

Greening of Cities

The Director of Municipal Administration, Chennai-5, now invites Consultancy firms and Individual Consultants to register their interest in participating in the assignment for conducting orientation workshop on Greening of Cities among the stake holders of city development and for the preparation of Action Plan to increase green cover in the nine City Municipal Corporations of Tamil Nadu by sending the following information.

a.	Name, address and fax number of Consultancy firm
b.	Ownership and Organizational Structure of the firm
c.	Financial Statement for the last three years
d.	Name and short CVs of Key Staff
e.	Details of Experience in Similar nature of the assignment.

Expression of Interest must be submitted separately for the above programme during office hours on or before **15.12.2010** to the above address. Documents received thereafter will not be accepted.

On the basis of obtained information from interested Consultants, the Director of Municipal Administration will prepare and short-list of Six Consultants who will be invited to submit their proposals.

Interested parties may obtain further information about the Consultancy assignment from the following officers at the address mentioned below:

Contact Person:

Thiru.R.Lingasamy, Procurement & Administrative Officer (i/c)
Mobile No: 9444343063

Thiru. G.Manian, Urban Development Specialist, TNUDP-III at telephone no:
044-2855020.Mobile No: 98845 64311

Contact hours: 10:00 am to 5.45pm

Director of Municipal Administration

Terms of Reference

Greening of Cities

1. Background

“Urban green spaces” comprising all urban parks, forests and related vegetation Trees, Parks, and open spaces in urban areas have significant potential to improve the quality of life of city and town dwellers, the urban environment factors as climate, pollution, noise levels, traffic congestion , quality of life and urban sustainability. However, this potential is not always fully recognized or realized. Rapid urbanization in India is bringing complex changes to ecology, economy and society. Greening of cities helps to offset the environmental and health risks posed due to urbanization **and also play an important role in the fight against global warming with all the ramifications.**

The cities renowned for their urban green spaces have approximately 20 to 30% coverage of the total geographical area and 15 to 25 m² urban green spaces per capita. International minimum standard suggested by World Health Organization (WHO) and adopted by the publications of United Nations Food and Agriculture Organization (FAO) is a minimum availability of 9 m² green open space per city dweller.

The Government of Tamil Nadu has recently upgraded 4 Special Grade Municipalities namely Tiruppur, Erode, Vellore and Thoothukudi as Municipal Corporations. Including these urban centers, there are nine Municipal Corporations in the State (excluding the Chennai city) under the administrative control of the Directorate of Municipal Administration. As these cities are prime urban centers of economic growth in the State, there has been a felt need to develop these centers as sustainable green urban centers for environmentally healthy living.

The objectives of the project are

- (i) to study and assess existing urban green spaces comprising all open areas and related vegetation in the project cities,

- (ii) to prepare city specific strategies and structure plan for increasing of green cover by creating multifunctional landscapes and appropriate vegetation to enhance urban resilience and human well-being,
- (iii) to create manuals for planting, maintenance of urban open spaces and formulate legal and institutional setup for sustainable maintenance of proposed projects
- (iv) to impart knowledge on the importance of greening of cities among the stakeholders of the city development

The tasks to be performed by the Consultant are as follows:

- a. Studying the demographic, economic and social character of the project cities of Coimbatore, Madurai, Thiruchirapalli, Salem, Thirunelveli, Thiruppur, Erode, Vellore, & Thoothukudi and critically analyzing existing and proposed landuse plans in terms of existing and proposed urban open spaces including parks, playgrounds, water bodies, marginal lands, and vacant lands
- b. Creating a detailed database of existing vegetation in all the project cities/region and making a city specific species inventory based on reconnaissance surveys. Assess existing green cover in terms of density, diversity, indigenous species and per capita urban green spaces availability
- c. Study and analyse international and national best practices of greening of cities with relevance to its applicability in project cities.
- d. Formulate strategies and landscape structure plans for greening of the cities integrating, strengthening and restoration of existing urban green spaces and proposing appropriate new projects to create multifunctional ecosystem for the city
- e. Suggest city specific projects for existing green spaces of patches (urban gardens, public and private parks, water bodies, urban forest patches etc.), corridors (roadside avenues, walkways and urban greenways, rivers, nallahs etc.), and network structures (layout of all the patches and the corridors connecting the patches)

and propose new projects for development of urban green spaces along with identification of land. The proposals might include creation of flower beds, lotus ponds, lily ponds, fish ponds, duck ponds, exhibiting various species, theme corners, nature blended children play space in the identifies land and appropriate avenue trees for planting along thoroughfare, bus routes , and pedestrian pathways but proposals need not limited to only these.

f. Identify, conceptualize and prepare draft feasibilities of urban green projects proposed along with implementation strategies of Projects and estimates.

g. Prepare strategies for phase-wise development, priorities and sequence of projects. Suggest Community participation/Public-Private Partnership framework in reviving, protecting and maintenance of green space in the city and applicability of PPP models for the proposed project

h. Prepare DPR and Bid Document for the finalized projects in the corporations

i. Prepare city specific suitable and appropriate vegetation species along with planting guidelines. Also assess implication of introduction of new vegetation species for increasing the green cover for the city.

j. Prepare guidelines for planting vegetation in the urban areas and Manual for Maintenance of vegetation and urban green areas for the ULBs

k. Assess and analyze exiting institutional setup in Municipal Corporations and suggest organisational upgradation/formulation requirements indicating financial implications for proposed projects

l. Suggest enactment of appropriate legislation/amendment to the Municipal Corporation Acts/Tamil Nadu District Municipalities Act for increasing of green cover in the cities and to protect, conserve, and maintain the green space, trees, and plants and vegetation within the city limit.

