

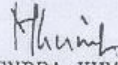
No.5-DDR/VIP/2000-DDVI  
Government of India  
Ministry of Urban Development & Poverty Alleviation  
(Delhi Division)  
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Nirman Bhawan, New Delhi  
Dated: 21st July, 2000

OFFICE MEMORANDUM  
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Sub: Environmental damage due to unnecessary and wasteful building exercises undertaken by Municipal agencies- Issuing of guidelines.  
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The undersigned is directed to state that after considering the views of experts, government agencies, local bodies and NGOs, the "Guidelines for greening of Urban areas and landscape" have been formulated. These guidelines are issued to all concerned for taking follow up action.

  
(MAHENDRA KUMAR)

Under Secretary to the Govt. of India

To:

1. Principal Secretary (UD), GNCTD, Vikas Bhawan, I.P.Estate, New Delhi.
2. Commissioner, MCD, Town Hall, New Delhi.
3. Chairperson, Palika Bhawan, New Delhi.
4. Vice Chairman, DDA, Vikas Sadan, New Delhi.
5. CEO, Delhi Jal Board, Jhandewalan, New Delhi.
6. Chairman, DVB, Shakti Sadan, New Delhi.
7. DG (W), CPWD, Nirman Bhawan, New Delhi.
8. Engineer-in-charge, PWD (Delhi Admn.), GNCTD, KG Marg, N.Delhi.
9. Director of Horticulture, CPWD, I.P.Bhawan, New Delhi.
10. Director of Horticulture, MCD, Under School Lane Fly-over, Deen Dayal Upadhyay Marg, Rouse Avenue, New Delhi-2.
11. Director of Horticulture, NDMC, Palika Kendra, New Delhi.
12. Director of Horticulture, DDA, Vikas Minar, New Delhi.
13. Conservator of Forests, GNCTD, Kamla Nehru Ridge, Delhi-7.
14. Head of Department, Floriculture, IARI, Pusa Road, New Delhi.

Copy to:

1. APS to UDM/PS to MOS(UD)
2. SPPS to Secretary (UD)/PS to JS(UD)/PS to JS(DL)/PS to DS(DD)

### Guidelines for greening of urban areas and landscaping

1. **To avoid use of excessive tiling of pavements : porous materials to be used :**  
Unnecessary and excessive tiling of the roadside pavements should be avoided. The area around trees lined along the road should not be covered with tiling as it hampers the basic necessary functions and needs of the trees i.e., root aeration and availability of water gets drastically reduced. Wherever tiling is done, porous tiles alone should be used. Roots of the trees should be protected, top soil should be preserved while taking up civic works. Indiscriminate tiling of road dividers and foot paths should be avoided.
2. **Tiling to be done only on pavements with heavy pedestrian traffic :**  
Tiling should only be done on the roadside which have heavy pedestrian movements. In case of bridges and such areas where there are no pedestrian movements, tiling may be avoided and in case tiling is to be done, preference is to be given to porous tiles as porous material allows seepage of ground water. The species of trees may be chosen for their pollution reduction abilities including dust trapping to avoid reliance of a single species, a combination of trees, shrubs, grasses should be grown.
3. **Growth of grass to be encouraged :**  
The necessity of grasses playing a vital role in making the soil suitable for vegetation should be realised and unnecessary digging of soil should be stopped forthwith.
4. **Excessive pruning to be avoided :**  
Practice of excessive pruning of crops should be avoided . Pruning of plants in a well nurtured garden and pruning of roadside plants should be differentiated. Excessive pruning may lead to upsetting the root: shoot ratio. Leaf pruning should not be resorted to.
5. **Compost to be made of leaves :**  
Leaf is an excellent material for making of compost and burning of leaves causes pollution. A system of composting of leaves in nearby parks should be adopted which will provide water retentive manure to civic agencies. Some fallen leaves may be left near the tree base as water retentive mulch.
6. **Adequate space to be left around trees :**  
An area of 6'x6' around the trees should be left uncemented. Widening of roads upto the trunk of trees is to be avoided as roots come under the asphalted roads and will gradually die. In case of storm, these trees can

topple down. Activities which adversely affect the roots are to be kept at a minimum.

