- 1. Auroville belongs to nobody in particular. Auroville belongs to humanity as a whole. But to live in Auroville, one must be a willing servitor of the Divine Consciousness.
- 2. Auroville will be the place of an unending education, of constant progress, and a youth that never ages.
- 3. Auroville wants to be the bridge between the past and the future. Taking advantage of all discoveries from without and from within, Auroville will boldly spring towards future realisations.
- 4. Auroville will be a site of material and spiritual researches for a living embodiment of an actual Human Unity.

PREFACE

This Land Use Plan for the Auroville Green Belt has been prepared in accordance with the Town and Country Planning Act (1971) of Tamil Nadu State, with the purpose of establishing long range land use and development goals and objectives for the land falling within the officially designated Green Belt of Auroville.

Auroville was established under the Auroville Foundation Act of 1988. The Green Belt encompasses all of the land lying between 1,250 and 2,500 metres from the centre of Auroville, as indicated on Auroville Master Plan map of 2001, and it includes parcels owned by the Auroville Foundation, parcels in private ownership held both by residents of the included villages and by others who have acquired these lands by other means including purchase, and areas under public ownership, primarily parcels of poramboke land, that is, watercourses which are also used for such public purposes as drainage, grazing and traditional country roads which follow these water courses.

However, it is important to note that this land use plan does not address the specific problems lying beyond the boundary of the Green Belt, issues which were addressed in the Green Belt Development Plan of 2013. (See appendix xx). However, it does of necessity reference these issues and bring up numerous points of the wider Bioregion to which Auroville belongs.

The primary issue linking Auroville and the Bioregion remains the issue of management for the aquifers serving the town and the villages and farms of the Kaluveli Basin and the Ousteri aquifer. Water is supplied by storage in surface ponds, both natural and man-made (known as "eris"), and from wells that tap into the aquifers which are replenished by the monsoon rains. The only river in the bioregion is fully subscribed supplying the urban systems of Pondicherry and Cuddalore, while large scale desalinization of sea water remains an issue of both cost and practicability.

The primary activity in both basins remains agriculture, which is also the largest single land use within the Auroville Green Belt. Other lands have been designated as woodlands, used to grow trees for both the restoration of the indigenous Tropical Dry Evergreen Forest (TDEF) biotope and for commercial wood products and orchard crops. These lands form a crucial part of the water recharge system for both of these aquifers. It is therefore considered critical that they be preserved and managed in the most

efficacious manner so as to maximize their productivity and their capacity to recharge the ground water table which is the primary source of both drinking and irrigation water. Auroville has long engaged in practices designed to moderate the use of water within its own sphere, and to demonstrate methods of sustainable agriculture and tree planting applicable to local conditions.

The Green Belt serves as a training ground and demonstration center for sustainable and organic practices, offering them as examples to the residents and farmers of the bioregion. A prime example has been the work of the Pitchandikulam Trust which has set up training and demonstration programs in Nadukuppam in the Kaluveli basin, and which proposes to expand these through the application of skills and methods developed in Auroville and modern advanced communications. Others, including Palmyra, the Auroville Village Action Group, numerous schools within Auroville and the Mangalam Industrial center have also undertaken developmental training for residents of surrounding villages with the intent to share and promote sound

and sustainable technologies available to the region for its own benefit.¹

The Green Belt Land Use Plan should be viewed within its context: it is part of a larger comprehensive set of plans for Auroville that will constitute a formal Master Plan. These been prepared over the past several years to enable orderly and planned development of the town and the region, each of which relies on the others. This master plan is intended to be presented to the Town and Country Planning Organisation of Tamil Nadu for official certification.

In addition to planning for the development of the Auroville Green Belt, this plan also establishes a process that will allow the five villages within the Green Belt to address issues regarding their own development, their land holdings and their needs. These villages have recently begun to engage in village level planning in cooperation and partnership with the Auroville Town Development Council, which is providing them with technical support.

¹For a complete list of the outreach efforts, see the Auroville Outreach Development Database, prepared for the Working Committee and the Town Development Council in 2014.

