	कांचन
➢ *Holoptelea integrifolia*	वावळा
➢ *Mangifera indica*	आंबा
➢ *Tamarindus indica*	चिंच

C4 = Fuelwood Depots.

- *Acacia nilotica* बाभुळ
- *Terminalia* spp हिरडा
- *Azadirachta indica* निम
- *Leucena leucophloeus* सुबाभुळ
- *Pongamia pinnata* करंज
- *Cassia* spp. कॅशिया

C5 = Nurseries.

Includes all plant species listed in this manual.

D = Agro-Forestry.

D1 = Horticulture.

- *Zizyphus* spp. बोर
- *Tamarindus indicus* चिंच
- *Mangifera indica* आंबा
- *Artocarpus* spp. रानफणस
- *Acharas sapota*
- *Psidium guava* पेरू
- Papaya पपई
- Cucumbur spp. काकडी
- Watermelon spp. कलिंग
- Pomegranate डाळीब

D2 = Vegetable Cultivation.

- *Tomato* टोमॅटो
- *Brinjals* वांगी
- *Ladies Finger (Okra)* भेंडी
- *Spinach (Various species* पालक
- *Green Chillies /Pepper* मिरची
- *Melon spp.* कलिंगड
- *Elephant's Foot*

D3 = Forestry On Agricultural Lands.

- *Sesbania* spp. हादगा
- *Murraya koeining*
- *Cocos nucifera* नारळ
- *Tectona grandis* साग
- *Dalbergia melanoxylon* शिसम
- *Dalbergia sisso* शिसम
- *Cassia fistula* बहावा
- *Cassia auriculata* कॅशिया
- *Acacia nilotica* बाभुळ
- *Acacia catechu* खैर
- *Acacia scholaris*
- *Albizzia lebbek* शिरस
- *Albizzia procera* किन्हाई
- *Bombax ceiba* बांबु
- *Bombax malabaricum* बांबु
- *Butea monosperma* पळस
- *Butea frondosa* पळस
- *Hardwickia binata* अंजन
- *Pongamia pinnata* करंज
- *Syzygium cumini* जांभुळ
- *Psidium guava* पेरू
- *Mangifera indica* आंबा
- *Tamarindus indica* चिंच

E = Special Areas.
E1 = Slums.

- *Artocarpus hirsuta* रानफणस
- *Azadirachta indica* चिंच
- *Bauhinia purposa* कांचन
- *Bauhinia racemosa* कांचन (आपटा)
- *Bauhinia variegata* कांचन
- *Casearia gravelens* कॅशिया
- *Dalbergia latifolia* शिसम

- *Ficus glomerata* उंबर
- *Caryota urens* फिशटेल पाम
- *Ficus retusa* फायकस
- *Terminalia crenulata*
- *Salmalia malabarica* सावर
- *Mitragyna parviflora* कळंब
- *Casuarina equisetifolia* सुरू
- *Tomato* टोमॅटो
- *Brinjals* वांगी
- *Ladies Finger (Okra)* भेंडी
- *Spinach (Various species)* पालक
- *Green Chillies /Pepper* मिरची
- *Melon spp.* कलिंगड टरबुज
- *Elephant's Foot*

E2 = Schools And Educational Institutions.

- *Lagerstroemia flos-reginae* गुलमेंदी
- *Millingtonia hortensis* आकाशनीम
- *Spathodea campanulata* स्पॅथोडिया
- *Jacaranda mimocifolia* जाकरांडा
- *Anthocephalus indicus*
- *Cassia grandis* कॅशिया
- *Cycas circinalis* सायकस
- *Roystonea regia*
- *Araucaria excelsa*
- *Ficus benjamina* फायकस बेंजामिन
- *Polyalthia pendula*
- *Saraca indica* सीताअशोक
- *Bauhinia purpurea* कांचन
- *Croton Varieties* क्रोटॉन
- *Rose Varieties* गुलाब
- *Ferns* फर्नस
- Cactii for rocky gardens कॅक्टस्
- *Callistemon lanceolatus* बॉटलब्रश
- *Cane Palms* पाम
- *Bamboo* बांबु

- *Zizyphus* spp. बोर
- *Tamarindus indicus* चिंच
- *Mangifera indica* आंबा
- *Artocarpus* spp. रानफणस
- *Acharas sapota*
- *Psidium guava* पेरू
- *Papaya* पपई
- *Watermelon spp.* कलिंगड
- Cucumbur spp. काकडी
- Pomegranate डाळीव

E3 = Community Areas And Commercial Complexes.

- *Samania saman* रेनट्री
- *Spathodia campanulata* स्पॅथोडीया
- *Casuarina equisitfolia* सुरू
- *Delnix regia* गुलमोहोर
- *Peltophorum ferrugineum* पेल्टोफोरम
- *Ailanthus excelsa* महारूख
- *Bombax malabarica* बांबु
- *Ficus bengalensis* वड
- *Ficus religiosa* पिंपळ
- *Millingtonia hortensis* आकाशनीम
- *Cassia fistula* बहावा
- *Azadirachta indica* निम
- *Bauhinia purpurea* कांचन
- *Butea frondosa* पळस
- *Melia azadirachta* लिंबारा
- *Pongamia pinnata* करंज
- *Ficus retusa*
- *Tamarindus indica* चिंच
- *Mangifera indica* आंबा
- *Jacaranda mimosaefolia* जाकरांडा
- *Lagerstroemia flos-reginae* गुलमेंदी
- *Spathodea campanulata* स्पॅथोडीया
- *Jacaranda mimocifolia* जाकरांडा

- *Anthocephalus indicus*
- *Cassia grandis* कॅशिया
- *Cycas circinalis*
- *Roystonea regia*
- *Araucaria excelsa* ख्रिसमस
- *Ficus benjamina* फायकस बेंजामिन
- *Polyalthia pendula*
- *Saraca indica* सीता अशोक
- *Bauhinia purpurea* कांचन
- Croton Varieties क्रोटान
- *Rose Varieties* गुलाब
- *Ferns* फर्नस
- *Cactii for rocky gardens* कॅक्टस
- *Callistemon lanceolatus* बॉटलब्रश
- *Cane Palms* पाम
- *Bamboo* बांबु

E4 = ETP /STP And Garbage Dumps.

- *Dalbergia melanoxylon* शिसम
- *Dalbergia sisso* शिसम
- *Glericidia* spp. ग्लिरिसिडीया
- *Lawsonia alba*
- *Casuarinia* spp. सुरु
- *Cassia fistula* बहावा
- *Cassia auriculata* कॅशिया
- *Cochlospermum gossypium*
- *Acacia nilotica* बाभुळ
- *Acacia catechu* खैर
- *Acacia scholaris* बाभुळ
- *Albizzia lebbek* शिरस
- *Albizzia procera* किन्हाई
- *Anacardium occidentale*
- *Azadirachta indica* चिंच
- *Boswelia serrata*

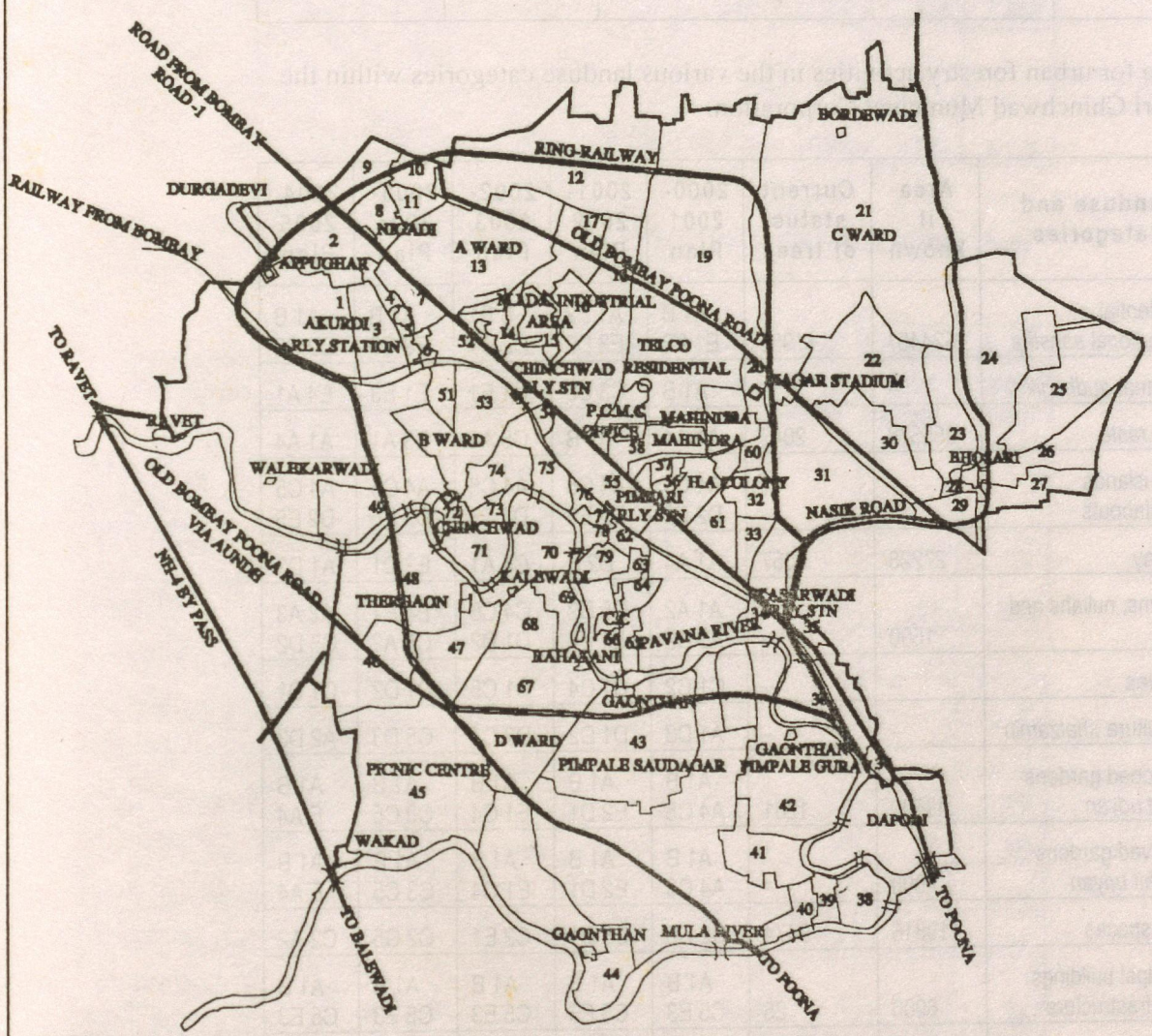
Bombax ceiba	बांबु
Bombax malabaricum	बांबु
Butea monosperma	पळस
Butea frondosa	पळस
Cassia fistula	बहावा
Erythrinia indica	पागारा
Ficus spp.	फायकस
Hardwickia binata	अंजन
Melia azadarach	लिंबारा
Morus indica	
Pithecolobium dulce	
Pongamia pinnata	करंज
Spathodea campanulata	स्पॅथोडिया
Syzygium cumini	जांभुळ
Tecoma stans	टिकोमाटान्स
Bassia latifolia	
Phyllanthus emblica	
Psidium guava	पेरू
Thespesia populnea	भेंडी
Ehretia aspera	पांगारा
Annona squamosa	सिताफळ
Nerium spp.	कण्हेर
Thespesia populnea	भेंडी
Bauhinia purpurea	कांचन
Holoptelea integrifolia	वावाळा
Mangifera indica	आंबा
Tamarindus indica	चिंच

OLD NH4

AUNDH BRIDGE TO DANGE CHOWK

NORTH

SCALE : 1:16000



PCMC LANDUSE

- ☐ AGRICULTURAL
- ☐ CANTONMENT
- ☐ COMMERCIAL
- ☐ CREMATION
- ☐ GAOTHAN
- ☐ INDUSTRIAL
- ☐ PUBLIC SEMI-PUBLIC
- ☐ RECREATIONAL
- ☐ RESIDENTIAL
- ☐ RIVER/NALA WATER BODIES
- ☐ ROADS, TRANSPORTATION

The map template for PCMC limits was digitised and later separated for each ward, river-section and road-section. This map shows all sections together. The digitised maps are available to the field staff in easy-to-use computerised Autocad formats.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
001	Pimpri Chinchwad Polytechnic	1422727	6794

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	524457	11955	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	355578	2047	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	27228	6057	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	1500	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	43600	1231	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	4000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	119816	9474	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	6000	25	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	1000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	37700	187	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	5000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	2000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--		E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	619520	30976	517	387	202	630	630
Percentage of area under green cover with reference to total area	44 %	+ 4% = 48 %	+ 1 %	+.50 %	+.50%	+ 1 %	+ 1 %

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	524457	11955	--	--	--	--	--
Roadside hedges and medians	382806	8104	307	277	112	375	375
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	1500	--	--	--	--	--	--
Forest plantations	119816	9474	--	--	70	180	180
Gardens and groves	47600	1231	85	--	--	50	50
Slum focus projects	--	--	--	--	--	--	--
School focus projects	37700	187	105	65	20	--	--
Community focus projects	14000	25	20	45	--	25	25

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2001 to 2005

Ward No.	Name of Ward	Area	Population
002	Vahatuk Nagari	1145717	7161

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	330172	13552	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	248982	2362	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	288800	104989	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	25100	430	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	126800	14392	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	33600	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	64000	8000	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	898760	143695	896	503	455	210	211
Percentage of area under green cover with reference to total area	78%	+ 5 % = 83%	2%	1%	1%	.5%	.5%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	330172	13522	--	--	--	--	--
Roadside hedges and medians	248982	2362	387	318	35	--	--
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	64000	8000	100	128	220	210	211
Gardens and groves	313900	105419	254	--	200	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	--	--	89	12	--	--	--
Community focus projects	160400	14392	66	45	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
003	Ganganagar	658681	6371

