

# Watershed Management – Policies and Practices in a Humid Tropical Region

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## **Abstract**

In many tropical regions, increasing population and associated water needs in domestic, industrial and agricultural sectors exerts tremendous pressure on the watersheds. Even in water rich regions in the humid tropics like the State of Kerala in India, this affects the economy and day-to-day life. The State receives three times the global average precipitation and there exist a number of rivers, making even the demarcation of watershed difficult. But, more than 80% of the water in the rivers wastefully flows into the Arabian Sea. Kerala experiences serious seasonal water shortages, as a combined result of improper management, careless use, land and water resources degradation and heavy population. There are several rules and regulations for the protection of watersheds, with provision for optimum utilization of resource. Failure in its implementation often poses threat to the watersheds' environment. Land and water degradation has become a major issue here. The State administration has recently formulated certain development programs at various levels in the watersheds, incorporating modern and traditional methods. This paper is a detailed investigation on the water related problems in the watersheds of Kerala and on the various projects planned as part of a water policy for the watersheds' protection and management. Drawbacks in the implementation of existing laws and its effect on the watersheds' environment have been examined. Assessment of the water resources and possible impacts of a changing environment on them has been made, for providing guidelines for better management.

**Keywords:** Kerala, watershed management, water policy, changing environment