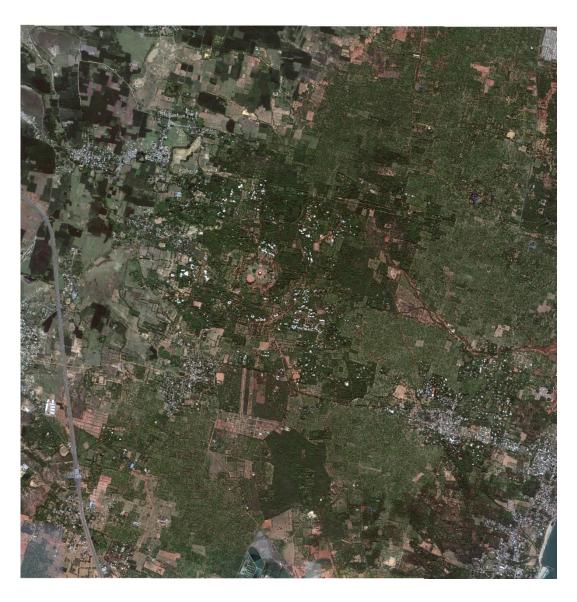


Figure 1. Aerial View of Auroville

Under the Tamil Nadu Town and Country Planning Act, Master Plans may be prepared under the guidance and with the assistance of the Tamil Nadu Town and Country Planning Organization by the affected areas in conjunction with the local authorities for the district. Final approval by the TCPO grants the authority to regulate the land uses and development of the area to the designated preparing authority, in this case, the Auroville Town Development Council.

Brief History of the Development of Auroville

Auroville was conceived as an international community dedicated to the evolution of a new level of consciousness. This is anticipated to result in new forms of living and creating together. A primary focus is to be on learning and education, not only for Aurovilians, but also for the region, as well as more broadly for the world.

Auroville was established in a rural area approximately 10 km from the City of Pondicherry (Puducherry) in 1968. This land was

mostly vacant or in seasonal rain-fed agriculture, and lay within the designated spheres of several small villages. Much of the land was barren or severely eroded as a result of severe deforestation over centuries. Initially, lands were acquired through purchase from owners by the Auroville Trust and by donations from friends and well-wishers of Auroville, who wished to help it develop into a center for the propagation of the teachings and ideas of The Mother, Mirra Alfassa, under whose direction the first development took place.

The land throughout the designated township, both land acquired by Auroville and land in private ownership was mostly degraded, suitable for limited, rain-fed agriculture and grazing, cut through by canyons formed by the erosion of the barren soil over more than two centuries. There were some tanks (eris) within the area, including Kuilapalayam and Irumbai, but the productivity was limited and entirely dependent on rainfall and traditional methods.

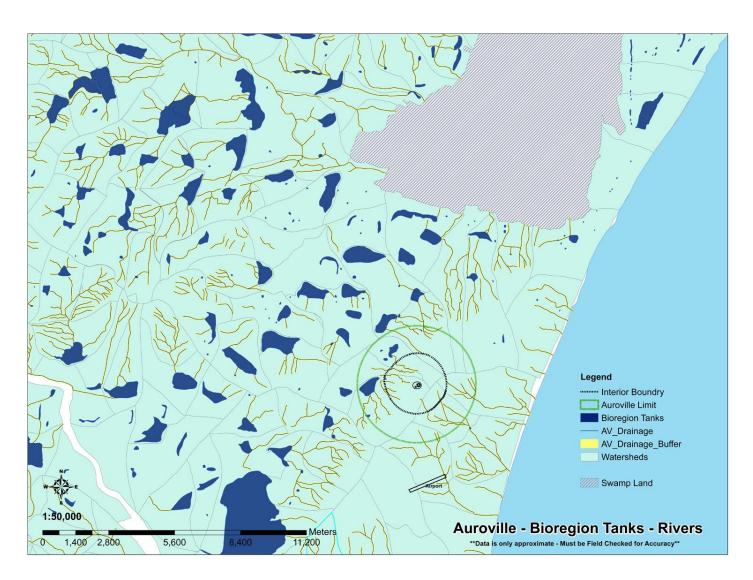


Figure 2. Bioregion Tanks and Streams

The founding of Auroville in 1968 brought a new group of people to the region, mostly young, followers of The Mother, and dedicated to the creation of a new city and to the restoration of the land on which it was to be situated. In the course of the past 47 years, they have established farms, orchards, water management systems and planted more than 3 million trees. This later effort has significantly altered the climate and livability of the area, providing shade, habitat for wildlife, enhanced water retention and aquifer recharge, and control of the storm runoff which had badly eroded many of the stream beds.