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	314985	13113	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	203514	1550	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	8000	1839	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	(1200?)	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	45600	1583	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	640	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	16300	30	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	3000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	60600	451	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	371320	18566	1042	100	190	50	50
Percentage of area under green cover with reference to total area	56 %	+ 4.30 % = 60.30 %	3 %	0.5 %	.5 %	0.15%	0.15%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	314985	13113	--	--	--	--	--
Roadside hedges and medians	211514	3389	554	--	--	--	--
Vermiculture projects	4000	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	1200	--	--	--	--	--	--
Forest plantations	3640	--	--	--	90	35	35
Gardens and groves	45600	1583	300	100	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	60600	451	155	--	--	--	--
Community focus projects	19300	30	33	--	100	15	15

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
004	Dattawadi – Akurdi	196188	6817

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	148284	4414	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	1594	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	38726	320	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	5400	245	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	1250	625	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	500	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	112080	5604	182	20	--	16	16
Percentage of area under green cover with reference to total area	57 %	+ 2.6 % = 59.60%	2 %	0.2 %	--	0.20%	0.20%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	149878	4414	--	--	--	8	8
Roadside hedges and medians	38726	320	112	20	--	8	8
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	1250	625	--	--	--	--	--
Gardens and groves	5400	245	60	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	500	--	10	--	--	--	--
Community focus projects	--	--	--	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
005	Vithalwadi, Akurdi	252036	6973

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	209913	2700	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	32173	403	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	3000	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, hullahs and rivers	1515	160	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	200	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	948	87	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	2000	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	2000	28	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	67560	3378	853	--	--	120	120
Percentage of area under green cover with reference to total area	27%	+9% =36%	7%	--	--	1%	1%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	209913	2700	--	--	--	--	--
Roadside hedges and medians	35173	403	853	--	--	10	10
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	1515	160	--	--	--	--	--
Forest plantations	2948	115	--	--	--	75	75
Gardens and groves	200	--	--	--	--	25	25
Slum focus projects	--	--	--	--	--	--	--
School focus projects	--	--	--	---	--	--	--
Community focus projects	4000	--	--	--	--	10	10

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
006	Hanuman Mandir, Akurdi	136043	7119

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	104658	607	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	18993	25	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	600	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	3600	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	4000	25	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	4000	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	131410	657	330	100	100	266	266
Percentage of area under green cover with reference to total area	10%	+16% =26%	5%	1.5%	1.5%	4%	4%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	104658	607	100	100	100	70	70
Roadside hedges and medians	19593	25	10	--	--	166	166
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	--	--	--	--	--	--	--
Gardens and groves	3600	--	200	--	--	--	-
Slum focus projects	--	--	--	--	--	--	--
School focus projects	4000	--	--	--	--	30	30
Community focus projects	4000	25	20	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
007	Tuljai Vasti	405392	7201

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	256833	2519	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	68843	53	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	680	170	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	4000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	100	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	3900	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	2600	26	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	8000	80	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	700	07	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	57100	2855	80	05	45	259	259
Percentage of area under green cover with reference to total area	14%	+3.25% =17.25%	.5%	0.02%	0.23%	1.25%	1.25%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	256833	2519	--	--	--	--	--
Roadside hedges and medians	68843	53	55	05	45	140	139
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	680	170	--	--	--	--	--
Forest plantations	100	--	--	--	--	12	13
Gardens and groves	4000	--	--	--	--	100	100
Slum focus projects	--	--	--	--	--	--	--
School focus projects	8000	80	--	--	--	--	--
Community focus projects	7200	33	25	--	--	07	07

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
008	Nigdi Gaothan	391295	6647

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	226371	2828	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	68976	86	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	2000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	34700	347	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	11900	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	2000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	1500	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	65220	3261	102	92	50	86	87
Percentage of area under green cover with reference to total area	17%	+2.25% =19.25%	0.50%	0.50%	0.25%	0.50%	0.50%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	226371	2828	--	--	--	--	--
Roadside hedges and medians	68976	86	12	42	--	54	55
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	--	--	--	--	--	-	--
Gardens and groves	2000	--	50	50	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	11900	--	25	--	50	22	22
Community focus projects	38200	347	15	--	--	10	10

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
009	Nigdi Octroi Post	305731	6921

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	223528	721	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	34114	25	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	100	25	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	2000	95	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	2000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	2240	560	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	8000	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	11900	79	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	9500	20	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	4000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	30500	1525	598	552	480	192	192
Percentage of area under green cover with reference to total area	10%	+13.50% =23.50%	4%	4%	3%	1.25%	1.25%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	223528	721	400	400	400	157	157
Roadside hedges and medians	34114	25	43	67	70	17	18
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	100	25	--	--	--	--	--
Forest plantations	2240	560	--	--	--	--	--
Gardens and groves	4000	95	50	--	--	--	--
Slum focus projects	--	--	--	---	--	--	--
School focus projects	9500	20	40	10	--	13	12
Community focus projects	23900	79	65	75	10	05	05

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
010	Ota Scheme (Nigdi)	258377	7052

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	156256	2676	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	84624	184	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	600	30	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	1300	269	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	7000	48	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	64140	3207	59	80	21	35	40
Percentage of area under green cover with reference to total area	25%	+2% =27%	0.50%	0.75%	0.25%	0.25%	0.25%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	156256	2676	--	--	--	--	--
Roadside hedges and medians	84624	184	59	80	21	--	--
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	1300	269	--	--	--	25	30
Gardens and groves	600	30	--	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	7000	48	--	--	--	10	10
Community focus projects	--	--	--	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
011	Yamuna Nagar	226025	5340

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	139627	4804	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	--	--	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	50757	164	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	6000	91	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	2000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	200	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	20000	291	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	3500	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	107000	5350	265	161	88	21	20
Percentage of area under green cover with reference to total area	47%	+4.80 =51.80%	2.25%	1.50%	0.75%	0.15%	0.15%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	139627	4804	--	--	--	--	--
Roadside hedges and medians	50757	164	115	101	68	08	08
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	200	--	--	--	20	13	12
Gardens and groves	8000	91	150	25	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	3500	--	--	35	--	--	--
Community focus projects	20000	291	--	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
012	Ajanta Nagar, Nigdi	2609368	6366

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	799627	3363	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	287254	445	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	94700	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	6800	913	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	40000	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	1400	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	73250	10923	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	312880	15644	2039	1628	1701	2321	2325
Percentage of area under green cover with reference to total area	12%	+8% =20%	1.50%	1.25%	1.25%	2%	2%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	799627	3363	1150	1150	1150	591	592
Roadside hedges and medians	287254	445	814	328	551	852	853
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	80050	11836	50	75	--	375	376
Gardens and groves	94700	--	--	50	--	315	315
Slum focus projects	--	--	--	--	--	--	--
School focus projects	4000	--	25	25	--	181	182
Community focus projects	1400	--	--	--	--	07	07

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
013	Akurdi, Khandoba Mal	2413375	6269

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	273357	8814	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	1490334	43480	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	496000	3096	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	60900	1369	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	587	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	3000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	3600	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	1135180	56759	181	159	192	89	89
Percentage of area under green cover with reference to total area	47%	+0.6% =47.60%	0.15%	0.15%	0.16%	0.07%	0.07%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	1763691	52294	--	--	--	--	--
Roadside hedges and medians	496000	3096	106	104	96	59	59
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	587	--	--	--	30	--	--
Gardens and groves	60900	1369	50	50	50	20	20
Slum focus projects	--	--	--	--	--	--	--
School focus projects	3600	--	--	--	16	10	10
Community focus projects	3000	--	25	05	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
014	Akurdi Kalbornagar	706077	5992

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	83710	1340	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	4122626	8954	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	118409	327	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	1200	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	5000	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	3000	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	1000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	212420	10621	25	100	160	312	313
Percentage of area under green cover with reference to total area	30%	+2.85% =33%	0.07%	0.28%	0.50%	1%	1%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	495936	10294	--	--	--	--	--
Roadside hedges and medians	118409	327	15	--	60	94	95
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	1200	--	--	--	--	143	143
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	3000	--	--	100	100	50	50
Community focus projects	6000	--	10	--	--	25	25

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
015	Mohan-Nagar	375232	6446

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	205901	4233	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	15903	1661	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	74947	248	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	200	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	1000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	3400	14	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	123120	6156	124	90	--	305	305
Percentage of area under green cover with reference to total area	33%	+4.75% =37.75%	0.75%	0.50%	--	1.75%	1.75%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	221804	5894	--	--	--	--	--
Roadside hedges and medians	74947	248	104	80	--	285	285
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	200	--	--	--	--	20	20
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	3400	14	10	10	--	--	--
Community focus projects	1000	--	10	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
016	Sangvi Kesri College	324161	5987

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	21304	584	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	187834	1502	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	52721	258	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	2000	50	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	4500	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	10000	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	40	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	47880	2394	244	200	150	155	155
Percentage of area under green cover with reference to total area	15%	+5.75% =20.75%	1.50%	1.25%	1%	1%	1%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	209138	2086	150	150	150	60	60
Roadside hedges and medians	52721	258	40	50	--	--	--
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	--	--	--	--	--	--	--
Gardens and groves	2000	50	50	--	--	--	--
Slum focus projects	4500	--	--	--	--	45	45
School focus projects	10000	--	--	--	--	50	50
Community focus projects	40	--	04	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
017	HDFC Colony	802482	6373

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	234243	2680	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	133231	3005	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	118857	779	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	60830	900	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	350	55	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	38000	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	10000	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	148380	7419	141	83	150	324	325
Percentage of area under green cover with reference to total area	18%	+2.55% =20.55%	0.35%	0.20%	0.40%	0.80%	0.80%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	367474	5685	--	--	--	--	--
Roadside hedges and medians	118857	779	141	83	50	72	72
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	60830	900	--	--	--	--	--
Vegetable cultivation	100	--	--	--	--	--	--
Forest plantations	350	55	--	--	--	12	13
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	10000	--	--	--	100	50	50
School focus projects	--	--	--	--	--	--	--
Community focus projects	38000	--	--	--	--	190	190

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
018	Chichwad MIDC	1589603	5989

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	178933	2799	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	527343	27862	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	386711	3062	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	20000	655	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	6390	1055	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	65900	6000	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	1300	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	32100	191	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	5200	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	832480	41624	1319	--	293	--	--
Percentage of area under green cover with reference to total area	52%	+2.10% =54.10%	1.75%	--	0.35%	--	--

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	706276	30661	--	--	--	--	-
Roadside hedges and medians	386711	3062	573	--	193	--	--
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	6390	1055	442	--	100	--	--
Gardens and groves	20000	655	50	--	--	--	--
Slum focus projects	1300	--	13	--	--	--	--
School focus projects	5200	--	52	--	--	--	--
Community focus projects	98000	6191	189	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
019	Ajmera Colony	4051706	6639

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	1382018	269541	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	1660262	67171	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	512592	2182	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	8900 ?	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	161700	1617	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	9000	2019	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	5700	253	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	500	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	500	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	12000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	3000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	2080125	342783	170	65	75	406	407
Percentage of area under green cover with reference to total area	51%	+0.48% =51.48	0.04%	0.02%	0.02%	0.20%	0.20%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	3042280	336712	--	--	--	--	--
Roadside hedges and medians	512592	2182	130	65	75	250	250
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	161700	1617	--	--	--	--	--
Vegetable cultivation	8900	--	--	--	--	--	--
Forest plantations	9000	2019	--	--	--	76	77
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	500	--	05	--	--	--	--
Community focus projects	21200	253	35	--	--	80	80

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
020	Magar Stadium	233773	6509

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	58439	1026	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	34626	51	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	2400	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	73800	1476	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	9400	94	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	500	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	1500	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	54920	2647	55	615	20	05	05
Percentage of area under green cover with reference to total area	24%	+06.08% =30.08%	0.50%	5.25%	0.25%	0.04%	0.04%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	58439	1026	--	--	--	--	--
Roadside hedges and medians	34626	51	50	--	20	05	05
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	2400	--	--	600	--	--	--
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	9400	94	--	--	--	--	--
School focus projects	1500	--	--	15	--	--	--
Community focus projects	74300	1476	05	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
021	Bhosari – Borhadewadi	645520	6997

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	1697	1259	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	263351	4735	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	162476	433	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	900	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	72950	2918	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	4000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	3220	805	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	30000	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	27000	533	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	47050	121	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	2000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	500	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	216080	10804	315	22	60	775	776
Percentage of area under green cover with reference to total area	34%	+49.25% =83.25%	1%	0.07%	0.18%	24%	24%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	265048	5994	--	--	--	--	--
Roadside hedges and medians	163376	433	225	22	60	413	413
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	72950	2918	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	3720	805	05	--	--	--	--
Gardens and groves	4000	--	80	--	--	--	--
Slum focus projects	27000	533	--	--	--	--	--
School focus projects	47050	121	05	--	--	202	203
Community focus projects	32000	--	--	--	--	160	160

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
022	Bhosari Indrayani Nagar	940721	6588

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	145460	3108	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	399987	8125	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	239576	1861	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	3560	802	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	13700	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	2600	26	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	1300	13	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	56900	286	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	2500	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	500	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	284420	14221	268	195	320	462	461
Percentage of area under green cover with reference to total area	30.23%	+3.58% =33.81%	0.50%	0.40%	68%	1%	1%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	545447	11233	--	--	--	--	--
Roadside hedges and medians	239576	1861	195	195	320	229	229
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	4060	802	53	--	--	20	20
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	2600	26	--	--	--	--	--
School focus projects	56900	286	20	--	--	200	200
Community focus projects	17500	13	--	--	--	13	12

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
023	Landge Limbaji Talim	987909	6900

