



Book Review: Life in the Himalaya: An Ecosystem at Risk

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A Book Review on

Life in the Himalaya: An Ecosystem at Risk

Maharaj K. Pandit (Cambridge, MA: Harvard University Press), 2017, 384 pages, Foreword by Kamal Bawa and Peter H. Raven, ISBN-10: 0674971744; ISBN-13: 978-0674971745.

The Himalaya represents the youngest and highest mountain chain of the world; it is home to 1.4 billion human population and 10,000 plant species, source of origin for 10 major river systems of the world and repository of largest glacier cover outside the North and South Poles. Since time immemorial, Himalaya have attracted religious people, scientists and nature lovers alike. It forms the cradle of origin of many species, religions and even human civilizations.

The formation of the Himalaya started in the early Cenozoic Era around 55–50 million years ago (Mya) with the collision of Indian and Eurasian plate and subsequent obliteration of Tethys Sea. Since its formation, the Himalaya has witnessed periodic orogenic events such as tectonic subduction, crustal folding and thrusting, uplift of the mountain ranges, etc. The ensuing effects on climate and landscape, which accompanied these orogenic events (e.g., formation of land bridges, evolution of monsoon etc.), served as major driving force for establishment of new and modification of old ecosystems followed by genetic interchanges among biota, vicariations, speciation, evolutionary divergence and migration of human populations. *Life in the Himalaya: An Ecosystem at Risk* attempts to analyze, understand and present a comprehensive overview of the intricate relationship between the physical-climatological variations produced by the geo-physical changes during the formation of the Himalaya and subsequent build-up of biodiversity in the region, the current biodiversity distribution patterns and the likely future trajectories of ecological and socio-cultural change in this global biodiversity hotspot. A botanist by training, Maharaj K. Pandit has lucidly presented an overall picture of the past, present and likely future of the Himalayan ecosystems by combining anthropological, biological, ecological, socio-cultural and geological literature.

The book is divided into four different sections: natural phase, cultural phase, mechanical phase and networking phase. In the natural phase consisting of four chapters (“The Himalayan Memoir,” “Tectonic Serendipity,” “Intercontinental Biological Highway,” “Life in Flux”), an attempt has been made to review all the geological events and processes that led to the formation of the Himalaya and its geo-biological consolidation, right from the time when Indian plate broke apart from Gondwanaland (~145 Mya) till the time it eventually collided with Asia (~55–50 Mya). The second section—cultural phase consisting of two chapters (“The First Axe” and “The Chipko Saga”) explores how human populations started to spread in the Himalaya and various ecological and biological transformations which they brought about along with them, starting right from hunting-gathering activities around 15–18,000 years ago to organized and state-sponsored deforestation activities during the 18th and 19th century. The third section-mechanical phase

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consists of three chapters (“The First Train to Lhasa,” “Dam Rivers, Damn Rivers,” “Payback Time”) explores how the Himalayan landscape was transformed after the 19th century due to various anthropogenic pressures such as large-scale militarization, rampant urbanization, incessant hydropower development, neo-religious tourism activities, massive road building and large scale population growth. Finally, the last and fourth section-networking phase consisting of two chapters (“Toward Sustainability” and “Individuals, Institutions, and Ideals”) attempts to outline a sustainable future for the Himalaya by presenting some workable solutions such as trans-boundary disaster management and information sharing systems.

Some suggestive measures and guidelines for policy makers or other governmental and non-governmental organizations for future development in the region have also been made out in the last two chapters of the book. These include establishing partnerships and networking among the national, regional, local institutions and non-governmental organizations and their capacity building. This inter-linking can provide a mechanism for sharing experience, technology transfer and coordination in development. The limited carrying capacity of the Himalayan mountains requires that all efforts to solicit trans-national participation and inter-governmental support in enforcing various policies concerning land-use, administrative accountability, river regulation and water resource use, and biodiversity conservation are made integral to the Himalayan development. Environmental sustainability, development and governance issues in the Himalayan region are highly interconnected, trans-boundary and interdependent in nature. Tackling of critical issues such as climate change, poverty, biodiversity loss and loss of ecosystem services requires a trans-national effort involving due deliberations between policy makers and experts. The book also highlights the need to re-align the existing policies of different countries in the Himalayan nation into one uniform policy across the Himalayan landscape.

The book wonderfully treads on a fine line between scholarly,

scientific and common writing. All the chapters begin with a literary quote that aptly summarizes the whole message at the start itself such as “If we could see the miracle of a single flower clearly, our whole life world would change – Buddha” (Chapter 7, p.163) and “There is enough for everybody’s need, but not enough for everybody’s greed – Mahatma Gandhi” (Chapter 10, p. 261). All the facts in the book are well supported by published studies and no conjectures as such have been made at any place. In fact, the book has collated almost every available published account (718 references) on the Himalaya right from the age of the *Kalidasa* (a 5th century poet) till the present (2017). Overall, this book provides every detail—even the minutest regarding the Himalaya. The book aptly concludes with a central message—“a peaceful Himalaya is the safest Himalaya!” (p. 301).

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The author confirms being the sole contributor of this work and approved it for publication.

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