The presence of the now nearly 2700 residents of Auroville, more than half of them from other nations and other parts of India, has also created a magnet for tourism and economic activity within Auroville and the villages within and near the Green Belt.

Due to its limited financial resources, Auroville has been unable to purchase the majority of the land within its designated planning sphere. Today it owns approximately 80% of the land within the area designated for Auroville Town, and another 25% of the area designate for the Auroville Green Belt. Village built up areas occupy approximately 130 acres within the Green Belt (in Irumbai Panchayat). The built up areas of the villages in Bom-

mayarpalayam panchayat lie outside the Green Belt. The remainder is in private hands, primarily in agricultural uses public lands (poramboke), housing legal and illegal and wood lots. There is also a women's college located on temple lands.

Thanks to the recent rapid growth of Puducherry and the rise in incomes throughout India, there has been growing pressure to develop around Pondicherry including the Auroville area, and land prices have risen to astronomical values. A number of sites within the Green Belt have been purchased by outside developers using the attraction of Auroville to entice new owners to purchase "farms" within gated communities along the main roads leading into Auroville.

This form of development is contrary to the spirit of Auroville. Auroville therefore has found itself obligated to seek formal planning authority in order to actively control the use and reuse of lands within the area designated under the 2001 Master Plan which was approved in? The first step has been the establishment of the Auroville Town Development Council (TDC) under the Governing Board.

This plan, therefore, identifies each of the specific areas within the designated Green Belt to be reserved for specific uses, such

as agriculture, timber and tree crop production, ground water recharge, education, recreation, transportation, utilities and the like.

Establishment of Uses:

Under existing land use legislation, land in rural areas, including Auroville, is classified in a few basic uses: forest, agriculture, poramboke (state owned for public use), wasteland, water, and village

Agriculture: Land reserved for the growing of farm crops including rice, other grains, vegetables and spices. Also includes small residential units for farmers living on site and appropriate storage and processing facilities for products of the land

Woodland: lands which have been replanted in trees to provide tree cover, enhance the recharge of the aquifers, and provide products such as wood, Includes small residential units for stewards of planted woodlands.

Poramboke: land held in state ownership for common use, including grazing, fodder, fuel and transportation in

This plan maintains these general classifications, and further specifies items associated with a growing urban area suited to the purposes of Auroville's charter and guiding principles.

It then identifies areas within the Auroville green belt that shall be dedicated to and reserved for these activities. This includes both lands owned by Auroville and lands owned by others within the jurisdiction of the Auroville Master Plan.

addition to providing drainage channels for runoff from rainfall.

Water: bodies of water used for storage and irrigation, both natural and man-made.

Village: land within the built-up area of a village used for residential, commercial, religious, educational and other purposes.

Institution: Guest Houses, schools, training centers, health facilities, cultural and civic and spiritual buildings

Temple Land: Lands held by a temple trust

Public Land: Land held within the villages for public purposes

In addition to the standard categories, additional refinements have been provided, including:

Water overlay protection zone: areas specially designated for protection in which all construction shall be prohibited and all land shall be subject to organic and sustainable farming practices with the use of chemical fertilizers and non-organic pest control shall be prohibited.

Residential: This shall be permitted within the areas provided for villages including areas designated for future expansion.

Commercial: Stores, restaurants, small craft and manufacturing units. Permitted only within village boundaries/