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	666798	1813	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	91384	263	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	24675	987	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	124756	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	2260	33	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	35100	23	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	3100	01	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	11350	31	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	2100	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	1800	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	10000	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	63020	3151	294	894	95	724	725
Percentage of area under green cover with reference to total area	6.38%	+5.52% =11.90%	0.59%	1.80%	0.19%	1.47%	1.47%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	666798	1813	--	--	--	--	--
Roadside hedges and medians	91384	263	244	112	95	25	25
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	24675	987	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	12260	33	--	25	--	266	266
Gardens and groves	124756	--	--	637	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	11350	31	15	120	--	80	81
Community focus projects	42100	24	35	--	--	353	353

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
024	Chakrapani Vasahat	2103877	6569

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	111405	3451	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	92201	380	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	71300	10000	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	8000	1884	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	30000	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	1800	13	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	124700	1247	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	339500	16975	345	70	55	202	203
Percentage of area under green cover with reference to total area	16.14%	+0.83% =16.97%	0.33%	0.07%	0.05%	0.19%	0.19%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	111405	3451	--	--	--	--	--
Roadside hedges and medians	92201	380	41	70	55	15	15
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	8000	1884	--	--	--	37	38
Gardens and groves	71300	10000	300	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	124700	1247	--	--	--	--	--
Community focus projects	31800	13	04	--	--	150	150

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
025	Uttar Alandi Rasta	1521827	6714

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	26597	1859	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	11227	202	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	90500	905	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	112720	7183	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	3500	11	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	203200	10160	40	60	90	88	88
Percentage of area under green cover with reference to total area	13.55%	+0.46% =13.81%	0.05%	0.07%	0.12%	0.11%	0.11%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	26597	1859	--	--	--	--	--
Roadside hedges and medians	11227	202	35	55	80	46	46
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	90500	905	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	112720	7183	--	--	--	40	40
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	3500	11	05	05	10	02	02
Community focus projects	--	--	--	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
026	Dakshina Alandi Rasta	552807	7198

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	198686	1549	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	57641	101	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	32000	320	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	600	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	2300	03	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	200	02	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	28400	124	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	3000	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	41980	2099	160	120	135	283	285
Percentage of area under green cover with reference to total area	8%	+3.52% =11.52%	0.57%	0.43%	0.48%	1.02%	1.02%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	198686	1549	100	100	100	76	77
Roadside hedges and medians	57641	101	40	20	35	37	38
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	32000	320	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	3600	--	10	--	--	85	85
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	28400	124	10	--	--	85	85
Community focus projects	2500	05	--	-	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
027	Sandvik Colony	573966	6652

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	288353	2396	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	119139	99	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	20700	207	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	1000	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	2000	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	100	01	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	11600	116	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	3000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	1600	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	56380	2819	120	116	120	283	285
Percentage of area under green cover with reference to total area	10%	+3.50% =13.50%	0.50%	0.50%	0.50%	1.00%	1.00%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	288353	2396	100	100	100	93	94
Roadside hedges and medians	119139	99	12	16	20	37	38
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	20700	207	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	2600	--	08	--	--	128	128
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	11600	116	--	--	--	--	--
Community focus projects	5100	01	--	--	--	25	25

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
028	Vithal Rukmai Mandir	156509	6058

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	83117	307	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	39614	38	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	200	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	80	17	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	5900	09	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	2800	845	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	7300	43	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	3900	09	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	1500	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	25360	1268	184	150	165	154	154
Percentage of area under green cover with reference to total area	16.20%	+10.36 =26.56%	2.35%	1.91%	2.10%	2.00%	2.00%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	83117	307	125	125	125	88	88
Roadside hedges and medians	39614	38	26	10	21	23	23
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	1580	17	--	15	--	--	--
Gardens and groves	200	--	--	--	10	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	7300	43	--	--	02	15	15
Community focus projects	12600	863	33	--	07	28	28

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
029	Gavhane Vasti	461477	7039

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	233561	2548	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	13380	94	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	131137	888	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	300	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	3600	29	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	600	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	32000	87	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	2200	17	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	16000	60	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	9000	32	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	75100	3755	155	30	230	312	314
Percentage of area under green cover with reference to total area	16.27%	+4.50% =20.77%	0.67%	0.13%	1.00%	1.35%	1.35%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	246941	2642	--	--	--	20	20
Roadside hedges and medians	131137	888	130	30	10	30	31
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	300	--	--	--	--	--	--
Forest plantations	600	--	--	--	--	67	68
Gardens and groves	3600	29	--	--	120	12	12
Slum focus projects	--	--	--	--	--	--	--
School focus projects	16000	60	15	--	100	35	35
Community focus projects	43200	136	10	--	--	148	148

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
030	Bhosari Landewadi	944117	8976

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	120215	1258	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	420176	10694	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	217775	2302	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	11888	2772	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	1900	91	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	1500	15	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	342640	17132	165	25	--	75	80
Percentage of area under green cover with reference to total area	36.29%	+0.74% =37.03%	0.35%	0.05%	--	0.17%	0.17%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	540391	11952	--	--	--	--	--
Roadside hedges and medians	217775	2302	65	25	--	25	30
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	11888	2772	100	--	--	50	50
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	1900	91	--	--	--	--	--
School focus projects	1500	15	--	--	--	--	--
Community focus projects	--	--	--	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
031	CIRT	2839245	6251

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	71130	240	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	1339310	18659	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	758651	15449	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	110	11	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	300	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	47340	2242	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	14660	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	1800	501	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	573000	6355	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	9800	98	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	6700	17	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	8000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis			A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	871440	43572	250	277	145	1653	1655
Percentage of area under green cover with reference to total area	30.77%	+2.77 =33.47%	0.17%	0.18%	0.10%	1.16%	1.16%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	1410440	18899	100	100	100	85	85
Roadside hedges and medians	759061	15460	65	77	45	250	250
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	1800	501	--	--	--	225	225
Gardens and groves	6200	2242	75	100	--	341	342
Slum focus projects	9800	98	--	--	--	--	--
School focus projects	--	--	--	--	--	--	--
Community focus projects	587700	6372	10	--	--	752	753

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
032	YCM Hospital	363547	6251

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	109178	1743	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	82019	366	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	14300	315	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	1700	25	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	1160	128	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	17500	129	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	4900	49	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	4600	46	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	75000	596	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	1300	08	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	68100	3405	165	205	25	79	81
Percentage of area under green cover with reference to total area	19.00%	+3.10% =22.10%	1%	1.10%	0.13%	0.43%	0.44%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	109178	1743	--	30	15	12	13
Roadside hedges and medians	82019	366	115	--	--	--	--
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	14300	315	--	--	--	--	--
Forest plantations	1160	128	35	25	05	47	48
Gardens and groves	1700	25	10	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	4600	46	--	--	--	--	--
Community focus projects	98700	782	05	150	05	20	20

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
033	Sant Tukaram Nagar	308299	6067

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	182953	1797	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	61635	522	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	2000 ?	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	11300	539	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	400	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	1560	80	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	1000	10	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	2500	10	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	7700	45	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	60060	3003	190	42	45	116	116
Percentage of area under green cover with reference to total area	19.50%	+3.35% =22.85%	1.25%	0.30%	0.30%	0.75%	0.75%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	182953	1797	--	32	--	105	105
Roadside hedges and medians	61635	522	30	10	35	05	05
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	2000	--	--	--	--	--	--
Forest plantations	1560	80	95	--	05	--	--
Gardens and groves	11700	539	45	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	7700	45	20	--	--	06	06
Community focus projects	3500	20	--	--	05	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
034	Kasarwadi Shankarwadi	571265	6048

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	84777	3008	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	45304	657	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	165772	107	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	50	11	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	1600	382	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	9100	91	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	1000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	193600	1871	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	21000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	122540	6127	35	--	05	229	231
Percentage of area under green cover with reference to total area	21.50%	+2.14 =23.64%	0.12%	--	0.02	1%	1%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	130081	3665	--	--	--	--	--
Roadside hedges and medians	165822	118	--	--	05	197	198
Vermiculture projects	--	--	--	--	---	--	--
Horticulture projects	9100	91	--	--	--	--	--
Vegetable cultivation	1600	382	--	--	--	--	--
Forest plantations	--	--	--	--	--	--	--
Gardens and groves	1000	--	25	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	--	---	--	--	--	--	--
Community focus projects	214600	1871	10	--	--	32	33

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
035	Kasarwadi	151478	6860

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	57870	481	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	21314	297	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	61829	37	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	200	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	200	02	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	2400	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	400	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	5900	49	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	17800	890	60	25	64	58	58
Percentage of area under green cover with reference to total area	11.75%	+3.50% =15.25%	0.80%	0.30%	0.80%	0.80%	0.80%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	79184	778	25	25	25	12	13
Roadside hedges and medians	61829	37	--	--	35	44	44
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	200	--	25	--	--	02	01
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	2400	24	--	--	--	--	--
School focus projects	5900	49	10	--	--	--	--
Community focus projects	600	02	--	--	04	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
036	Kasarwadi Kundan Nagar	1083040	6228

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	251733	1821	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	196645	3980	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	276297	194	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	21120	356	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	29700	1485	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	500	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	400	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	11700	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	700	07	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	10500	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	500	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	156860	7843	175	155	225	779	779
Percentage of area under green cover with reference to total area	14.50%	+3.92% =18.42%	0.32%	0.29%	0.41%	1.45%	1.45%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	448378	5801	100	100	200	148	148
Roadside hedges and medians	297417	550	50	35	--	500	500
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	29700	1485	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	400	--	--	--	--	40	40
Gardens and groves	500	--	--	--	25	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	10500	--	25	--	--	40	40
Community focus projects	12900	07	--	20	--	51	51

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
037	Phugewadi – Kasarwadi	202752	7196

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	29140	135	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	12456	304	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	71170	60	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	3680	134	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	2000	44	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	1900	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	200	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	6400	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	700	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	10600	51	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	300	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	14560	728	70	55	50	120	119
Percentage of area under green cover with reference to total area	7.18%	+4.14% =11.32%	0.70%	0.54%	0.54%	1.18%	1.18%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	41596	439	--	50	50	25	25
Roadside hedges and medians	74850	194	50	05	--	13	12
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	200	--	--	--	--	13	12
Gardens and groves	3900	44	10	--	--	12	13
Slum focus projects	--	--	--	--	--	--	--
School focus projects	10600	51	--	--	--	25	25
Community focus projects	7400	--	10	--	--	32	32

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
038	ST Colony, Sangvi	559610	6744

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	329975	4832	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	84400	52	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	4000	968	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	1260	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	140	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	800	8	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	2000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	2000	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	117200	5860	165	139	102	180	181
Percentage of area under green cover with reference to total area	21%	+2.74% =23.74%	0.59%	0.50%	0.36%	0.64%	0.65%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	329975	4832	--	--	--	--	--
Roadside hedges and medians	84400	52	135	124	72	149	149
Vermiculture projects	-	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	4000	968	--	--	--	--	--
Forest plantations	140	--	--	05	30	--	--
Gardens and groves	1260	--	--	--	--	31	32
Slum focus projects	--	--	--	--	--	--	--
School focus projects	2000	--	20	--	--	--	--
Community focus projects	2800	08	10	10	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
039	Sangvi Gaotan	255283	6740

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	157424	1828	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	56377	115	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	10	02	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	8000	301	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	240	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	3500	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	5500	45	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	1900	19	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	1000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	500	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	2000	10	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	46400	2320	169	139	42	126	126
Percentage of area under green cover with reference to total area	18.17%	+4.70% =22.87%	1.32%	1.08%	0.32%	0.99%	0.99%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	157424	1828	--	--	--	--	--
Roadside hedges and medians	56377	115	79	104	42	71	71
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	10	02	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	2240	10	05	05	--	30	30
Gardens and groves	8000	301	35	25	--	22	23
Slum focus projects	--	--	--	--	--	--	--
School focus projects	1900	19	--	--	--	--	--
Community focus projects	10500	45	50	05	--	03	02

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
040	Narsimh High School, Sangvi	331674	6831

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	218562	4768	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	52162	254	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	450	56	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	9200	92	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	7500	75	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	3700	27	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	105440	5272	246	33	112	46	47
Percentage of area under green cover with reference to total area	32%	+2.89 =35%	1.48%	0.20%	0.67%	0.27%	0.27%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	218562	4768	--	--	--	--	--
Roadside hedges and medians	52162	254	236	23	66	46	47
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	450	56	--	10	46	--	--
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	7500	75	--	--	--	--	--
School focus projects	3700	27	10	--	--	--	--
Community focus projects	9200	92	--	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
041	Navi Sangvi	881131	4988

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	594033	3292	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	212167	--	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	520	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	1740	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	25800	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	1500	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	65840	3292	879	863	917	547	550
Percentage of area under green cover with reference to total area	7.47%	+8.52% =16%	2.00%	1.95%	2.08%	1.24%	1.25%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	594033	3292	750	750	750	200	200
Roadside hedges and medians	212687	--	114	113	167	111	112
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	1500	--	15	--	--	64	65
Gardens and groves	1740	--	--	--	--	43	44
Slum focus projects	--	--	--	--	--	--	--
School focus projects	25800	--	--	--	--	129	129
Community focus projects	--	--	--	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
042	Pimple Gurav	2399497	6346

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	966478	8300	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	248189	131	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	100	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	4000	984	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	300	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	6000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	12000	119	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	5000	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	1100	01	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	1500	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	190700	9535	561	527	473	508	510
Percentage of area under green cover with reference to total area	8%	+2.13% =10.13%	0.46%	0.44%	0.39%	0.42%	0.42%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	966478	8300	349	349	349	175	175
Roadside hedges and medians	248289	131	122	178	124	186	188
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	4000	984	--	--	--	--	--
Forest plantations	--	--	--	--	--	--	--
Gardens and groves	6300	--	15	--	--	147	147
Slum focus projects	5000	--	50	--	--	--	--
School focus projects	1500	--	15	--	--	--	--
Community focus projects	13100	120	10	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
043	Pimpri Waghere /Pimpale Saudagar	3205084	5999

