

## Foreword

The Convention on Biological Diversity (CBD) which was initiated at the Earth Summit in Rio de Janeiro on 5 June 1992 seeks to conserve the diversity of life on earth at all levels - genetic, population, species, habitat and ecosystem. The Convention stresses that the conservation of biological diversity is a common concern of humankind, but recognizes the sovereign rights of nations over their own biological resources particularly in addressing the overriding priorities of economic and social development and the eradication of poverty. The convention has three objectives: the conservation of biological diversity; the sustainable use of its components; and the fair and equitable sharing of benefits arising out of the utilization of genetic resources.

India, as a mega biodiversity country in the world, has a major role to play in ensuring that the objectives of the convention were realised. The Western Ghats or Sahyadri Hills is highly rich in biodiversity and endemism. The biodiversity of the region is under threat due to continuous human pressure on the ecosystems. The Biligiri Ranganathaswamy Temple Tiger Reserve (BRTR) is the co-junction point between two floristically rich areas in India viz., the Western Ghats and the Eastern Ghats. This confluence of the Western Ghats and Eastern Ghats is home to ecosystems that are unique to both the mountain ranges and makes the whole BRTR range a very distinct habitat. A wildlife sanctuary, called as Biligiri Ranganathaswamy Temple Wildlife Sanctuary or BRT Wildlife Sanctuary of 322.4 sq km was created on 27 June 1974, which was later enlarged to 539.52 sq km on 14 Jan 1987. In December 2010 the BRT Sanctuary was also declared as a 'Tiger Reserve'. The native Soliga tribe is rich in traditional ecological knowledge, which is inherited from their ancestors. However, at present the traditional ecological knowledge related to use and conservation of biodiversity in and around BRTR is in jeopardy due to variety of reasons.

The monograph by Sunil Nautiyal, Varsha NP, Sravani Mannam, C Rajasekaran documents the plant species of BRTR their usage and administration in traditional health care systems by people living in forested landscape in harmony with nature. Apart from undertaking the empirical field study on the inventory, use and knowledge regarding biodiversity evolving the practice of package of cultivation of the medicinal plants having

socioeconomic and ecological significance was significant aspect of this study. The researchers have developed model for cultivation of medicinal plants (low volume high value crops) in the study region to enable farmers for livelihood development and their participation of conservation programmes. Scientific validation of metabolites in the selected plants was done in the laboratory and thus highlighted biological importance of the plant species. Therefore, the work done by the researchers is highly useful both for development and policy perspective. I am sure the documentation done with the help of this study will serve as baseline data for future research in this ecologically sensitive region.

I congratulate the authors on undertaking such an important research work and thank the Science for Equity, Empowerment and Development (**SEED**) **Division** of the Department of Science and Technology, Govt. of India, for sponsoring this study. The results and recommendations of this study will be beneficial to policymakers at large, the officials concerned of the Department of Forests, Ecology and Environment and researchers working on the social and ecological dimension of landscape development in biodiversity-rich areas. The recommendations are specific to use and conservation of biodiversity on one hand and local livelihood development on the other, which makes the outcomes relevant and useful for all the stakeholders. I am confident these recommendations and suggestions will be considered in the developmental schemes and programmes for their effective implementation in the Western Ghats.

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