Small Industry: Shall be permitted only within village areas of the Green Belt

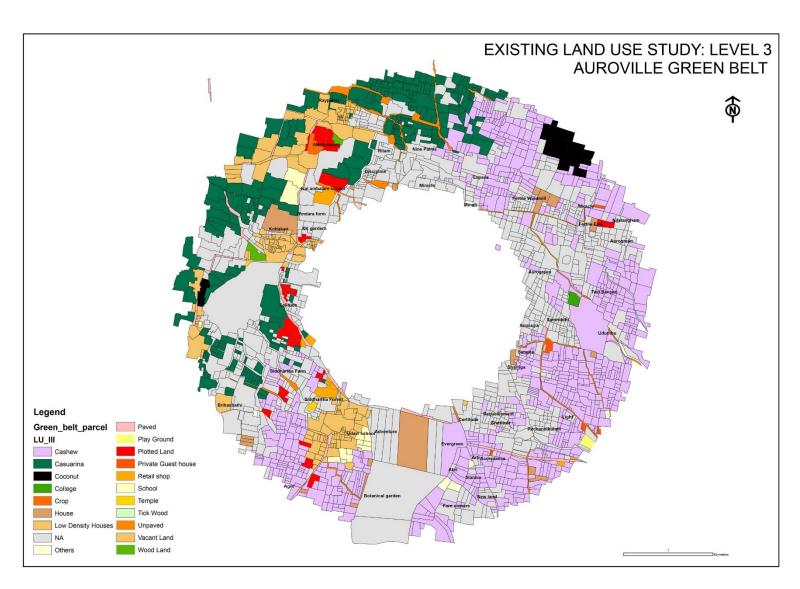


Figure 3. Existing Land Use

CURRENT LAND USES

The Auroville Green Belt currently contains a number of different land uses. The parcels owned by Auroville are used for farms, planted woodlands, roads, schools and modest residences for the stewards who are entrusted with operating and managing the farms and woodland areas.

The State of Tamil Nadu is the formal owner of land designated as "poramboke" used for unpaved roads, rainfall runoff drainage and grazing. Some poramboke has also been encroached for buildings and waste disposal.

Within the Green Belt, however, almost 75 % of the land is in private hands, consisting of farms, woodlands, waste lands, water bodies and a growing number of residences, many of which are termed "farms", but in reality small bungalows on subdivided,

usually gated areas with attached gardens. This conversion of land in a rural setting to semi-urban uses is a prime concern for Auroville, and forms the impetus for the preparation of this plan, and the seeking of authority as a New Town to control land uses. Auroville is very determined to protect the green belt from development, and to use its planning area as a demonstration of land restoration and sustainable living.

In the past, there was no formal plan for the Green Belt. Owners were almost completely free to build on their land. There are laws against the conversion of agricultural land, but these have been rarely enforced. This plan will provide a formal and accepted mechanism for enforcement.