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	1249288	8571	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	304326	129	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	--	--	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	3000	600	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	5000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	11000	107	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	1000	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	500	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	188140	9407	1105	1158	1160	741	741
Percentage of area under green cover with reference to total area	6%	+3.05% =9.05%	0.69%	0.72%	0.72%	0.46%	0.46%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	429314	8700	1000	1000	1000	460	461
Roadside hedges and medians	--	--	90	155	160	173	172
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	3000	600	--	--	--	--	--
Forest plantations	--	--	--	--	--	--	--
Gardens and groves	5000	--	--	--	--	--	--
Slum focus projects	--	--	--	--	--	108	108
School focus projects	1000	--	10	--	--	--	--
Community focus projects	11500	107	05	03	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
044	Pimple Nilakh	562004	6219

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	283955	1530	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	63669	156	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	900	208	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	4000	106	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	10000	191	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	45000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	800	124	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	1000	100	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	14900	138	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	2200	22	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	1900	19	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	51880	2594	528	440	466	247	247
Percentage of area under green cover with reference to total area	9.23%	+6.86% =16.09%	1.88%	1.56%	1.66%	0.88%	0.88%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	283955	1530	400	400	400	53	53
Roadside hedges and medians	63669	156	56	40	66	82	82
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	4000	106	--	--	--	--	--
Vegetable cultivation	900	208	--	--	--	--	--
Forest plantations	2700	143	20	--	--	22	22
Gardens and groves	55000	191	30	--	--	90	90
Slum focus projects	--	--	--	--	--	--	--
School focus projects	2200	22	03	--	--	--	--
Community focus projects	25200	238	19	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
045	Thergaon – Wakadgaon	2379757	5947

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	1186104	6519	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	218821	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	305655	1558	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	600	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	10000	2471	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	558450	11169	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	13000	297	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	5700	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	13600	126	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	5000	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	3500	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	1200	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	400	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	2500	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	442800	22140	2048	1942	1975	1549	1550
Percentage of area under green cover with reference to total area	18.60%	+7.61% =26.21%	1.72%	1.63%	1.66%	1.30%	1.30%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	1404925	6519	1800	1800	1800	1065	1065
Roadside hedges and medians	306255	1558	132	132	175	309	309
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	558450	11169	--	--	--	--	--
Vegetable cultivation	10000	2471	--	--	--	--	--
Forest plantations	2500	--	25	--	--	--	--
Gardens and groves	18700	297	50	--	--	145	146
Slum focus projects	5000	--	--	--	--	25	25
School focus projects	1200	--	12	--	--	--	--
Community focus projects	17500	126	29	10	--	05	05

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
046	Dange Chowk / Thergaon	982072	6113

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	793977	4635	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	135766	177	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	22900	458	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	15000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	1000	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	4000	42	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	200	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	6500	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	2000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	400	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	106240	5312	828	857	848	584	584
Percentage of area under green cover with reference to total area	11%	+7.52% =18.52%	1.68%	1.74%	1.72%	1.19%	1.19%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	793977	4635	737	737	737	368	369
Roadside hedges and medians	135766	177	30	85	101	32	31
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	22900	458	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	1400	--	05	--	--	107	106
Gardens and groves	15000	--	--	--	--	67	68
Slum focus projects	--	--	--	--	--	--	--
School focus projects	6500	--	40	25	10	--	--
Community focus projects	6200	42	16	10	--	10	10

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
047	Thergaon Gaotan	1359152	5852

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	217379	4910	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	1102030	117	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	2500	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	600	06	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	600	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	1600	20	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	10000	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	5000	14	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	10500	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	1000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	1000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	1000	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	101340	5067	426	121	40	184	184
Percentage of area under green cover with reference to total area	7.45%	+1.38 =8.83%	0.62%	0.17%	0.05%	0.27%	0.27%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	217379	4910	--	--	--	--	--
Roadside hedges and medians	1104530	117	185	121	15	49	49
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	600	06	--	--	--	--	--
Forest plantations	1600	--	--	--	--	80	80
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	10000	--	100	--	--	25	25
School focus projects	10500	--	85	--	10	15	15
Community focus projects	8600	34	56	--	15	15	15

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
048	Pudumjee Paper Mill, Thergaon	1775625	6213

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	731742	3043	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	186976	7165	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	245586	99	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	100	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	2500	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	1800	449	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	3000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	1800	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	26000	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	215120	10756	1060	1084	1146	1051	1052
Percentage of area under green cover with reference to total area	12.11%	+6.06% =18.17%	1.19%	1.22%	1.29%	1.18%	1.18%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	918718	10208	1021	1021	1021	510	511
Roadside hedges and medians	248186	99	39	63	125	111	112
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	1800	449	--	--	--	--	--
Forest plantations	1800	--	--	--	--	226	225
Gardens and groves	3000	--	--	--	--	72	72
Slum focus projects	--	--	--	--	--	--	--
School focus projects	26000	--	--	--	--	132	132
Community focus projects	--	--	--	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
049	Pawana Nagar	481291	7016

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	121327	6940	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	77306	580	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	5600	1366	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	19148	9599	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	1500	30	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	500	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	200	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	2000	20	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	97700	977	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	390240	19512	41	34	56	112	114
Percentage of area under green cover with reference to total area	81%	+1.55% =82.55%	0.15%	0.15%	0.25%	0.50%	0.50%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	121327	6940	--	--	--	17	18
Roadside hedges and medians	77306	580	41	--	56	70	71
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	19148	9599	--	--	--	--	--
Vegetable cultivation	5600	1366	--	--	--	--	--
Forest plantations	97900	977	--	--	---	--	--
Gardens and groves	2000	30	--	34	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	--	--	--	--	--	--	--
Community focus projects	2000	20	--	--	--	25	25

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
050	Chinchwad, Walekarwadi	252807	6732

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	115955	5711	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	50756	4	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	600	146	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	7600	1894	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	17946	29958	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	500	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	1000	25	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	50000	14615	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	2500	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	4300	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	155600	52353	61	164	356	130	128
Percentage of area under green cover with reference to total area	62%	+6.75% =68.75%	0.50%	1.25%	3%	1%	1%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	115955	5711	--	--	--	--	--
Roadside hedges and medians	51356	150	43	139	331	104	104
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	17946	29958	--	--	--	--	--
Vegetable cultivation	7600	1894	--	--	--	--	--
Forest plantations	--	--	--	---	--	--	--
Gardens and groves	1500	25	--	25	--	13	12
Slum focus projects	--	--	--	--	25	--	--
School focus projects	4300	--	18	--	--	--	--
Community focus projects	52500	14615	--	--	--	13	12

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
051	Premlok Park	269806	6813

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	173142	3607	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	45115	101	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	500	124	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	7000	73	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	1600	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	500	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	1200	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	100	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--		A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	78100	3905	240	--	17	206	206
Percentage of area under green cover with reference to total area	29%	+4.85% =34%	1.75%	--	0.10%	1.50%	1.50%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	173142	3607	--	--	--	--	--
Roadside hedges and medians	45115	101	234	--	17	200	200
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	500	124	--	--	--	--	--
Forest plantations	1600	--	--	--	--	--	--
Gardens and groves	7000	73	--	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	100	--	01	--	--	--	--
Community focus projects	1700	--	05	--	--	06	06

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
052	Chinchwad Station	577835	6257

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	96020	2771	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	291350	6010	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	138360	33	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	1600	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	4500	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	1800	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	1000	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	1300	13	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	19000	180	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	180140	9007	83	60	--	359	360
Percentage of area under green cover with reference to total area	31%	+3% =34%	0.30%	0.20%	--	1.25%	1.25%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	387370	8781	--	--	--	--	--
Roadside hedges and medians	139960	33	15	50	--	354	355
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	19000	180	--	--	--	05	05
Gardens and groves	4500	--	50	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	1000	--	--	10	--	--	--
Community focus projects	3100	13	18	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
053	SKF Company	1234355	6938

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	185178	6150	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	823974	56577	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	158434	238	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	1600	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	8000	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	4200	165	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	9000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	380	5	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	7200	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	631350	63135	189	--	154	307	308
Percentage of area under green cover with reference to total area	51%	+1.55% =52.55%	0.30%	--	0.25%	0.50%	0.50%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	1009152	62727	--	--	--	--	--
Roadside hedges and medians	160034	238	117	--	42	245	245
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	8000	--	--	--	--	--	--
Forest plantations	380	05	--	--	84	--	--
Gardens and groves	13200	165	--	--	28	62	63
Slum focus projects	7200	--	72	--	--	--	--
School focus projects	--	--	--	--	--	--	--
Community focus projects	--	--	--	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
054	Anantnagar, Chinchwad	103045	6453

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	27432	213	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	12184	--	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	100	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	60	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	1200	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	3500	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	4260	213	155	--	--	--	--
Percentage of area under green cover with reference to total area	4%	+3% =7%	3%	--	--	--	--

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	27432	213	62	--	--	--	--
Roadside hedges and medians	12284	--	31	--	--	--	--
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	60	--	15	--	--	--	--
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	3500	--	35	--	--	--	--
School focus projects	--	--	--	--	--	--	--
Community focus projects	1200	--	12	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
055	Vishal Theatre	1100081	5855

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	116136	1252	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	619269	10275	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	166712	235	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	3200	797	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	1000	20	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	9500	304	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	2000	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	1000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	200	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	700	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	257660	12883	106	68	--	168	168
Percentage of area under green cover with reference to total area	23%	+0.90% =24%	0.20%	0.10%	--	0.30%	0.30%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	735405	11527	--	--	--	--	--
Roadside hedges and medians	169912	1032	81	26	--	--	--
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	9500	304	--	10	--	168	168
Gardens and groves	1000	20	25	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	200	--	--	02	--	--	--
Community focus projects	3000	--	--	30	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
056	Karalwadi	181032	5951

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	97860	1983	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	34436	39	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	2500	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	500	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	1000	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	1900	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	3500	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	40440	2022	30	256	50	46	45
Percentage of area under green cover with reference to total area	22%	+4.80% =26.80%	0.30%	3%	0.50%	0.50%	0.50%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	97860	1983	--	--	--	--	--
Roadside hedges and medians	34436	39	30	107	--	38	38
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	--	--	--	--	--	--	--
Gardens and groves	3000	--	--	125	25	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	3500	--	--	10	--	--	--
Community focus projects	2900	--	--	14	25	08	07

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
057	Gandhinagar	52554	6884

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	2175	102	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	6260	--	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	8000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	200	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	2040	102	63	--	--	50	50
Percentage of area under green cover with reference to total area	4%	+6.40% =10.40%	2.40%	--	--	2%	2%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	2175	102	--	--	--	--	--
Roadside hedges and medians	6260	--	61	--	--	--	--
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	--	--	--	--	--	--	--
Gardens and groves	8000	--	--	--	--	50	50
Slum focus projects	--	--	--	--	--	--	--
School focus projects	--	--	--	--	--	--	--
Community focus projects	200	--	02	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
058	Morwadi	1519050	6045

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	311305	1291	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	714732	9107	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	229413	132	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	3700	307	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	38000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	2200	552	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	30400	304	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	2500	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	233860	11693	627	663	628	161	161
Percentage of area under green cover with reference to total area	15%	+2.92% =18%	0.82%	0.87%	0.83%	0.20%	0.20%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	1026037	10398	500	500	500	161	161
Roadside hedges and medians	229413	132	98	148	28	--	--
Vermiculture projects	-	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	2200	552	--	--	--	--	--
Gardens and groves	41700	307	--	15	100	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	2500	-	25	--	--	--	--
Community focus projects	30400	304	04	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
059	Vastu Udyog	551808	6142

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	360113	3276	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	91555	76	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	800	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	2500	25	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	8000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	5700	220	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	36800	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	500	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	26600	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	1500	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	3000	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	71940	3597	165	192	405	654	655
Percentage of area under green cover with reference to total area	13.04%	+7.51% =20.55%	0.60%	0.70%	1.47%	2.37%	2.37%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	360113	3276	25	100	100	50	50
Roadside hedges and medians	92355	76	90	67	285	40	40
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	---	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	8700	220	30	--	--	225	225
Gardens and groves	10500	25	10	--	--	40	40
Slum focus projects	--	--	--	--	--	--	-
School focus projects	26600	--	10	--	--	128	128
Community focus projects	38800	--	--	25	20	171	172

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
060	Nehru Nagar	345969	6132

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	284979	1944	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	56238	39	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	1000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	600	118	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	2000	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	42020	2101	220	234	221	247	248
Percentage of area under green cover with reference to total area	11.80%	+6.5% =18.3%	1.24%	1.25%	1.24%	1.39%	1.39%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	284979	1944	200	200	200	150	150
Roadside hedges and medians	56238	39	15	34	21	87	88
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	600	118	--	--	--	--	--
Gardens and groves	1000	--	05	---	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	--	--	--	--	--	--	--
Community focus projects	2000	--	--	--	--	10	10

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
061	HA Colony	1447263	6642

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	333128	15896	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	415151	12770	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	231727	2126	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	4400	1081	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	2700	20	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	4000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	100	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	13200	46	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	3400	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	622780	31939	54	312	411	85	86
Percentage of area under green cover with reference to total area	43%	+1.30% =44.30%	0.7%	0.43%	0.57%	0.12%	0.12%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	748279	28666	--	200	200	--	--
Roadside hedges and medians	236127	3207	--	12	156	75	75
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	100	--	20	--	--	--	--
Gardens and groves	6700	20	--	75	15	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	3400	--	34	--	--	--	--
Community focus projects	13200	46	--	25	40	10	11

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
062	Pimpri Nagar Shopping Center	137171	6701

