

About the Book

The book makes a comprehensive survey of the field of river research across temporal trajectories. The complexities of river management problems that include a real understanding of the nature of water resources and their complex links and interrelations with other systems can no longer confine the discipline in a domain of compartmentalized sector and single disciplinary approaches, Natural and social sciences converse, exchanges and gets informed by each other's methods, methodologies, frameworks and approaches. The book is an attempt to reflect on critical advancements in both technical and social aspects of river and the potential confluence and intersections between the two. The Book is divided into two sections: the first part is dedicated to theoretical and technical understandings and framework and the second part is informed by empirical findings through case narratives across the Indian subcontinent and her neighbors including Bangladesh and China.

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- 1. Environmental flows and their assessment*
- 2. Story of the Ganga River: Its pollution and Rejuvenation*
- 3. Ganges groundwater interaction at Varanasi*
- 4. Microbial water Quality assessment in river Ganga*
- 5. Vulnerability and resilience status of river systems of North-India: A special reference to Brahmaputra*
- 6. Flood Hazard of the Brahmaputra River in Assam: Current Mitigation approaches, challenges and sustainable solution options*
- 7. Integrated simulation of surfacewater-groundwater interactions using*
- 8. Effect of changing climate on the water resources of upper Jhelum Basin*
- 9. Geogenic and anthropogenic impact on the water quality of Cauvery river*
- 10. Fluvio-dynamics and groundwater system in the Narmada river*