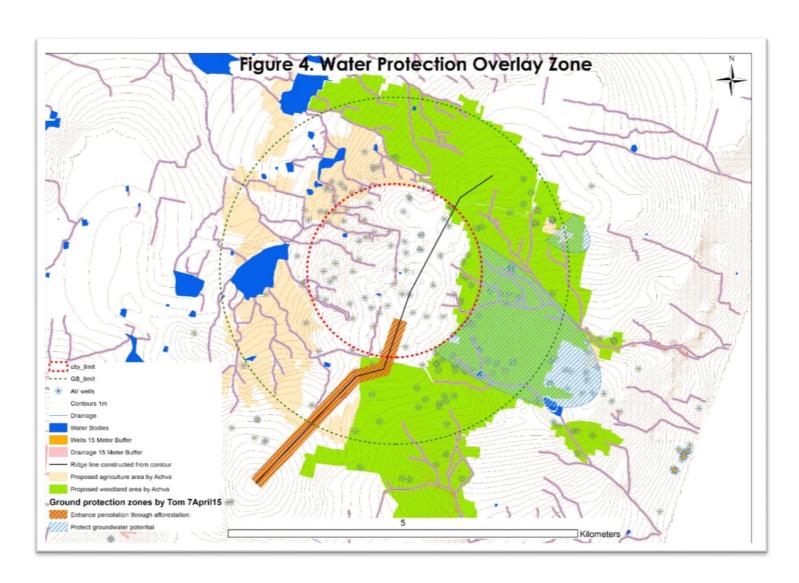


Figure 4. Water Protection Overlay Zone

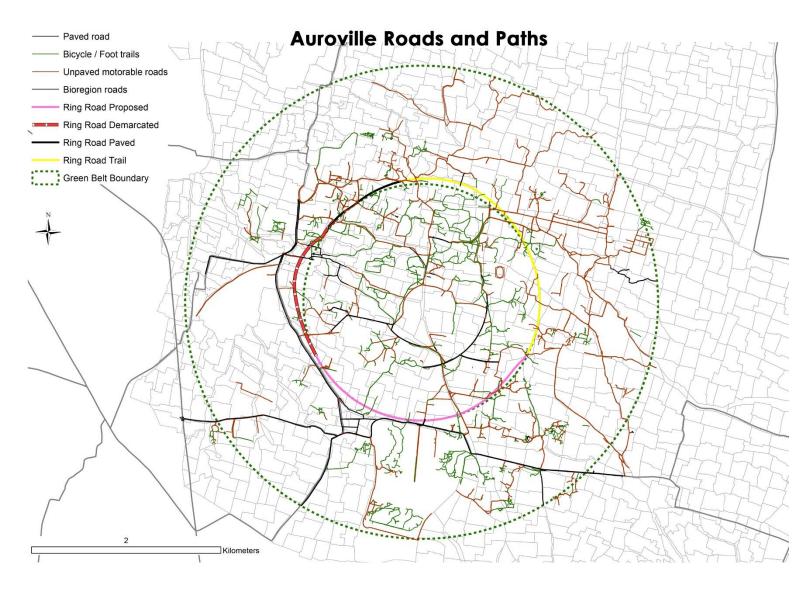


Figure 5. Roads and Paths

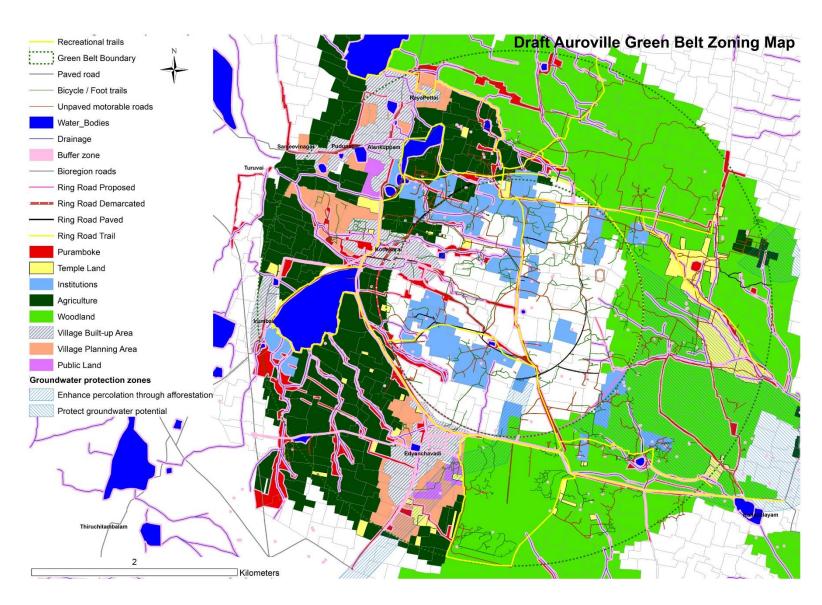


Figure 6. Draft Green Belt Zoning

LAND USE ZONES

Auroville is a special and unique community. Established in 1968, it is driven by a special charter, and has been granted special powers to plan and create a universal city under the Auroville Foundation Act of 1988.

Since the area designated for Auroville incorporates both this special community and six traditional rural villages, planning must take into account the unique and very different needs of both kinds of settlement.

Auroville has undertaken extensive studies of its land, its suitability for various activities consistent with its mission, and has developed a master plan (2001) identifying the proposed patterns of growth and development for the Auroville Town, lying within the Green Belt. The Green Belt itself was left inadequately defined, other than being identified as a circular strip of land 1.25 km in width around the core of the Town.

1. Agriculture. (Map Designation: dark green)

Auroville has pioneered the development of organic and sustainable agriculture on its farms, lying both within the green belt and beyond. These farms are noted for their advanced skills in water utilization, conservation of the land, elimination of chemical fertilizers and pest control, and quality produce which not only is consumed within Auroville, but also is sold in small quantities to outside consumers.

Permitted uses shall include fields for the production of crops including rice and other grains, vegetable and other field crops, dwellings for the actual cultivators and managers of these farms, ancillary structures needed for the practice of farming including storage for equipment, pump-houses, generator sheds, animal shelters, and such other structures as may be deemed necessary for the actual production, processing and storage of crops,

2. Woodlands (Map Designation: bright green)

a. **Tree crops**. Along with much of the rest of the wider region, cashew production has become an important land use and source of income on both Auroville and non-Auroville owned lands. Other tree crops include fuel wood and timber, while reforested areas have been created to provide for recharge of the region's ground water, habitat for a wide range of native plant and animal species, and local climate modification.