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	69393	500	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	42666	186	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	1000	246	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	3150	25	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	1200	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	4000	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	3100	25	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	19140	957	194	20	92	44	44
Percentage of area under green cover with reference to total area	14%	+5.95% = 20%	3%	0.30%	1.35%	0.65%	0.65%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	69393	500	194	--	--	--	--
Roadside hedges and medians	43666	432	--	20	51	30	31
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	3150	25	--	--	06	05	05
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	4000	--	--	--	35	03	02
Community focus projects	1200	--	--	--	--	06	06

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
063	Vaishnodevi Mandir	138271	6342

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	86888	437	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	48441	90	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	2600	202	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	14580	729	151	64	44	65	65
Percentage of area under green cover with reference to total area	11%	+5.65% =16.65%	2%	1%	0.65%	1%	1%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	86888	437	100	--	--	65	65
Roadside hedges and medians	48441	90	51	64	19	--	--
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	--	--	--	--	--	--	--
Gardens and groves	2600	202	--	--	25	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	--	--	--	--	--	--	--
Community focus projects	--	--	--	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
064	Ashok Nagar, Pimpri Nagar	189986	6082

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	124042	981	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	47912	119	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	1000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	100	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	8000	179	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	8400	208	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	29740	1487	66	198	47	58	59
Percentage of area under green cover with reference to total area	15.65%	+4.48% =20.13%	0.69%	2.08%	0.49%	0.61%	0.61%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	124042	981	--	--	--	--	--
Roadside hedges and medians	47912	119	66	143	47	21	21
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	100	--	--	25	--	--	--
Gardens and groves	1000	--	--	--	--	37	38
Slum focus projects	--	--	--	--	--	--	--
School focus projects	8400	208	--	--	--	--	--
Community focus projects	8000	179	--	30	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
065	Nava Maharashtra Vidyalaya	278957	6508

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	165177	859	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	65991	114	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	1000	240	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	1200	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	1200	24	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	7500	55	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	1100	11	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	26060	1303	242	268	287	260	261
Percentage of area under green cover with reference to total area	9.34%	+9.42% =18.76%	1.73%	1.92%	2.05%	1.86%	1.86%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	165177	859	200	200	200	96	96
Roadside hedges and medians	65991	114	32	68	30	33	34
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	1000	240	--	--	--	--	--
Forest plantations	1200	24	--	--	--	126	126
Gardens and groves	1200	--	--	--	57	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	7500	55	10	--	--	05	05
Community focus projects	1100	11	--	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
066	Bhairavnath Mandir	792416	6864

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	306443	2680	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	99511	12	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	17850	892	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	3200	160	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	11000	351	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	6000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	570	07	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	1000	10	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	900	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	300	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	300	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	82060	4112	336	366	182	278	278
Percentage of area under green cover with reference to total area	10.35%	+3.62% =14%	0.84%	0.92%	0.46%	0.70%	0.70%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	306443	2680	92	92	92	46	46
Roadside hedges and medians	99511	12	154	34	20	160	159
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	3200	160	--	--	--	--	--
Vegetable cultivation	17850	892	--	--	--	--	--
Forest plantations	570	07	15	--	--	60	60
Gardens and groves	17000	351	60	240	70	12	13
Slum focus projects	--	--	--	--	--	--	--
School focus projects	900	--	09	--	--	--	--
Community focus projects	1600	10	06	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
067	Rahatni /Kalewadi	2426826	6073

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	1264388	8756	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	654829	263	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	1708	127	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	15000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	125	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	1500	15	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	5700	50	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	7000	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	4000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	184220	9211	1117	1065	1160	967	968
Percentage of area under green cover with reference to total area	7.59%	+4.34% =12%	0.92%	0.87%	0.95%	0.80%	0.80%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	1264388	8756	1000	1000	1000	506	507
Roadside hedges and medians	654829	263	80	65	160	354	353
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	---	--	--	--	--	--	--
Vegetable cultivation	1708	127	--	--	--	--	--
Forest plantations	125	--	--	--	--	12	13
Gardens and groves	15000	--	--	--	--	55	55
Slum focus projects	--	--	--	--	--	--	--
School focus projects	7000	--	30	--	--	20	20
Community focus projects	11200	65	07	--	--	20	20

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
068	Tapkir Nagar, Kalewadi	622375	6514

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	423099	3162	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	74862	--	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	600	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	700	2	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	1000	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	6100	41	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	64100	3205	337	314	376	237	238
Percentage of area under green cover with reference to total area	10.30%	+4.80% =15.10%	1.08	1.00	1.20	0.76	0.76

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	423099	3162	250	250	250	125	125
Roadside hedges and medians	74862	--	52	64	126	40	40
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	600	--	--	--	--	72	73
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	1000	--	10	--	--	--	--
School focus projects	6100	41	20	--	--	--	--
Community focus projects	700	02	05	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
069	Kalewadi, Nadenagar	543073	6764

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	263676	3824	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	57489	25	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	5200	1278	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	1400	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	400	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	200	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	4500	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	102540	5127	126	106	88	139	139
Percentage of area under green cover with reference to total area	19%	+2.19% =21.19%	0.46%	0.39%	0.32%	0.51%	0.51%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	263676	3824	--	--	--	--	--
Roadside hedges and medians	57489	25	89	106	88	54	54
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	5200	1278	--	--	--	--	--
Forest plantations	400	--	--	--	--	47	46
Gardens and groves	1400	--	--	--	--	33	34
Slum focus projects	--	--	--	--	--	--	--
School focus projects	4500	--	35	--	--	05	05
Community focus projects	200	--	02	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
070	Vijaynagar, Kalewadi	773684	5572

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	443572	3377	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	110822	--	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	8000	1891	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	27900	279	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	5640	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	540	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	5000	25	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	10600	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	111440	5572	361	378	342	437	437
Percentage of area under green cover with reference to total area	14.40%	+5.02% =19.42%	0.93%	0.97%	0.88%	1.12%	1.12%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	443572	3377	286	286	286	143	143
Roadside hedges and medians	110822	--	30	87	56	45	45
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	27900	279	--	--	--	---	--
Vegetable cultivation	8000	1891	--	--	--	--	--
Forest plantations	540	--	--	--	--	67	68
Gardens and groves	5640	--	--	--	-	141	141
Slum focus projects	--	--	--	--	--	--	--
School focus projects	10600	--	25	--	--	41	40
Community focus projects	5000	25	20	05	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
071	Keshav Nagar	705485	6352

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	338938	24505	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	137399	45	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	10500	2560	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	135400	1354	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	1500	50	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	1000	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	200	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	1000	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	5800	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	66500	640	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	291540	29154	103	129	226	94	95
Percentage of area under green cover with reference to total area	41%	+1.80% =42.80%	0.30%	0.35%	0.65%	0.25%	0.25%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	338938	24505	--	--	--	--	--
Roadside hedges and medians	137399	45	71	129	176	27	27
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	135400	1354	--	--	--	--	--
Vegetable cultivation	10500	2560	--	--	--	--	--
Forest plantations	66700	640	--	--	--	37	38
Gardens and groves	2500	50	24	--	--	25	25
Slum focus projects	--	--	--	--	--	--	--
School focus projects	5800	--	08	--	50	--	--
Community focus projects	1000	--	--	--	--	05	05

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
072	Chinchwad Gandhi Pet	268694	6881

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	140412	7014	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	66453	68	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	900	220	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	10000	710	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	1200	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	100	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	2500	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	2000	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	1000	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	1500	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	2400	24	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	160720	8036	--	88	176	--	--
Percentage of area under green cover with reference to total area	60%	+1.95% =62%	--	0.65%	1.30%	--	--

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	140412	7014	--	--	--	--	--
Roadside hedges and medians	66453	68	--	48	52	--	--
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	900	220	--	--	--	--	--
Forest plantations	2500	24	--	--	--	--	--
Gardens and groves	11200	710	--	15	79	--	--
Slum focus projects	--	--	--	--	20	--	--
School focus projects	1000	--	--	10	--	--	--
Community focus projects	6000	--	--	15	25	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
073	Tanaji Nagar, Chinchwad	167858	6264

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	114034	4476	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	38719	112	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	2920	728	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	8000	877	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	1500	39	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	100	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	1900	7	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	124780	6239	--	181	90	35	36
Percentage of area under green cover with reference to total area	74%	+3.80% =77.80%	--	2%	1%	0.40%	0.40%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	114034	4476	--	--	--	--	--
Roadside hedges and medians	38719	112	--	156	90	17	17
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	8000	877	--	--	--	--	--
Vegetable cultivation	2920	728	--	--	--	--	--
Forest plantations	100	--	--	--	--	12	13
Gardens and groves	1500	39	--	25	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	--	--	--	--	--	--	--
Community focus projects	1900	07	--	--	--	06	06

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
074	Elpro Company	646036	6973

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	249106	7573	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	191565	8218	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	119206	47	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	8160	2036	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	8640	330	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	20	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	364080	18204	03	62	201	52	53
Percentage of area under green cover with reference to total area	56%	+1.12% =57.12%	--	0.20%	0.60%	0.16%	0.16%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	440671	15791	--	--	--	--	--
Roadside hedges and medians	119206	47	--	62	149	52	53
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	8160	2036	--	--	--	--	--
Forest plantations	20	--	03	--	--	--	--
Gardens and groves	8640	330	--	--	52	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	--	--	--	--	--	--	--
Community focus projects	--	--	--	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
075	Sudarshan Nagar	554294	5947

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	280788	7539	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	12023	187	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	112404	140	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	100	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	2000	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	6400	1604	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	2860	140	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	31600	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	1200	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	22600	216	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	31100	400	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	43300	200	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	208520	10426	586	--	--	725	725
Percentage of area under green cover with reference to total area	38%	+7.30% =45.30%	2.10%	--	--	2.60%	2.60%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	292811	7726	--	--	--	--	--
Roadside hedges and medians	114504	140	190	--	--	345	345
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	6400	1604	--	--	--	--	--
Forest plantations	44500	200	233	--	--	150	150
Gardens and groves	34460	140	3	--	--	200	200
Slum focus projects	--	--	--	--	--	--	--
School focus projects	--	--	--	--	--	--	--
Community focus projects	53700	616	160	--	--	30	30

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
076	Pimpri Bhatnagar	97325	6877

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	51521	798	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	28938	25	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	1300	328	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	2400	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	1700	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	400	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	23020	1151	32	45	46	--	--
Percentage of area under green cover with reference to total area	24%	2.50% =26.50%	0.65%	0.92%	0.93%	--	--

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	51521	798	--	--	--	--	--
Roadside hedges and medians	30238	353	20	36	22	--	--
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	--	--	--	--	--	--	--
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	1700	--	12	05	--	--	--
School focus projects	--	--	--	--	--	--	--
Community focus projects	2800	--	--	04	24	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
077	Pimpri Nagar, Mandai	132784	6667

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	54400	729	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	38049	25	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	1280	320	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	25	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	3000	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	21480	1074	25	--	16	25	25
Percentage of area under green cover with reference to total area	16%	+1.38% =17.40%	0.38%	--	0.24%	0.38%	0.38%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	54400	729	--	--	--	--	--
Roadside hedges and medians	38049	25	25	--	11	--	--
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	1280	320	--	--	--	--	--
Forest plantations	25	--	--	--	05	--	--
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	--	--	--	--	--	--	--
Community focus projects	3000	--	--	--	--	25	25

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
078	Pimpri Nagar State Bank	86631	6780

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	46805	132	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	26479	132	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	--	--	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	--	--	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	--	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	--	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	--	--	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 · C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	5280	264	107	--	14	38	38
Percentage of area under green cover with reference to total area	6%	+4.88% =11%	2.50%	--	0.32%	0.88%	0.88%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	46805	132	100	--	--	18	18
Roadside hedges and medians	26479	132	07	--	14	20	20
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	--	--	--	--	--	--	--
Forest plantations	--	--	--	--	--	--	--
Gardens and groves	--	--	--	--	--	--	--
Slum focus projects	--	--	--	--	--	--	--
School focus projects	--	--	--	--	--	--	--
Community focus projects	--	--	--	--	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Ward-specific urban forestry plan for 2000 to 2005

Ward No.	Name of Ward	Area	Population
079	Jijamata Hospital, Pimpri	162979	7098

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*	50827	1897	A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*	--	--	A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*	42167	25	A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts	--	--	A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway	--	--	A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers	1680	420	A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries	--	--	C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*	--	--	A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*	4200	333	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*	--	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces	700	174	C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure	500	--	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas	--	--	E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places	2000	75	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools	1000	--	E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals	5200	100	E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis	700	--	A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps	--	--	E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover	60480	3024	--	50	143	95	95
Percentage of area under green cover with reference to total area	37%	+4.69% =42.70%	--	0.60%	1.75%	1.17%	1.17%

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations	50827	1897	--	--	--	--	--
Roadside hedges and medians	42167	25	--	35	126	80	80
Vermiculture projects	--	--	--	--	--	--	--
Horticulture projects	--	--	--	--	--	--	--
Vegetable cultivation	1680	420	--	--	--	--	--
Forest plantations	700	174	--	--	--	15	15
Gardens and groves	4200	333	--	10	--	--	--
Slum focus projects	--	--	--	--	07	--	--
School focus projects	1000	--	--	--	10	--	--
Community focus projects	8400	175	--	05	--	--	--

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Habitat-specific urban forestry plan for 2000 to 2005

Habitat	Name of Habitat	Area	Population
River	Pawana River = 10.82 km length		

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*			A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*			A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*			A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts			A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway			A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers			A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries			C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*			A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*			A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*			A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces			C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure			A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas			E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places			E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools			E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals			E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis			A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps			E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover							
Percentage of area under green cover with reference to total area							

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations							
Roadside hedges and medians							
Vermiculture projects							
Horticulture projects							
Vegetable cultivation							
Forest plantations							
Gardens and groves							
Slum focus projects							
School focus projects							
Community focus projects							

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Habitat-specific urban forestry plan for 2000 to 2005

Habitat	Name of Habitat	Area	Population
River	Indrayani River		

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*			A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*			A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*			A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts			A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway			A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers			A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries			C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*			A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*			A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*			A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces			C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure			A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas			E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places			E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools			E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals			E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis			A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps			E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover							
Percentage of area under green cover with reference to total area							

Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations							
Roadside hedges and medians							
Vermiculture projects							
Horticulture projects							
Vegetable cultivation							
Forest plantations							
Gardens and groves							
Slum focus projects							
School focus projects							
Community focus projects							

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.

