Foreword

Biodiversity of forests and water are interrelated and complementary for enhancing and sustaining livelihood opportunities as well as environmental services. They also play significant role for realizing full economic and social benefits from agricultural land and human capital. Forests support 360 million people (30% of population), livestock, 14% of wild fauna and lot of flora. Percentage of forests land declined from 65% in 1925 to 40% in 1947 due to excessive extraction after First World War and to 19% at present. About 42% of the total forest area is degraded with less than 40% canopy cover.

Per capita availability of fixed resources is further going to decline due to demographic growth, industrialization and urbanization. Deforestation, desertification, climatic changes, pollution, contamination and stagnating productivity are major concerns of poverty management portfolios. Forests, grazing lands, aquifers, natural water bodies and fisheries are open access or common property resources. Their productivity is afflicted by the "tragedy of commons" with sub-optimal returns. Tribals have also been given land titles in lieu of usufruct rights. They require a unique joint and participatory management of transparency, equity, social justice and harmony. Forests could be highly prioritized sites for ground water recharging to sustain irrigation, domestic and industrial supplies of water. Litter production and transfer of nutrients from forests ecosystem to arable land is the only way of supporting organic farming. Forest cover dissipate kinetic energy of falling rain drops, checks soil erosions, ensure resource conservation and prevents sedimentation of flowing water and reservoirs constructed with massive public investments. It is commendable that Regional Centre at Belgaum of National Institute of Hydrology has endeavoured to update the knowledge of Forest Hydrology and allied activities in this edited volume of papers presented in a two days seminar.

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