- b. Protected Woodlands. All areas planted in trees are considered protected. Trees may be harvested under specific conditions including proper advance notification and issuance of permits by the Green Group and the Auroville Town Development Council.
- 3. Water: (Map designation: dark blue)

All existing ponds, tanks, eris and streams, including dry stream beds which carry water only during the rains.

A special feature of this zone is the requirement that a buffer area of 15 meters from the banks is required on all streams (including poramboke lands). This buffer is to be used for planting trees or grazing animals, but shall not be encroached by construction other than that necessary for roads and utility corridors.

- **4. Groundwater Recharge Overlay Zone: (**Map Designation: Blue hatching over primary zone)
 - a. Areas requiring special protection against construction and other sources of pollution. Farming and other uses shall be limited to sustainable and organic practic-

- es and all use of toxic fertilizers and pesticides is prohibited as is the disposal of any toxic wastes.
- b. Facilities may include bunds, dikes, check dams, drainage channels, ponds and wells.
- 5. Poramboke: (Map designation: red)

Land designated by the state under this category, owned by the state and used for drainage, pathways and common grazing.

- 6. Institutions: (Map designation: Light blue)
 - a. Educational and training institutes: for the training of Aurovilian and non-Aurovilian personnel engaged in agriculture, silviculture, water management, and other skills ancillary to the development of rural communities using agriculture and forestry and their products.
 - b. Cultural and civic institutions: Town Hall, Foundation
 Office, Bharat Nivas, Visitor Centre, SAIIER, Pitanga,
 CSR, Solar Kitchen, Kalabhumi, etc.
 - c. **Schools and training centers:** all schools and training facilities for both children and adults.

- **7. Village commercial**: Stores, services, etc., to be identified by village plans.
- **8. Small-scale industries:** craft and small manufacturing units processing local products, to be identified by village plans.
- **9. Village residential**: to be identified by village plans.
- **10. Roads and transportation**: Auroville recognizes several classes of roads within the Green Belt:
 - a. Paved (or metalled) roads created by the state or local authorities. These connect Auroville and the villages with the State and National road network, and include the main roads leading to the ECR and the Highway Bypass, as well as the roads linking the existing villages and paved portions of the Crown and Ring roads. They are suitable for general traffic including buses and goods movement vehicles.

- b. Unpaved roads suited to light vehicular (traffic within the green belt connecting major. These carry the daily flow of movement within Auroville, and may, where necessary, be used for occasional and limited bus and heavy vehicle movement to provide access to sites within the community. Through bus and heavy vehicle traffic is prohibited except by special permit.
- c. Unpaved bicycle and pedestrian roads
- d. Unpaved recreational pedestrian trails.

11. Waste disposal and treatment:

Special areas to be set aside for the processing and disposal of wastes, including household, commercial and manufacturing wastes for disposal or recycling. All areas used for waste disposal or treatment must have and follow approved plans for managing the process and ensuring the safety and security of the area and of the public.

Table 1. PERMITTED USES BY ZONING CATEGORY

Zone	Permitted Uses	Prohibited Uses	Uses Permitted by special application		
Agriculture	Field crops	Residential Subdivision Commercial establishments Buildings in excess of 100 sq. m.	Cultivator's residence Storage and processing structures Training and education facilities		
Woodland	 Tree crops timber special products including herbs and medicinal plants 	Residential Subdivision Commercial establishments Buildings in excess of 100 sq. m.	Steward residences Storage and processing structures Training and education facilities		
Ground Water Recharge	Permanently protected for re- charge	All uses which generate pollutants that can enter the ground water with the exception of roads and utilities	Water management structures, i.e. ponds, bunds, tanks,		
Transportation and Communications	 Roads Parking areas Electrical transmission lines Waterlines Sewer lines 	Permanent buildings and structures	Permanent structures needed for the approved purpose, not to exceed 40 square meters in footprint		
Public institution	SchoolsCommunity centersTraining facilities				
Commercial	StoresBanksRestaurantsHotels and hostels				
Waste Manage- ment	 Solid waste recycling Sanitary landfill Liquid waste treatment and disposal 		Waste collectionWaste treatment		

NON-CONFORMING USES

Zoning designations are generalized. In many cases, they have been established based on planning considerations, and the current uses do not conform to the designated zoning. Such uses are designated "grandfather uses" or "pre-existing uses" and may continue, but only in their current scale and scope. The plan does not and cannot deprive an owner of his present enjoyment of his property, but may limit changes that may be made, and require conversions when this use is abandoned or change is sought.