Habitat-specific urban forestry plan for 2000 to 2005

Habitat	Name of Habitat	Area	Population
Road	Mumbai Pune Highway (Aundh)		

Scope for urban forestry activities in the various landuse categories within the Pimpri Chinchwad Municipal Corporation.

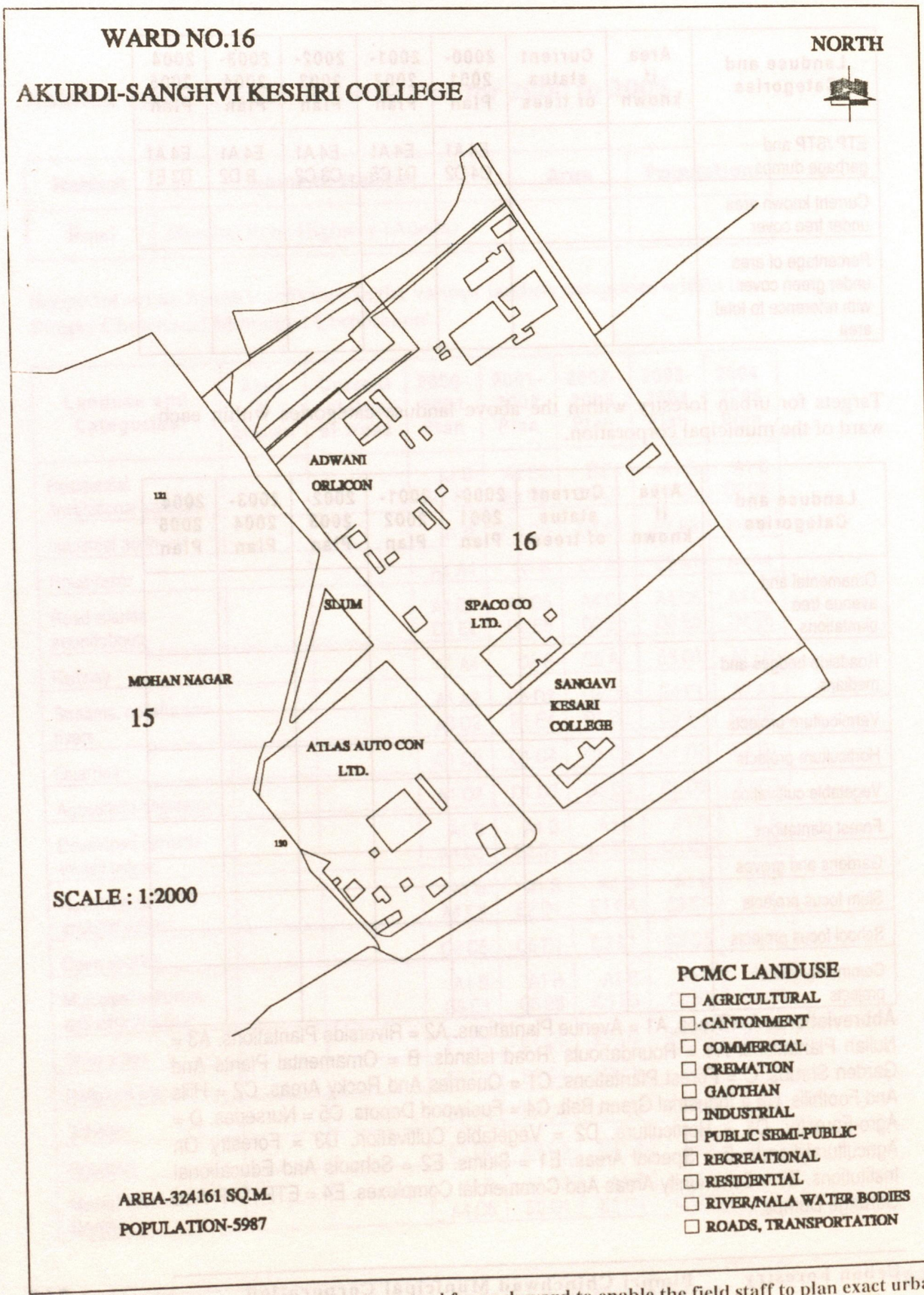
Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Residential /Institutional *sanstha*			A1 B E1 E2	A1 E2 E3 D2	B E1 D2 D1	A1 B E3 C5	A1 B D2 C5
Industrial *audhogik*			A1 B	C3 C5	D1 E1	E1 E3	E4 A1
Road *raste*			A1 A4	A1 B	C5 A1	E3 A1	A1 A4
Road islands /roundabouts			A4 C5 D2 E2	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5	A4 C5 D2 E5
Railway			A1 A4	D2 B	C5 A1	E3 D1	A1 D2
Streams, nullahs and rivers			A1 A2 A3 D2	C5 D2 E1 E4	C4 C5 D1 D2	E4 E1 C5 A2	A2 A3 C5 D2
Quarries			C1 C2	C1 C4	C1 C5	C1 D2	C1 D1
Agriculture *shetzamin*			A1 D3	D1 D2	D3 C4	C5 D3	A2 D3
Developed gardens *vikasit udyan*			A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Reserved gardens *arakshit udyan*			A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4
Open spaces			C2 C5	C5 D1	C2 E1	C2 C5	C2 A2
Municipal buildings and infrastructure			A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3	A1 B C5 E3
Slum areas			E1 C4	E1 C5	E1 D2	E1 D2	E1 D1
Religious places			E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Schools			E2 C4	E2 C5	E2 D2	E2 D2	E2 D1
Hospitals			E3 D2	E3 C4	E3 C5	E3 B	E3 A1
Market sites and Mandis			A1 B A4 C5	A1 B E2 D1	A1 B E1 C4	A1 B C3 C5	A1 B E A4

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
ETP /STP and garbage dumps			E4 A1 C4 D2	E4 A1 D1 C5	E4 A1 C3 C2	E4 A1 B D2	E4 A1 D3 E1
Current known area under tree cover							
Percentage of area under green cover with reference to total area							

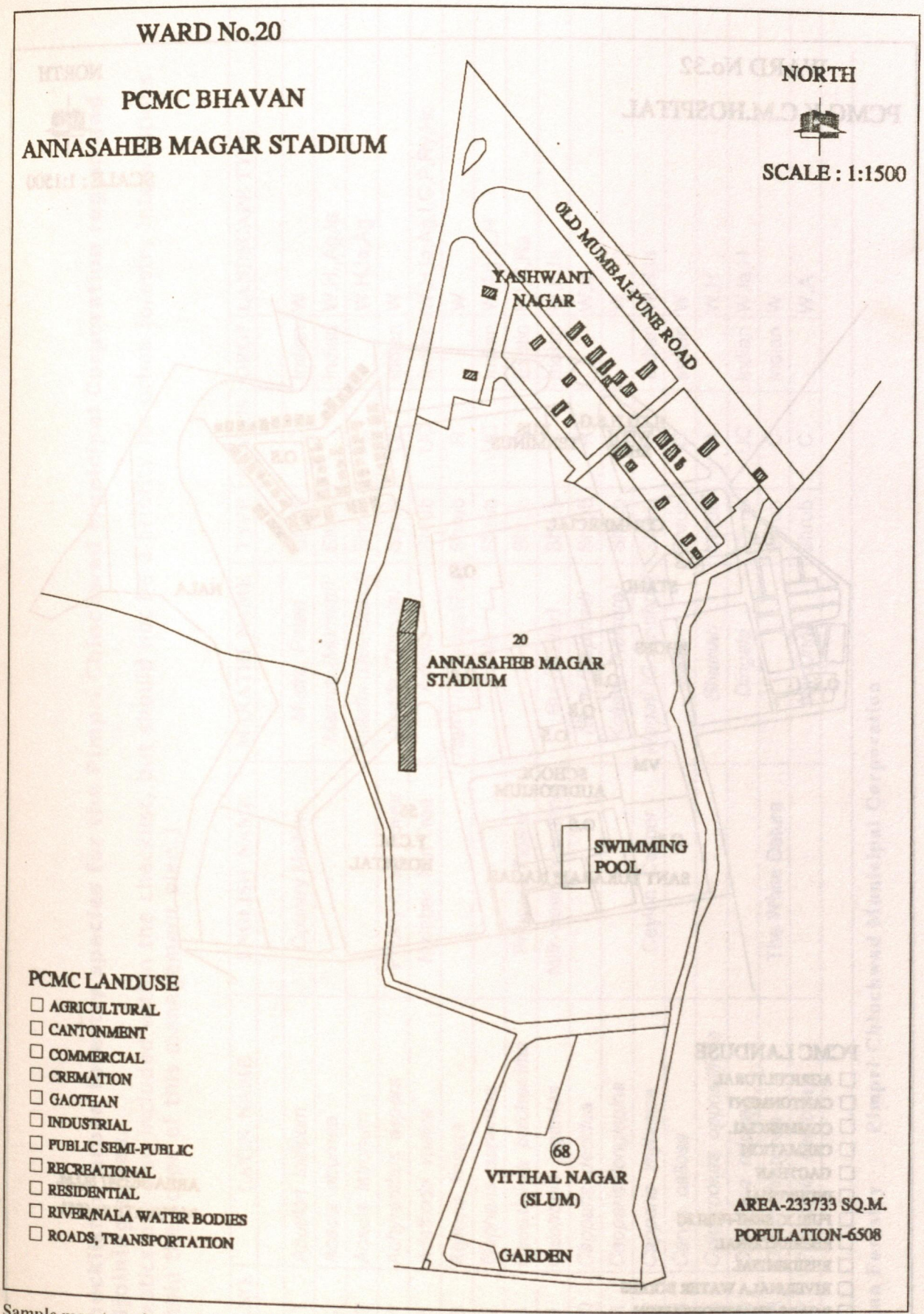
Targets for urban forestry within the above landuse categories within each ward of the municipal corporation.

Landuse and Categories	Area if known	Current status of trees	2000-2001 Plan	2001-2002 Plan	2002-2003 Plan	2003-2004 Plan	2004 2005 Plan
Ornamental and avenue tree plantations							
Roadside hedges and medians							
Vermiculture projects							
Horticulture projects							
Vegetable cultivation							
Forest plantations							
Gardens and groves							
Slum focus projects							
School focus projects							
Community focus projects							

Abbreviations: A = Trees. A1 = Avenue Plantations. A2 = Riverside Plantations. A3 = Nullah Plantations. A4 = Roundabouts /Road Islands. B = Ornamental Plants And Garden Shrubs. C = Forest Plantations. C1 = Quarries And Rocky Areas. C2 = Hills And Foothills. C3 = Industrial Green Belt. C4 = Fuelwood Depots. C5 = Nurseries. D = Agro-Forestry. D1 = Horticulture. D2 = Vegetable Cultivation. D3 = Forestry On Agricultural Lands. E = Special Areas. E1 = Slums. E2 = Schools And Educational Institutions. E3 = Community Areas And Commercial Complexes. E4 = ETP /STP And Garbage Dumps.



Sample map templates that have been prepared for each ward to enable the field staff to plan exact urban forestry interventions based on the Master Plan.



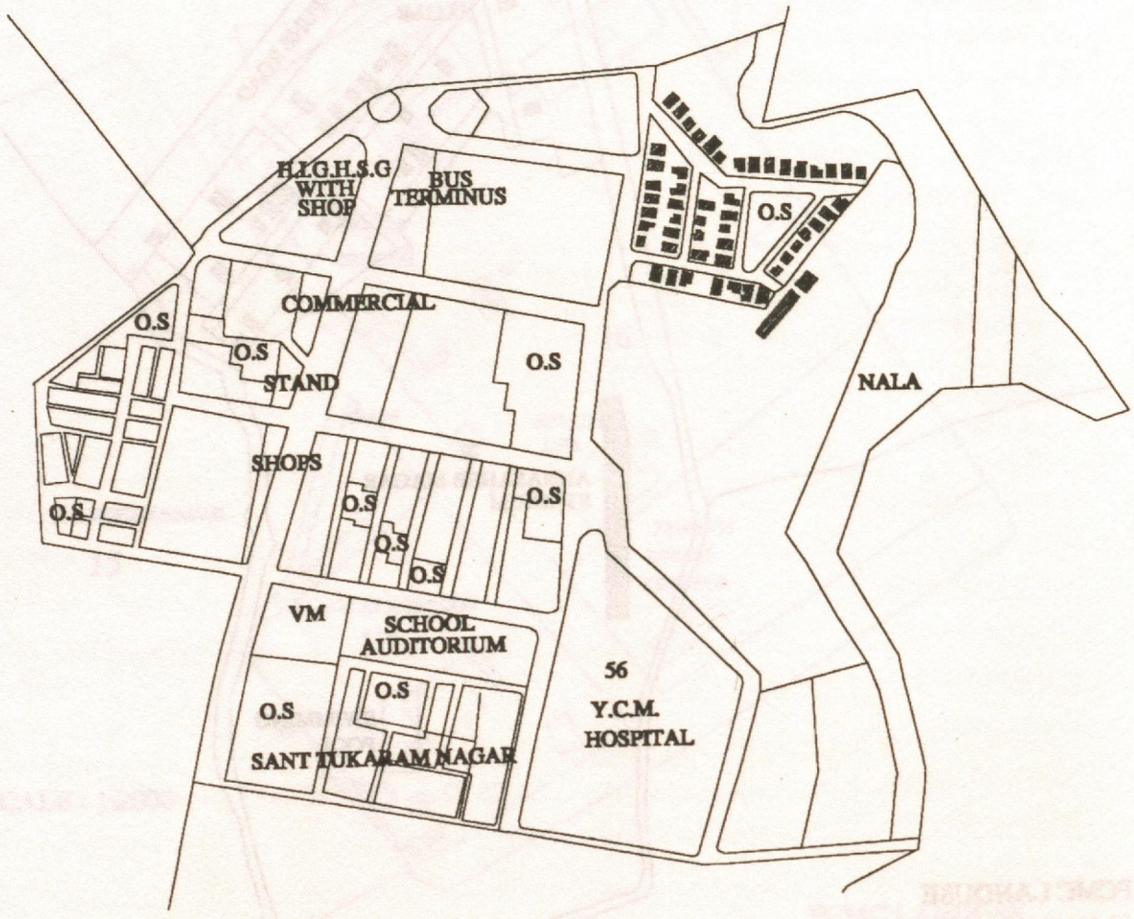
Sample map templates that have been prepared for each ward to enable the field staff to plan exact urban forestry interventions based on the Master Plan.