7. **Digging near trees to be avoided :**  
Digging near the trees by allowing telephone, electricity, sewage lines should be avoided to avoid root injury; sufficient space should be left along the ground for the trees. In no case should roots be exposed. Washing of avenue trees foliage may be done on a tri-monthly basis to get rid of particulate matter from the foliage
8. **Use of Organic Compost :**  
The dead trees may be replaced by young plants after providing sufficient organic compost in the pits. Organic manure added with compost FYM mix with Nitrogenous fixing bacterial culture and neem cake should be spread on the green and poured into the soil before either irrigating the tree basin or before rains.
9. **Planting of second line trees to be encouraged :**  
New trees which may be called as second generation trees must be planted preferably 2-3 meters behind the existing road trees in an alternate position or inside the bungalow compounds. A mix of foliage and fruit trees should be planted. Planting of fairly well established large trees should be undertaken as chances of their survival will be more. Cues of species to be adopted may be taken from the old trees lining Delhi's roads.
10. **Initiation of EEC activities :**  
Horticulture Deptt. may initiate education/awareness campaign with School students and elders and users of the park where the different species of trees are present in a particular park and importance about preservation of eco-systems is explained. School students may be taken for nature walks in a major garden to get them associated with the flora and fauna around them. Also the citizens of an area residing near a park can be involved for this awareness campaign.
11. **Compactness of soil near trees to be avoided :**  
Compactness of soil should be avoided within atleast one meter around the tree. Perforated metallic frame can be used for this purpose. Soil surveys around the trees should be done by removing stones.
12. **Setting up of a Central Resource Centre :**  
A Central Resource Centre should be set up to aid and advise the State Governments, Municipal Corporations and other development agencies dealing with matters pertaining to Horticulture and Landscaping. A manual on the subject should also be prepared.

13. **Stress on Shelter beds of thick trees :**  
Around the cities vulnerable to desert wings, shelter-beds of special design of thick trees should be planted.
14. **Updating technology of transplantation of trees :**  
Technology for transplantation of trees should be updated to ensure at least 80 percent of the success rate of planted trees. As far as possible , trees grown in the nursery with a height of four to six meters should be planted. Presently, survival rate of trees is less due to animal menace and non-caring of trees. The public participation in caring of trees planted around their houses may be ensured.
15. **Setting up of a tree disease surgery unit in Horticulture Deptt :**  
A small tree disease/surgery unit should be created in all Horticulture Departments to cure tree maladies.
16. **Earmarking of some cost of projects for landscaping :**  
In any layout plan of land and housing development, at least two and a half percent of the cost of the project should be earmarked for landscaping and green development.
17. **Use of kitchen and garden waste for compost :**  
Technology to use the kitchen and garden waste to fabricate building and landscaping material should be perfected and made available to all the urban development agencies.
18. **Proper care of water fronts :**  
Underground water does not get recharged sufficiently because of use of concrete around them. Efforts should be made to get the water fronts recharged and these fronts kept clean.
19. **Heritage building to be landscaped :**  
Areas around heritage buildings should be suitably landscaped and beautified.
20. **Greening of void areas not required for minimum construction :**  
Urban void areas should not be allowed to exist and the area not required for immediate development or construction, should be made green and fenced with suitable landscaping. Similarly road Bern/right of way required for future road widening should be landscaped and maintained as green.
21. **Encouragement for water harvesting technologies :**  
Information regarding water harvesting has to be disseminated in public and its use encouraged. It should be ensured that quality of water does not get deteriorated for which required measures are to be taken.

22. **For maintenance of greens internally:**  
Criss-cross paths should be provided for in the gardens and lawns. There should be connecting gates at all corners so that people do not walk on the grass.
23. **Public participation to be ensured :**  
Public participation at present is poor in maintenance of green. This has to be activated and Residents Welfare Association and to be involved in planting of new trees and in their survival. **User groups need to be activated ;** NGO's can play a catalytic role in this. Each NGO may earmark a selected area for its activities thereby dividing the entire Net area. A Committee with officials from MCD, NDMC, DDA, GNCTD, etc. will act as the nodal contact agency and will review progress every month or as necessary.