

P – 06**Roadside Trees of Uttara Kannada District, Karnataka****Vishnu D.M., Rao G R, M.D. Subash Chandran, T.V. Ramachandra**Energy & Wetlands Research Group, Centre for Ecological Sciences,
Indian Institute of Science
Bangalore – 560 012, INDIAE-mail: grrao@ces.iisc.ernet.in; mds@ces.iisc.ernet.in; cestvr@ces.iisc.ernet.in
<http://ces.iisc.ernet.in/energy>

Road making is associated with destruction of natural areas. Roads criss-crossing through forests create fragmentation and disturbance to the wildlife. However road-making may be considered a necessary evil for humans. Roadsides are often neglected places used for dumping of wastes and not much care given for beautification or planting except in some places. Wherever plantings are done in the usual manner there is not much regard for ecological conditions or consideration of local demands. This study is about how best roadsides can be made more eco-friendly through well-designed tree planting using appropriate native tree species than exotic ones.

Uttara Kannada district has very varied topography and climate. The district has a coast of sand and alluvium and rocky areas, a lateritic stretch of low hills and plateaus, the range of Western Ghats and the eastern portions merging with the Deccan plains. The coastal areas and west-facing portions of Western Ghats receive rains often more than 3000 mm/yr; the rainfall is down to 1500 mm or less in the rain-shadow eastern parts.

Considering all these factors we propose in this poster a more useful design for tree planting in the district, the salient features of which are as follows:

- Roadsides of sandy or low lying coast will have species like *Calophyllum inophyllum*, *Pongamia pinnata*, *Artocarpus heterophyllus* and *Lagerstroemia flos-reginae*.
- Lateritic terrain roads are good for *Sapindus emarginatus*, *Mangifera indica*, *Artocarpus heterophyllus*, *A. lakoocha*, *Garcinia indica*, *Cassia fistula*, *L. flos-reginae*, *Michelia champaca*, *Mammea suriga*, *Zanthoxylum rhetsa*, *Ficus* spp., *Terminalia bellirica*, *Caryota urens* etc.
- Narrow roads passing through forests need not have any additional planting. Wider roads can be considered for planting according to the rainfall and soils. In heavy rainfall areas, with non-lateritic soils wild mangoes (Appe-midi varieties), *Artocarpus heterophyllus*, *A. lakoocha*, *Corypha umbraculifera* (talipot palm), *Caryota urens*, *Mimusops elengi*, *Strychnos nux-vomica* etc. are good.
- Roads through eastern low rainfall areas are ideal for *Mangifera indica*, *Tamarindus indicus*, *Madhuca indica*, *Pongamia pinnata*, *Corypha umbraculifera*, *Ficus* spp., *Terminalia bellirica*, *Aegle marmelos* etc.



The planting prescriptions are based on the ability of the species to survive in varied habitats. The more elaborate list will cover decorative plants, shade trees, utility trees (fruits, medicine, fodder leaves etc.) nectar species, etc. and of ecosystem services.

