

Water Resource of Kerala: Status, Issues and Management – Special Publication No.10, Geological Society of India

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The compendium of special publication of the technical papers on **Water Resource of Kerala: Status, Issues and Management** published by the Geological Society of India, edited by Subhajyoti Das and E.Shaji is the latest publication which presents an in depth update and analysis about the status, issues and management aspects of water scenario in Kerala. The volume covers 7 specific topics in Part-I, namely Resource Potential and Development and 9 special theme subjects in Part-II, namely Resource Management and Conservation. Apart from this, one special paper on water resources development and conservation in Lakshadweep Islands is also included under Part-I.

Kerala, the ‘Gods own Country’ is a water surplus state with more than 3000 mm of annual rainfall. Still, the state is facing water scarcity and related problems during summer months due to its diversified physiographic set-up, from the coastal region to Western Ghats. Large scale storage reservoirs to store water during abundant rains are not feasible in Kerala and Lakshadweep. It is difficult to harvest and store the run-off during the rainy season and the base flow in streams and rivers during the post-monsoon period due to the uneven terrain conditions in the state. In fact, the subsurface stored ground water in the shallow aquifer zones also gets discharged into the valley region and joins the sea. Added to this, the management of coastal region with vast saline back water stretches is also an issue of water management. Of late, the unprecedented rains during the monsoon have added another major issue of floods and landslides along the hilly stretches and their impacts along the rivers in the downstream plain land. This perhaps is attributable to the changed climatic conditions in the region with significant decrease in SW monsoon

rainfall and an increase in post monsoon rainfall for the period from 1871-2005.

With all these complexities, it is important to aim for a balanced approach in framing the water management strategies for Kerala state. It is a herculean task in view of the varied reasons which broadly covers undulating topography, variations in rainfall, high population density, lengthy coastal stretch, distribution of saline back waters throughout the coastal region, water contamination related issues and of late the deluge-landslide and their aftermath. Establishment of Critical Zone Observatories after identifying the critical Zones is very much essential for the state in view of its diversified set-up in terms of water availability.

There is no doubt that the publication is very much useful to all the stake holders in the water sector to optimally plan the water management with scientific perspective and holistic approach, covering both the surface water and ground water. The volume has contributed impressively and achieved these objectives. The wide arrays of themes on water resource potential and management with the touch of advancement in water science are convincingly notable for worthy reference. The untiring efforts of the Editors in particular and the contributors in general in bringing out the special publication through Geological Society of India are praiseworthy. The topics covered and the conclusions drawn will help greatly to finalise the State’s Water policy apart from serving as a guide to fix the benchmark to orient the action plans for water management strategies for the state in future. The special article on water resources development and conservation in Lakshadweep Islands will also help to manage the limited fresh water resource available in these islands.