

International Conference on HIMALAYAN ENVIRONMENT IN CHANGING CLIMATE SCENARIO

September 19-23, 2023



University of Ladakh



G. B. Pant National
Institute of Himalayan
Environment



SPECIAL SESSION ON MOUNTAIN BIODIVERSITY- STATUS, IMPACTS AND LIVELIHOOD POTENTIAL IN INDIAN HIMALAYAN REGION

Organized by



G.B. Pant National Institute of Himalayan Environment (NIHE)
(An Autonomous Institute of Ministry of Environment, Forest, and Climate Change, GoI)

(September 20, 2023)

ORGANIZING COMMITTEE

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| 1. Prof. Sunil Nautiyal, Director, NIHE | Patron |
| 2. Dr. I. D. Bhatt, Scientist- F, NIHE | Convenor |
| 3. Dr. K. C. Sekar, Scientist- F, NIHE | Head, GRC |
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| 5. Dr. Sandipan Mukherjee, Scientist- D, NIHE | Head, LRC |
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LOCAL ORGANIZING COMMITTEE

1. Dr. Purushottam K. Garg, Scientist- C, LRC, NIHE
2. Dr. Ajay K. Gupta, Scientist- C, LRC, NIHE
3. Dr. Lalit Giri, TA (II), LRC, NIHE

Background

Biodiversity and its services are essential to the human being; however, the continued pressure is depleting this resource rapidly throughout the world. More specifically the climate change induced biodiversity losses are expected to have profound effects on ecosystem functions leading to alteration of ecosystem service flows. Considering this, the Paris Agreement, Sustainable Development Goals (SDGs) and most recently the 15th Conference of Parties to the UN CBD resulted the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF-2022). The key objective of GBF-2022 included "The integrity, connectivity and resilience of all ecosystems are maintained, enhanced, or restored, substantially increasing the area of natural ecosystems by 2050". This conference is envisaged on the urgency for actions, opening new areas for well-considered debates and knowledge-based deliberations.

Mountains as Global priority

While considering biodiversity, the mountain ecosystems attract immediate global attention. Mountain biodiversity is recognized for its ecological and economic values manifested by ecosystem integrity, adaptability, and ecosystem services. This fact is well acclaimed and recognized under Sustainable Development Goal (SDGs)15, which highlights need to "Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss". However, evidences suggest that mountain ecosystems and their components are particularly sensitive to change in the environment.

Himalaya - the special candidate

The Himalaya, which represents the youngest but complex mountain system on the surface of the earth, is still evolving, and it has been recognized amongst the 36 global biodiversity hotspots. On account of its continuum of evolution state, various ecosystems in the region exhibit great dynamism. The region has a discrete geographic and ecological entity. It produces a distinctive climate of its own and influences the climate of large part of Asia. However, the variations in topographical features along with three-dimensional framework (i.e., latitudinal: South-North; longitudinal: East-West; altitudinal: Low-High) cause diversity in climate and habitat conditions within the region. This leads to the overwhelming richness of biodiversity elements and their uniqueness. However, with respect to the climate change sensitivity, the region has been recognized as one of the most vulnerable ecosystems.

The Proposal

All this sets the agenda for regular and more vigorous interactive sessions to discuss on the Himalayan environment in changing climate scenario and develop an action plan for conservation and harnessing the potential of Himalayan Biodiversity. Realizing this, NIHE in collaboration with University of Ladakh, Leh is organizing a special session on the **Mountain biodiversity- Status, Impacts and livelihood potential in Indian Himalayan Region** to provide a platform to researchers, policy planners and relevant stakeholders to join hands for better integrity, connectivity and resilience of ecosystems and biodiversity through recommendation of appropriate solutions and pertinent policy prescriptions.

Topics to be discussed

- ♦ Stocktaking of existing biodiversity status
- ♦ High altitude wetland biodiversity
- ♦ Climate change impacts on biodiversity
- ♦ Potential of bio-resources for health and livelihood
- ♦ Devising science - policy interface to sustain Himalayan Biodiversity
- ♦ Solutions for achieving the biodiversity target

Envisaged outcome

- (i) Workshop proceedings
- (ii) Recommendations and action agenda
- (iii) Policy brief

Date: September 20, 2023

Venue: The Grand Dragon Hotel, Leh