WARD No.32

PCMC Y.C.M.HOSPITAL

NORTH

SCALE : 1:1500



PCMC LANDUSE

- ☐ AGRICULTURAL
- ☐ CANTONMENT
- ☐ COMMERCIAL
- ☐ CREMATION
- ☐ GAOTHAN
- ☐ INDUSTRIAL
- ☐ PUBLIC SEMI-PUBLIC
- ☐ RECREATIONAL
- ☐ RESIDENTIAL
- ☐ RIVER/NALA WATER BODIES
- ☐ ROADS, TRANSPORTATION

AREA-363547 SQ.M.

POPULATION-6251

Sample map templates that have been prepared for each ward to enable the field staff to plan exact urban forestry interventions based on the Master Plan.

Checklist of urban forestry species for the Pimpri Chinchwad Municipal Corporation region and adjoining areas.

(Exotics are also included within the checklist, but should not be a priority for urban forestry interventions within the scope of this management plan.)

SL.NO.	LATIN NAME	ENGLISH NAME	MARATHI NAME	TYPE	STATUS	ORG?	LANDSCAPE TYPE
1	*Abutilon indicum*	Country Mallow	*Mudra, Petari*	Shrub	C	Indian	W
2	*Acacia eburnea*		*Marmat (Murmati)*	Shrub		Indian	W,H,,Ag,Ia
3	*Acacia latronum*		*Pallathi (Dev-Babul)*	Shrub	C		W,H,Ia,Ag
4	*Achyranthus aspera*	Prickly-chaff flower	*Agada (Dingala)*	Shrub	UC	Indian	W
5	*Adathoda vasica*	Malabar Nut Tree	*Adulsa*	Shrub	UC	Indian	W,H,Ia,Ag,I,C,P,Ry,Hc
6	*Atylosia lineata*		*Ran-Tur (JangaliTur)*	Shrub	R		W
7	*Blepharis asperima*		*Akada*	Shrub	UC	Indian	W,Ag,Ia,H
8	*Caesalpinia pulcherrima*	Peacock Flower		Shrub	C	Exotic	P,I,C,Ra
9	*Calotropis gigantea*	Milk-weed,Bowstring	*Rui (Madar)*	Shrub	C	Indian	W,H,Ia
10	*Capparis decidua*		*Nepti (Nepthad)*	Shrub	R		W,Ia
11	*Capparis longispina*		*Kolisna (Kolsura)*	Shrub	C		W
12	*Capparis zeylanica*	Ceylon Capper	*Wagati (Govindhpal)*	Shrub	C	Indian	W,H,Ia
13	*Carvia callosa*		*Karvi*	Shrub	C	Indian	W
14	*Colebrookea oppositifolia*		*Bhaman*	Shrub	R		W,H
15	*Crotalaria retusa*		*Dingala*	Shrub	UC	Indian	W,Ia,H
16	*Datura fastuosa*	The White Datura		Shrub	C	Indian	W
17	*Euphorbia nerifolia*		*Nivdunga*	Shrub	C		W,A

SL.NO.	LATIN NAME	ENGLISH NAME	MARATHI NAME	TYPE	STATUS	ORG?	LANDSCAPE TYPE
18	*Euphorbia rothiana*		*Dudhi*	Shrub	C		W,Ia
19	*Euphorbia thirucalli*		*Sher*	Shrub	R		P,I,C,Ia
20	*Gymnema sylvestrea*		*Wakhandi*	Shrub	R		P,I,H
21	*Gymnosporia montana*		*Henkel(Mal-kanguni)*	Shrub	C		P,Ia,I
22	*Hamelia patens*	The Spreading Hamelia		Shrub	C	Exotic	A,P,C,I,Ia,Ra
23	*Helictreus ixora*		*Murudseng (Kewan)*	Shrub	R		P,C,I,Ra,Ag
24	*Hibiscus cannabinus*	Deccan Hemp		Shrub	C	Indian	P,C,I,Ra,A,Ia,Hc
25	*Hibiscus rosa-sinensis*	Shoe Flower		Shrub	C	Exotic	P,C,I,Ra,A,Ia
26	*Holarrhena antidysentrica*		*Kudha (Pandhra)*	Shrub	N		Ia,P,C,I,W
27	*Ixora arborea*	Small Flowered Ixora	*Lonkhandi*	Shrub	UC	Indian	P,C,I,Ia,Ra,A,Hc,Re
28	*Ixora cociinea*	Flame of the woods	*Bakora*	Shrub	C	Indian	P,C,I,Ia,Ra,A,Hc,Re
29	*Lasiosiphon eriocepholus*		*Rametha (Datpadi)*	Shrub	R		P,Ia,I,C
30	*Lawsonia inermis*		*Mendhi*	Shrub	C	Indian	Ra,Hc,P,I,C,Ag,Ia,Re
31	*Leea sambucina*		*Dinda (Karkani)*	Shrub	C		
32	*Leucas stelligera*		*Burumbi (Goma)*	Shrub	C		W,Ia,H
33	*Nerium odorum*	The Oleander		Shrub	C	Exotic	A,C,I,Ia
34	*Oroxylum indicum*		*Tetoo*	Shrub	UC	Indian	Ia,W,H
35	*Osyris wightiana*		*Lotal (Popli)*	Shrub	UC		Ia,W,H
36	*Pogostemon parviflorus*		*Phangla*	Shrub	R		W,Ia,H
37	*Rauvolfia serpentiana*		*Hadki (Sarpagandhi)*	Shrub	N	Indian	P,Hc,I,C,Ra
38	*Resinus communis*			Shrub	C	Indian	W
39	*Rhus mysorensis*		*Amani*	Shrub	C		W,Ia,H
40	*Rhus parviflora*		*Pander-phatti*	Shrub	C		W,Ia,H
41	*Salix Tetrasperma*		*Wallang*	Shrub	UC		W,R,N,Ag

SL.NO.	LATIN NAME	ENGLISH NAME	MARATHI NAME	TYPE	STATUS	ORG?	LANDSCAPE TYPE
42	*Scutia circumcissa*		*Chimat*	Shrub	R		W,Ia
43	*Solanum giganteum*		*Kutri (Chunna)*	Shrub	C		W,Ia,P,C,I,N
44	*Strobilanthus reticulatus*		*Akara*	Shrub	UC		P,C,Ia,H,W,Ra
45	*Strobilanthus scrobiculatus*		*Dawnna*	Shrub	UC		P,C,Ia,H,W,Ra
46	*Swertia corymbosa*		*Kavadi*	Shrub	UC		W,Ag,Ia,P,C,I,Ra
47	*Tabernaemontana coronaria*	The Moonbeam		Shrub	UC	Indian	P,I,C,Ra,Hc
48	*Thevetia neriifolia*	Yellow Oleander		Shrub	C	Exotic	A,P,C,I
49	*Thunbergia erecta*	The Upright Thunbergia		Shrub	C	Exotic	P,C,I,Ra,Ia,N
50	*Vinca rosea*	Madagascar Periwinkle		Shrub	C	Exotic	P,C,I,Ia,Ra,A,Hc
51	*Vitex negunda*		*Nirgudi*	Shrub	C		W,Ia,H,N
52	*Vitis repens*		*Girnnolli*	Shrub	R		W,Ia,H,N
53	*Wagatea spinata*		*Vakeri*	Shrub	R		W,Ia,H
54	*Woodfordia fruitico[illegible]*		*Dhayatti*	Shrub	R		W,Ia,H,P,I
55	*Ziziphus rugosa*		*Toran*	Shrub	UC		W,Ia,H,I
56	*Acacia arabica*	Gum- Arabic	*Babhal*	Tree	C	Indian	R,W,N,Ia,A
57	*Acacia catechu*	Black Cutch	*Khair (Kadori)*	Tree	C	Indian	W,N,Ia,A,Ry
58	*Acacia leucophloea*		*Hiwar*	Tree	C	Indian	W,N,Ia,A,Ry
59	*Acharis sapota*	Sapota	*Sapota*	Tree	UC	Exotic	W,H,N,Ia,Ry,I,Py
60	*Actinodaphne hookeri*		*Pissa*	Tree	R	Indian	W,H,Ia,N
61	*Adina cordifolias*	Yellow Teak	*Heddi, (Kalamb)*	Tree	R	Indian	W,Ag,Ia,I
62	*Ailanthus excelsa*	Tree of Heaven	*Maharukh*	Tree	R	Indian	I,C,N,P,A,Ra
63	*Albizzia amara*		*Lalai (Tulgi)*	Tree	C		W,Ia,N
64	*Albizzia lebbek*	East Indian Walnut	*Siras (Chinchola)*	Tree	C	Indian	W,Ia,H,Ag
65	*Albizzia odoratissima*	Black Siris	*Kala Siras, Bansa*	Tree	C		W,H,Ia

SL.NO.	LATIN NAME	ENGLISH NAME	MARATHI NAME	TYPE	STATUS	ORG?	LANDSCAPE TYPE
66	*Albizzia procera*		*Kinhai*	Tree	C	Indian	W,Ia,H,Ag
67	*Alstonia scholaris*	Devil's Tree	*Sathivann*	Tree	N	Indian	P,A,C,Hc,I,Ra,Py,Re
68	*Amherstia nobilis*	The Splendid Amherstia		Tree	R	Burma	P,A,C,Hc,I,Ra,Py,R,N
69	*Anogeissus latifolia*	Button Tree (Axle wood)	*Dhawa (Dhaura)*	Tree	R	Indian	Ia,W,Ag,P,Ry,I
70	*Anona reticulata*	Bullocks Eye		Tree	UC	Exotic	W,H,Ry,Re,I,Ia,Ag
71	*Anona squamosa*	Custard Apple	*Sitaphal*	Tree	C	Exotic	W,H,Ry,Re,I,Ia,Ag
72	*Anthocephalus cadamba*		*Kadamba*	Tree	R	Indian	A,P,C,I,Re,Hc
73	*Artocarpus hirusta*	Wild Jack	*Ran- Phanass*	Tree	R	Indian	W,Ag,Ia,H,N
74	*Azadirachta indica*	Neem	*Neem*	Tree	C	Indian	W,Ia,A,P,N,Ra,Hc,C,I,Py,Re,Ry
75	*Bauhinia purpurea*	The Purple Bauhinia	*Raktakanchan*	Tree	R	Indian	A,P,C,I,N,Hc,Ra,Py,Ry,Re
76	*Bauhinia racemosa*	Orchid or Butterfly Tree	*Apta*	Tree	UC	Indian	A,P,C,I,N,Hc,Ra,Py,Ry,Re,Ia
77	*Bauhinia variegata*	Variegated Ebony	*Kanchan (Thaur)*	Tree	C	Indian	A,P,C,I,N,Hc,Ra,Py,Ry,Re,Ia
78	*Boswellia serrata*	Indian Olibanum Tree	*Saler (Salphali)*	Tree	R	Indian	Ia,W,H,I,Ry
79	*Bridelia retusa*		*Asana (Kutki)*	Tree	R	Indian	W,Ia,H,Ry,I,N
80	*Butea monosperma*	Flame of the Forest	*Palas (Paras)*	Tree	C	Indian	A,P,C,I,Ia,Ry,Ra,H,Py,N,Hc
81	*Callicarpa tomentosa*	Woolly Malayan lilac	*Aisar*	Tree	R	Indian	P,C,I,Ia,W
82	*Canthium dicoccum*	Ceylon Box Wood	*Tupa*	Tree	R	Indian	W,Ia,H,N,Ag
83	*Careya arborea*	Patna Oak, Wild Guva	*Kuba (Kumbi)*	Tree	UC	Indian	W,Ia,N,I,Ry
84	*Caryota urens*	Fish Tail Palm		Palm	UC	Indian	P,C,I,A,Hc,Ra,Py,N,Ag,R
85	*Casearia elliptica*		*Kala (Chari)*	Tree	R	Exotic	W,Ia
86	*Casearia graveolens*		*Bokhada*	Tree	UC		W,Ia,Al,H,N
87	*Cassia fistula*	Golden Shower	*Bhawa*	Tree	C	Indian	A,P,C,I,Ia,Ry,Ra,H,Py,Hc,Re
88	*Cassia nodosa*			Tree	UC	Indian	R,N,C,I,Ia,Ra,P,A
89	*Cassia siamea*	Iron Wood Tree	*Kassodi (Kashidh)*	Tree	C	Exotic	P,I,C,Ia,Ra,Hc,W,H