- o Non-conforming uses
 - Existing structures or uses not appropriate to the zoning shall be allowed to continue in the current use. However, no expansion of the present non-conforming use will be allowed. No additional structures or expansion of the current use, nor conversion to another non-conforming use will be permitted, and in the event that the owner seeks to change the scale or scope of the operation, it must be relocated to a zone suitable for this use, and the land will revert to the underlying zoning.

In the event of the accidental destruction of more than 50% of a non-conforming use, or the abandonment of the use by the owner, the land shall revert to the underlying zoning, the remaining portion(s) of the non-conforming use shall be demolished and any new use shall be conforming.

Conversion

Certain areas are hereby rezoned to alternative uses that will allow activity other than that currently existing. Such lands include areas designated for future development. This shall also apply to non-conforming uses as defined above.

Exceptions/Variances

 Under special circumstances, certain nonconforming uses may be permitted by the Auroville Town Development Council on a case by case basis. Such permit shall be for a specified duration, af-

ter which the land must be either rezoned or revert to the existing zoning.

VILLAGE GROWTH

No accurate forecast can be made as the census does not disaggregate the data to the village level. Estimates are based on panchayat level figures that are disaggregated using rough estimates based on built up land area and number of structures for each village. Growth rates are averaged based on figures for each panchayat or revenue village using the 2001 and 2011 census data.

Additionally, some estimates of the physical needs anticipated to be generated by increased incomes is factored into the land area estimates, including larger homes, expanded commercial activity, expanded educational facilities, new roads to accommodate additional vehicular traffic, and the like. This issue is to be addressed more directly in the individual Village Master Plans that will be prepared under the recently inaugurated Village Planning process. Under this process, Auroville's Town Development Council is providing technical assistance to each of the villages within the panchayats that have agreed to participate. This assistance will include interviews with residents and officials

of each village, focusing on their own expression of need for both the immediate future and for the longer range development of the villages.

VILLAGE PLANNING

This plan seeks to make more definitive the nature of the green belt, its uses, set out restrictions on activities not compatible with the designated uses, and clarify relationships to the five villages of Kuilapalayam, Edayanchavadi, Irumbai, Kottakarai and Alankuppam lying within the Greenbelt. Additionally, local administrative arrangements have created three village panchayats each of which incorporates three villages, namely the Bommayarpalayam Panchayat with Bommayarpalayam, Kuilapalayam and Pillai Chavadi villages, the Irumbai Panchayat with Edayanchavadi, Irumbai and Kottakarai villages. An approach has been also initiated with the Pondicherry Planning Department regarding the planning of the villages within its jurisdiction, Alankuppam and 'Raya Pettai.

These village have grown and prospered over the period since the foundation of Auroville, and have developed significant economic and social links with it through both employment and

the admission of numbers of residents of the villages to membership in Auroville.

Recently, Auroville has initiated a cooperative planning process, providing technical assistance to the panchayats in planning their own development, and sitting as members of the village development committees (VDC's)

A NOTE ON IMPLEMENTATION

The preparation and adoption of this plan is only the first, and in many ways, the smallest of the steps required for its actualization. The most difficult tasks lie ahead: implementing the plan and maintaining the standards it calls for. It is not enough to adopt, but each step must be converted to concrete action, and the results must be maintained over time. This latter task is often thankless, yet without the constant effort of managing the use of the land, vigilance in implementation and against misuse by both non-Aurovilians and Aurovilians alike. Persuading Auroville to establish a maintenance program, and enlisting Aurovil-

ians in active participation of all aspects of this activity is the key to its successful implementation.

Maintenance

Among the most critical elements in the implementation of this (or any) plan is the issue of ongoing maintenance of the facilities and infrastructure that are created. This requires the development of effective institutions, whether formal or informal that will take responsibility and can be held accountable for the condition of the development, whether a forest, a building, a service or a program. Great care must be taken to ensure that these mechanisms are not only established, but have effective monitoring systems to ensure regular review and correction of any conditions which occur as a result of time or events, whether human or natural. Programs should be initiated from the beginning, establishing benchmarks against which conditions can be measured over time and an accurate representation made of both the degree and the direction of any changes that may occur...

