

About the Book

Social awareness of environmental problems and ecosystem limitation has been a major force behind the modern search for understanding forest hydrology. Research programme sponsored by government and private agencies in many countries has expanded continuously during recent decades in a synergistic search for new knowledge. Forest hydrology is clearly an interdisciplinary science, the union of forest and hydrology. It is also the science of water related phenomena that are influenced by forest cover with the advent of a “multiple-use” concept in forestry, and the recognition of water resources as a major goal along with timber, wild life and forest management. This book considers the various aspects related to forest-water and people interaction for better forest management and utilization of forest resources.

The book is divided into different parts covering process hydrology, agro-forestry and followed by extensive treatment of human and social issues. It uniquely integrates the summary of research finding in forest hydrology and its allied subjects.

Contents:

- 1. Forests and water Yield- an overview*
- 2. Impact of different land uses on run of and soil loss in high hills of nilgiris*
- 3. Hydrologic response of a forested micro watershed in outer shivalik of jammu region*
- 4. Hydrological process in forested and deforested*
- 5. Study of hydrological process in a small forested watershed in south Karnataka*
- 6. Effect of afforestation on base flow under different farming systems in hills*
- 7. Impact of deforestation over land and water resources in tropics*
- 8. Simulating contributions of forest to catchment run-off using a semi-distributed hydrological model*
- 9. Run off processes in forested watershed – a case study for a sub-basin of Bhandra rivers basin*
- 10. Morphometric analysis of a forested watershed using GIS technique*
- 11. Impact of iron ore mining on sediment response of a humid tropical forest and grassland dominated catchment in the western Ghats, India*
- 12. Road construction on hilly forest their impact on hydrological aspects*
- 13. Hydrological investigation under forest Landuses- a case study from J & K state*
- 14. Impact of vegetative cover on deep percolation and sediment concentration at different slopes*
- 15. Estimating evapo- transpiration losses from pichhola lake catchment with special reference to forests*