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## FOREWORD

Springs, the visible manifestation of groundwater, are vital water sources for millions in India's mountainous regions, supporting around 200 million people, particularly in the Indian Himalayas, Western Ghats, Eastern Ghats, and Central India. They offer pure water economically and sustain river flow, biodiversity, and agricultural and industrial growth.

Climate change, deforestation, and unsustainable development practices are exerting immense pressure on these springs. Between 1961 and 2011, the Himalayan population grew by 250%, three times the world average growth rate. This rapid growth has led to accelerated urbanisation, resulting in damage to recharge zones and degradation of water quality in the springs. Ever-increasing stress due to natural and anthropogenic reasons on these vital water sources has led to the drying or reduced flow. Neglect over recent decades has worsened water scarcity, aggravated by the lack of systematic data on springs, hindering policy integration despite their critical importance.

Ensuring the long-term survival of mountain ecosystems and the well-being of millions, requires sustainable development practices and ecosystem protection. Springshed management, crucial for spring preservation and rejuvenation, requires scientific studies aligning with local wisdom. The Honourable Prime Minister of India emphasised the need to expedite springshed management during the 'All India Annual State Ministers Conference on Water @2047' in January 2023. Strengthening institutional capabilities for systematic, scientific interventions is now imperative to address spring ecosystem challenges effectively.

Recognising the critical role of springs in water and ecological security, the Department of Water Resources, River Development & Ganga Rejuvenation (DoWR, RD & GR), Ministry of Jal Shakti, the Government of India has prioritised their protection and rejuvenation. To this end, a Steering Committee on 'Springshed Mapping of the Indian Himalayan Region (IHR) Including Mountainous Regions of the Country and Springshed-based Watershed Management Plan' was established. The objective of the committee is to address key challenges related to conservation and sustainable management of springshed management across the country. The committee, supported by technical expertise, initiated the First Springs Census to expedite nationwide springshed management. Responding to the need for comprehensive guidance, the committee, led by Shri Subodh Yadav, Joint Secretary, crafted the 'Resource Book and SoPs for Springshed Management in the Mountainous Regions of India,' featuring insights from domain experts and implementing agencies for practical utility.

I am confident that stakeholders in springshed management will find great value in these scientific documents, aiding our collective endeavor to enhance spring civilisations in mountainous regions. Let's unite under the principle of 'Vasudhaiva Kutumbakam' to conserve these water sources and nurture a prosperous, water-abundant world.

(Debashree Mukherjee)