SL.NO.	LATIN NAME	ENGLISH NAME	MARATHI NAME	TYPE	STATUS	ORG?	LANDSCAPE TYPE
90	*Casurina equistifolia*	Hourse Tail Tree	*Suru*	Tree	C	Exotic	P,C,N,R,I,Ia,W,Ry
91	*Cochlospermum religiosum*	Yellow Silk-Cotton Tree	*Galgal, Ganeri*	Tree	R	Indian	C,P,I,Ra,Ry,Py,Ia,A,Hc
92	*Cocus nucifera*	Coconut Tree	*Narialped*	Palm	C	Indian	R,N,C,I,Ia,Ra,P,Ag,A,Re,Hc
93	*Cordia myxa*	Aloe-wood	*Bhokar*	Tree	R	Exotic	
94	*Dalbergia latifolia*	Indian Rosewood	*Sisam*	Tree	N	Indian	W,Ia,H,Ag,C,I,Ry,N
95	*Dalbergia paniculata*		*Dobin (Padri)*	Tree	R		W,Ia,H,Ag,C,I,Ry,N
96	*Dalbergia pentagyna*		*Kamal*	Tree	C		W,Ia,H,Ag,C,I,Ry,N
97	*Delonix regia*	Gold Mohur (Gulmohar)	*Sandesra*	Tree	C	Exotic	A,I,C,P,Ia,Hc,Ry,Py,Ra
98	*Diospyros assimilis*	Macassar Ebony	*Bobdasa*	Tree	R	Indian	Ia,H,P,C,I,Ry,Py,Hc,Ra
99	*Diospyros melanoxylon*	Coromandel Ebony	*Thaedu*	Tree	R	Indian	Ia,P,C,I,Hc,Ra,Ag
100	*Diospyros montana*	Mountain Persimmon	*Govinda*	Tree	N	Indian	Ia,H,P,I,Ry,Py
101	*Diospyros peregnina*	Indian Persimmon	*Themburnni*	Tree	R	Indian	Ia,H,N,Ry,Py,I,Ag
102	*Dolichandrone falcata*		*Mersinghi*	Tree	R		W,Ia
103	*Elaeocarpus oblongus*		*Kassa*	Tree	R		W,Ia,I,P
104	*Emblica officinalis*	Indian Gooseberry	*Amla*	Tree	UC	Indian	W,Ia,H,P,C,I,Ra,Ry,Py,Hc
105	*Eriolaena hookeriana*		*Buttae (Bundum)*	Tree	UC		P,Ia,I,C,A,N,Py,Ry
106	*Erythrina indica*	The Indian Coral Tree	*Pangara*	Tree	C	Indian	W,Ia,I,P,Ra,Py,Ry,C,Hc,A
107	*Eucalyptus*	Eucalyptus	*Nilgiri*	Tree	C	Exotic	R,N,W,Ia
108	*Ficus asperima*		*Karvat*	Tree	C		W,Ia,H,P,Ry,Py,A
109	*Ficus Bengalensis*	Banayan	*Vad*	Tree	C	Indian	A,W,Ia,P,Ry,Py,Re,H
110	*Ficus glomerata*	Cluster Fig	*Umbar*	Tree	C	Indian	P,W,Ia,Ry,N,H
111	*Ficus microcarpa*		*Nandrak*	Tree	C	Indian	P,W,Ia,A,Ry,N,H
112	*Ficus religiosa*	Peepul, Bo-tree	*Pimpal (Ashvatha)*	Tree	C	Indian	P,W,Ia,A,Ry,N,H
113	*Ficus rumpii*		*Pair (Sahta)*	Tree	C	Indian	P,W,Ia,A,Ry,N,H

SL.NO.	LATIN NAME	ENGLISH NAME	MARATHI NAME	TYPE	STATUS	ORG?	LANDSCAPE TYPE
114	*Flacourtia latifolia*		*Thambat*	Tree	N		
115	*Garcinia indica*	Kokam Butter Tree	*Kokam*	Tree	R	Indian	W,Ia,H,R,N,I
116	*Garuga pinnata*		*Kudak (Kakad)*	Tree	R		W,Ia
117	*Glochidian lanceolarium*		*Bhoma*	Tree	R		W,Ia,H,Ry,Ag,N
118	*Gmelina arborea*	Malay Bush Beech	*Sivan*	Tree	UC	Exotic	
119	*Grewia tiliaefolia*		*Dhamann*	Tree	R	Indian	W,Ia,H,I,P,Ry,Ag,A
120	*Guvajava jambosa*	Guva	*Peru*	Tree	C	Exotic	H,W,Ia,Ag,Ry,Ra
121	*Hardwickia binata*		*Anjan*	Tree	C	Indian	W,Ia,Ag,H,N,Ry,I,C,P
122	*Holoptelea integrifolia*		*Vavala*	Tree	R	Indian	W,Ia,Ag,H,Ry,I,P
123	*Hynea trijuga*		*Nimbara*	Tree	R		W,Ia,N,H,I
125	*Lagerstromia lanceolata*	Queen's Flower	*Nana*	Tree	UC	Indian	A,Ry,P,C,I,Ia,Ra,Hc,Py,Re,N,R
126	*Lagerstromia parviflora*	Crepe Myrtle	*Bhondara*	Tree	C	Indian	A,Ry,P,C,I,Ia,Ra,Hc,Py,Re,N,R
127	*Leea macrophylla*		*Dhingda*	Tree	UC		P,C,I,Ia,Py,Hc
128	*Leucaena leycocephala*		*Subabhul*	Tree	C	Indian	W,Ia,R,N,H,Ag,Ry
129	*Macaranga peltata*		*Chande*	Tree	R	Indian	P,C,I,A,Hc,Ra,Py
130	*Machilus glancescens*		*Gullumba*	Tree	R		
131	*Madhuca indica*	Indian Butter Tree	*Moh*	Tree	UC	Indian	P,A,C,I,Py,Hc,Ra,N
133	*Mangifera indica*	Mango Tree	*Amba*	Tree	C	Indian	W,Ia,A,P,Re,I,Ra,N,Ry,Py,Hc,H,
134	*Melia azedarach*	The Persian Lilac	*Pejri*	Tree	UC	Indian	A,P,C,I,Ra,Hc,Ry,Ag,Ia,Py,W
135	*Memecylon edule*	Ironwood Tree	*Anjani*	Tree	R	Indian	W,Ia,H,P,N,Ry,I
136	*Miliusa tomentosa*		*Humb*	Tree	R		
137	*Millingtonia hortensis*	The Indian Cork Tree	*Akas-nimb*	Tree	UC	Indian	P,C,I,Ia,Py,Hc,Ry,Ra
138	*Mitragyna parvifolia*		*Kalamb*	Tree	UC	Indian	W,Ia,H,Ry,Ag,N,P
139	*Morinda tinctoria*	Togari Wood of Madras	*All or Asho*	Tree	UC	Indian	Ia,P,C,I,Hc,Ra,Ag,H,N

SL.NO.	LATIN NAME	ENGLISH NAME	MARATHI NAME	TYPE	STATUS	ORG?	LANDSCAPE TYPE
140	*Moringa oleifera*	The Drumstick Tree		Tree	UC	Indian	W,Ia,H,Ag,Ry,N
141	*Murraya koenigii*	Curry Leaf Tree	*Kadilimb*	Tree	UC	Indian	Ag,Ra,I,Ia,N,W,H
142	*Murraya paniculata*	Orange Jessamine	*Pandari*	Tree	N	Indian	P,C,I,Hc,Ra,Py,Re
143	*Mussaenda frondosa*	Papperchase Tree	*Bhuthkesh*	Tree	C	Indian	P,C,I,Hc,Ra,Py,Ia
144	*Myristica malabarica*	Malabar Nut-meg	*Ran-Jaiphal*	Tree	N	Indian	P,I,N,R,Ra,Ry,Ag
145	*Olea diocia*	Rose Sandal Wood		Tree	R	Indian	P,I,W,Ia,Ry,Py
146	*Ougenia ooieineniis*	Sandan	*Thivas*	Tree	R	Indian	W,Ia,H,N,I,Ry
147	*Peltophorum Roxburghii*	The Copper-Pod Tree		Tree	C	Indian	A,P,C,I,Ia,Ry,Py,W
148	*Plumeria acutifolia*	Dead Man's Flower	*Khairchampa*	Tree	C	Exotic	Re,C,P,I,Hc,Py
149	*Plumeria alba*	The White Frangipani	*Champa*	Tree	UC	Indian	Re,C,P,I,Hc,Py
150	*Plumeria rubra*	The True Frangipani	*Lalchampa*	Tree	C	Exotic	Re,C,P,I,Hc,Py
151	*Polyalthia longifolia*	The Mast Tree	*Ashoke*	Tree	C	Indian	P,A,C,I,Py,Hc,Ra,Ia,Ry
152	*Pongamia pinnata*	The Pongam	*Karanj*	Tree	C	Indian	P,C,I,Py,H,Ia,Ry,W,N,R,A
153	*Pterocarpus marsupium*	Malabar Kino	*Bibla (Asan)*	Tree	R	Indian	W,Ia,N,R,Ry
155	*Pygeum gardneni*		*Dakka*	Tree	R		
155	*Randia dumetorum*	Emetic Nut	*Gola*	Tree	UC	Indian	
156	*Salmalia malabarica*	Silk Cotton Tree	*Savar*	Tree	UC	Indian	I,C,Ag,Ia,W,N,H,Ry
157	*Samania saman*	Rain tree	*Rain Tree*	Tree	C	Exotic	A,Ia,C,Ry,Py
158	*Santalum album*	White Sandal Wood	*Chandan*	Tree	N	Indian	P,C,I,Ra,Re,Py,Hc
159	*Sapindus emarginatue*	Soapnut Tree	*Ritta*	Tree	C	Indian	P,I,C,A,Ra,Hc,Py,Ag
160	*Saraca indica*	The Asoka Tree	*Ashoka (Jasundi)*	Tree	UC	Indian	Re,C,P,I,Hc,Py,Ry,Ia
161	*Schleichera oleosa*	Lac Tree, Honey Tree	*Kusam*	Tree	R	Indian	W,Ia,H,P,I
162	*Semecarpus anacardium*	Marking Nut Tree	*Biba*	Tree	N	Indian	W,Ia,H,P,I,Ry,N
163	*Smithia senaitiva*		*Kavala*	Tree	UC	Indian	Ia,W,H,Ry

SL.NO.	LATIN NAME	ENGLISH NAME	MARATHI NAME	TYPE	STATUS	ORG?	LANDSCAPE TYPE
164	*Soymida febrifuga*	Indian Red-wood	*Rohin (Palara)*	Tree	N	Indian	W,Ia,H
165	*Spathodea companulata*	The Scarlet-Bell Tree		Tree	C	Exotic	
166	*Sterculia guttata*	The Coloured Sterculia	*Goldhara (Kokar)*	Tree	UC	Indian	P,C,I,A,Re,Py,Hc,Ia
167	*Symplocos beddomei*		*Laenda*	Tree	N		Ia,C,I,P,W
168	*Syzigium cuminii*	Indian Allspice	*Jambul*	Tree	C	Indian	P,C,I,Ra,Re,Py,Hc,Ag,W,Ia,H,A
169	*Tamrindus indica*	Tamirind	*Chinch*	Tree	C	Indian	A,P,I,Ra,H,W,Ia,Ag,Ry,Py,R,N
170	*Tecomella undulata*	Wavy leaved Tecoma	*Rakhtreora*	Tree	R	Indian	P,Ra,Ry,C,I,Ia
171	*Tectona grandis*	Teak	*Sagwan*	Tree	UC	Indian	W,Ia,H,N,I,Ry
172	*Terminalia arjuna*	The Arjun	*Savimadat*	Tree	UC	Indian	P,C,I,A,Py,Ia,Hc,Re
173	*Terminalia belerica*	Belleric Myrobalan	*Bahera*	Tree	R	Indian	P,C,I,Py,H,Ia,Ry,W
174	*Terminalia cattapa*			Tree	C	Exotic	A,W,Ia,Ry,Py,H
175	*Terminalia chebula*	Yellow Myrobalan	*Hirda*	Tree	R	Indian	P,C,I,Py,H,Ia,Ry,W
176	*Terminalia paniculata*		*Kinjal*	Tree	N	Indian	P,C,I,Py,H,Ia,Ry,W,A
177	*Terminalia tomentosa*		*Ain*	Tree	C		P,C,I,Py,H,Ia,Ry,W,A
178	*Thespesia populnea*	The Bhendi Tree	*Bendi (Paraspipar)*	Tree	UC	Indian	A,C,P,I,Ia,Py,Ry,Ra,Ag
179	*Vangueria spinosa*		*Allu*	Tree	N		W,Ia,Ry,Ag,H
180	*Wrightia tinctoria*		*Kalakuda*	Tree	R		W,Ia,N,H,Ag
181	*Xantolis tomentosa*		*Kumbhal*	Tree	N	Indian	W,Ia,H,Ag,Ry,N
182	*Xylia Xylocarpa*	Pyinkado	*Jamba*	Tree	C	Indian	Ag,I,Ia,W,H,C,P,Ry
183	*Ziziphus mauratiana*		*Bor (Bera)*	Tree	C	Indian	Ag,W,Ia,I,H,N,Ry

C = Common, UC = Uncommon, R = Rare, N = Nil
A = Avenue (Roads -Highway, City main roads, Small roads, Lanes), I = Institutional Open Spaces, Hc = Hospital Compounds,
C = Comercial and Public Campus, P = Parks, Gardens, R = River banks, N = Nalas, lakes banks, Ia = Industrial Areas,
Ra = Residential areas, W = Waste lands and Open spaces, H = Hills, Ag = Agricultural areas, Ry = Railway lands,
Py = Playing grounds, Re = Regional areas