Appendix

DEFINITIONS/CLASSIFICATIONS

- Forest: a natural or replanted area for the recharge of ground water, climate management, fodder production and may include the residence, tool storage and other ancillary structures required by the steward for the effective management of the designated property
- Woodlands: land in production for timber, edible tree crops
- Water: shall include all water courses, ponds, streams, wells, tanks, eris and open bodies of water, whether permanent or intermittent.
- Transportation corridor: shall include paths, unpaved roads, paved roads, highways and any routes designated for the movement of people, goods or animals from point to point.
- Utility corridor shall include electric lines, water lines, sewage lines, and communications lines either above or below the ground.
- Waste disposal and recycling site: a site designated for the planned collection, treatment, recycling or disposal of any

household, institutional, commercial or manufacturing wastes

Village Development Committee: a body to undertake
the planning and administration of land use and other
coordinating functions within the boundaries of a village
or panchayat. Auroville has entered or will enter into
memoranda of understanding (MOU) with each of the villages or panchayats located (or partially located) within
the Green Belt to provide technical assistance and establish coordination and consistency of plans between adjoining jurisdictions.

SUSTAINABILITY

Auroville has established the goal of becoming a sustainable community, minimizing the carbon footprint of all activities within its borders. To this end, it promotes and encourages technologies and practices that include

- o Organic, sustainable farming and land management
- Pedestrian and bicycle priority over motorized traffic.
- Limitations of access to fixed points, with capacity for access for emergency vehicles
- Limitation of adjacent corridor development (rail, highway) in sensitive areas through land use controls, planning to prevent land, water pollution,
- Minimizing physical footprint of utility lines through careful location in non-sensitive areas
- Maximum use of solar, wind power, distributed energy facilities, anticipate individual fuel cell units for household and other domestic, industrial uses.

- o Maximum protection of infiltration fields through prohibition of development in sensitive zones.
- Establishment of buffers along all seasonal water courses, and around all ponds, eris and wells
- Training institutes for sustainable practices
- o Schools
- Colleges by special planning permit
- Protection of existing temples, temple lands, sacred groves, cremation grounds,

RECORDING AND MAPPING

- All zoning attributes shall be recorded on the Auroville GIS data base.
- Zoning shall, to the maximum extent feasible, be based on physical factors identified
 - Soil suitability
 - Existing land use

- Minimization of non-conforming uses
- Avoidance of spot zoning use of "grandfather variances" for specific instances.

- Consolidation of areas of similar character and use
 - Avoidance of adjacency of conflicting uses

Statistical information on current land use in GB

Existing Land use by classification and ownership type

1	2	3	4	5	6	7	8
Category	Subcategory	Total area (ha)	% total area	Area Auro- ville owner- ship	% of AV land	Area non AV ownership	% non AV
Field crops							
Tree crops							
	Timber						
	Cashew						
	Fruit						
Woodland							
Institutions							

	Education			
	Religious			
Utilities				
	Electrical			
	Water			
	Communications			
Poramboke				
Roads				
	Paved			
	Unpaved			

Water bod-				
ies				
	Tanks and ponds			
	Streams and buff- ers			
Open space				
	Parks			
	Public areas			
	Recreation and sports			
Residential				
Commercial				
Industrial				

Green Belt Land Area by Proposed Zoning Classification [in hectares (HA)]

Zoning Classification	Total area	% total area	Area in Auroville ownership	% of AV land	Area in non-AV ownership	% non AV land
Agriculture	1116.4	30.7	321.6	29.0	794.8	31.4
Woodlands	2909.1	80.0	964.2	87.0	1944.9	76.9
Groundwater recharge overlay	617.2	17.0	236.9	21.4	380.3	15.0
Institutions	105.0	2.9	68.6	6.2	36.4	1.4
Utilities						
Poramboke	215.1	5.9	n.a.	n.a.	n.a.	n.a.
Roads						
Water bodies and streams	149.6	4.1	n.a.	n.a.	n.a.	n.a.
Open space						
Village built-up area	296.4	8.1	n.a.	n.a.	n.a.	n.a.
Total Land Area	3637.3		1108.3		2529.0	