Lake 2016: **Conference on Conservation and Sustainable Management of Ecologically Sensitive Regions in Western Ghats**
[THE 10TH BIENNIAL LAKE CONFERENCE]
Date: 28-30th December 2016, http://ces.iisc.ernet.in/energy
Venue: V.S. Acharya Auditorium, **Alva's Education Foundation**, Sundari Ananda Alva Campus, Vidyagiri, Moodbidri, D.K. Dist., Karnataka, India – 574227

Riparian Diversity: Documentation and Conservation Strategy in Kumaradhara River Basin

Rajesh B
Post graduate Dept of Applied Botany, Alva's College Moodbidri
D K. 574 227 Karnataka, India Email: drrajeshb23@gmail.com

Abstract

Documentation, conservation and finding enhancement strategies of biodiversity is considered to be one of the important challenges in present day conservation biology research and policy making process. The Kumaradhara river basin of South Canara has a large phyto-floristic wealth, rightfully, enough to constitute a separate phyto-geographic unit. Increase in the anthropogenic pressures within the river basin and surrounding landscapes have persistently stressed the riparian ecosystem structure adversely, besides altering its composition. The objective of this study was to examine the present status of riparian vegetation along the Kumaradhara river basin, in response to anthropogenic pressures. In each zone, tree species were quantified using transects at 500 m interval. The results indicate that the river basin has rich diversity of plants including annuals and perennials of herbs, , woody climbers and tree species. The study also indicated the presence of Nagabana (Kemmathakutelu), sacred groves, special spirits (Panjurli, guliga) which covered by vegetations. The riparian plant diversity, most of them are belong to the family Rubiaceae followed by Euphorbiaceae, Moracese, Anacardiaceae, Ebenaceae, Celastraceae and Dipterocarpaceae. Similarly a few species belong to Myristicaceae, Lauraceae, Combretaceae, Verbenaceae, Melastomataceae, Asteraceae, Poaceae and Myrtaceae. Some ferns also observed along the river banks. The river basin with a large amount of stress due to anthropogenic activities like sand mining, road constructions, implementation of electric cable, fire wood collection, expansion of agricultural activities, and encroachment unscientifically. The heavy tree fall due to sand erosion during rainy season also one of the factor for deforestation in river basin. The results of the present study clearly brought out the need for preparing and implementing site-specific conservation plans for riparian ecosystem.

Keywords : Kumaradhara river · Riparian diversity, Anthropogenic activity, deforestation, phytogeographic unit