- m. Conduct workshop among the stakeholders of the Corporations on Greening of the cities. The following tasks should be performed by the consultant with regards to the workshops:
- i. Develop the structure and the content of required workshops
 - ii. Facilitate the workshops and present relevant information
Document outcome and findings from the workshops

Note: Consultants are free to procure and use satellites imagery for the towns for survey and analysis at their cost. It is optional.

4. Data inputs and Services from the Client/ULBs

The Client/ ULB will provide to the Consultant all the available data, documentation and maps available with them. The Client /ULBs shall make available its Senior officers for consultation purposes and furnish the available relevant data and documentation, maps for consultant's reference and study.

5. Study Area

The study will be taken in Coimbatore, Madurai, Thiruchirapalli, Salem, Thirunelveli, Thiruppur, Erode, Vellore, & Thoothukudi City Municipal Corporations.

6. Outputs, Reporting and Schedule for Completion of the Assignment:

<u>Outputs</u>	Time from Start	Payments (% to Total)
<u>Inception Report (20 Copies)</u> Reconnaissance survey and Field Visits to the ULBs - Methodology for conducting survey works in the Corporations -Work Plan, Staffing Schedule for completion of the assignment.	1 month	10%

Submission of the Inception Report for review of the Review committee

Interim Status Report (20 copies)

3 months

40%

Assessment and analysis of the project cities in terms of demographic, social, economic landuse patterns and existing green cover.

Detailed database and inventory of city specific urban open areas including parks, gardens, water bodies etc and vegetation, urban open areas.

Assessment of existing vegetation in terms species, density, diversity, Assessment of national and international best practices in greening of cities and its applicability to project cities.

Formulation of Preliminary strategies and structure plans for greening of the cities.

Identification, conceptualization and draft feasibilities of urban green projects proposed along with implementation strategies of Projects

Identification of specific patches (urban gardens, public and private parks, gardens, urban forest patches etc.), corridors (roadside avenues, walkways and urban greenways etc.), and network structures (layout of all the patches and the corridors connecting the patches) for landscape development

-Submission of the Interim Status Report for review of the Review committee

Draft Final Report (20 Copies)

5 Months

30%

Development, detailing and of Urban greening projects proposed by the consultants Indicate Financial Estimate and Organizational requirement in the ULBs to carry out the tasks mentioned above.

Preparing DPR and Bid Document for the finalized development works in the cities

Formulating strategies for increasing/augmenting the city specific green cover including planting frameworks and feasibility of introduction of new or non-native species

Prepare city specific species list appropriate for planting along with manuals for tree planting and maintenance

Prepare an assessment of existing institutional setup for proposed works of greening the city and indicate Organizational/Institutional requirement along with Financial Estimate in the ULBs to carry out the proposed projects

Submission of the Draft Final Report/s for review of the Review committee.

Final Report & Conducting Workshop (30 Copies) 6 Months 20%

DPR and Bid Document for the finalized development work proposals.

Framework for Community participation / Public – Private participation in creating, protecting and maintenance of green cover and urban open spaces in cities

Suggestion on suitable enactment/amendment to the City Municipal Acts/ Tamil Nadu District Municipalities Act to protect ,conserve and maintain the green space, trees, plants, and vegetation in the city including organisational and Institutional Strengthening measures

Frameworks for Implementation and monitoring programs

7. Composition of the Review Committee

The Review committee includes :

1. The Director of Municipal Administration or his nominee
2. Managing Director & Chief Executive Officer, TNUIFSL or his nominee

3. The Joint Commissioner of Municipal Administration.
4. The Chief Engineer , Directorate of Municipal Administration.
5. Corporation Commissioner Concerned

8. Project team key personnel Requirement

The following Key Professionals are to be engaged by the Consultant along with required support staff. The C.V. of the following professional will be reviewed for technical evaluation.

Specialization	Requirement
Landscape Architect/ Team Leader	Masters in Landscape Architecture or equivalent qualifications with about 7 years experience in large scale urban landscape and environmental planning projects
Urban Forestry Specialist	Masters in Forestry or equivalent qualification with about 5 years experience in social forestry
Horticulture Specialist	Master in Horticulture or equivalent qualification with about 5 years experience in horticulture
Urban Infrastructure Specialist	Master in Urban Engineering or equivalent with 5 years experience in infrastructure works.
Urban/Environmental Planner	Masters in Planning or equivalent qualification with about 5 years experience in land use planning
Urban Finance Specialist	Master in Financial Management /CA or equivalent qualification with around 5 years experience in Urban Financing
GIS Expert (optional)	Bachelor in Civil Engineering /Architecture with 5 years experience in GIS Applications