

**Brief report of the organized event**  
(Financial Assistance to Seminar / Symposia)

**SERB Sanction / File No: SSY/2024/000602**

**Date :30/11/2024**

**1. Name of Academic Institution / University / Society etc. under whose auspices the Seminar / Conference / Workshop / Symposium etc. was organized:**

Government College, Kullu, Himachal Pradesh

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**2. Title of the Seminar / Conference / Workshop / Symposium etc.:** "Mountain Ecosystem: A Biodiversity Focus"

**3. Duration / Period of the organized event:** October 21-22, 2024 (2 days)

**4. Grant Sanctioned:** 2,00,000/-

**5. Summary of the event (Max. 1000 Words):**

National Conference on "Mountain Ecosystem: A biodiversity Focus" organized by Department of Botany, Government College, Kullu, Himachal Pradesh on dated October 21-22, 2024. The Conference was mainly sponsored by Science and Engineering Research Board (SERB), DST, New Delhi and partially by NHPC, Parvati III, Sainj; Research Aid Instruments and Service, Palampur, HP; Akash Publication, Hisar, Haryana; and Modern Publisher, Jalandhar, Punjab and Anand Enterprises, Kullu. The Conference was programmed in six themes and six technical sessions. More than 100 participants including scientists from various research institutions, teaching faculty from various universities and colleges, research scholars and students participated in the conference. 14 invited speakers delivered their talk and 58 research papers were presented by participants through oral and poster presentations. National Conference started with inaugural session, Dr. Mandeep Sharma, Principal, G.C. Kullu graced the occasion as chief guest and Dr. S.S Samant, DSc, FNASc, FLS, FRSB, FSE, Former Director HFRI, Shimla and emeritus scientist, UCOST-MKSC, Almora, Uttarakhand graced the day as guest of honor. Dr. Ramnath, head, department of Botany, G.C. Kullu welcomed the distinguished guests and Dr. Man Singh Rana, convener of the conference briefed about the two days national conference. Dr. S.S Samant, addressed his keynote on '**Need for the Conservation and Management of Himalayan Ecosystem**' and highlighted the current scenario of Himalayan and trans Himalayan regions, biotic and abiotic components of these ecosystems, floral and faunal groups, economic importance and ecosystem services, threats, conservation initiatives and models. The Chief Guest Dr. Mandeep Sharma, also shared his valuable experiences throwing light on biodiversity, culture and socio-economic prospects of Himalayan regions. The session concluded with 'vote of thanks' presented by Dr. Brij Bala, Vice Principal G.C. Kullu. In Technical Session I themed '**Current Scenario of Himalayan Biodiversity**' which was chaired by Dr. S.S. Samant. Two keynote speakers, Dr. ML Thakur, Programme Coordinator, State Biodiversity Board, Shimla, HP deliberated on '**Conservation of Biological Diversity: Concept and Scope**' and Dr. Neelam Thakur, Assistant Professor, Sardar Patel University, Mandi, HP on '**Nanotechnology Innovations in Cancer Treatments via Preserving Gut Microbial Diversity and Reversing Gut Dysbiosis**' and nine participants delivered their presentations in the session.

Technical Session II themed '**Biodiversity Conservation and Management**' by Dr. Sandeep Sharma, CCF & Director, Great Himalayan National Park, Shamshi, Kullu HP had three invited speakers. Dr. Shyam Masakpalli from School of Bioengineering, IIT Mandi presented a talk on '**Phytochemical diversity of Himalayan essential oils and their applications**', Dr. Salvador Lyngdoh, Scientist from WII, Dehradun, presented on the topic, '**Wildlife Research for Mountain Conservation in Himachal Pradesh**' and Dr. Sandeep Sharma, on, '**Great Himalayan National Park Conservation Area**'. After that participant presented their research papers. About 15 posters were presented in parallel session and were evaluated by the Poster Evaluation Committee comprising of Dr. Ram Nath, Head Department of Botany, GC Kullu, Dr Neelam Thakur, SPU Mandi HP and Dr Kesar Chand, Scientist GBPNIHE Mohal Kullu. Third technical session on the theme "Biodiversity and ecosystem services" started in Conference Hall on day II and was chaired by Dr. Vaneet Jishtu, Senior Scientist Himalayan Forest Research Institute, Shimla, HP. In this session total three keynote speakers, Dr. Shalini Dhyani, Senior Scientist NEERI, Nagpur MH deliberated on the topic '**Securing Himalayan Ecosystems and ecosystem services for future: a call of action for researcher and**

**practitioners**, Dr. Ashish Tewari from Kumaon University Nainital delivered on **Diversity and carbon stock of an old growth *Quercus semecarpifolia* Sm. dominated forests** and Dr. Shreekar Pant, Coordinator Centre for Biodiversity studies, BGSB University, Rajuri J&K on **Ecosystem vs Nature based Solution a sustainable approach for biodiversity conservation: A paradigm Shift** and six oral presentations of participants.

Technical Session-IV on theme **Biodiversity: Indigenous Knowledge System** was chaired by Dr. Arun Chandan, Regional Director, RCFC, Joginder Nagar, Himachal Pradesh. The **keynote speakers, Dr. Arun Chandan**, deliberated a lecture upon **“Opportunities and Challenges in the Indian Medicinal Plants Sector: A strategic Perspective”** and **Dr. Tara Devi, Assistant Professor from Vallabh Government College, Mandi, HP** discoursed on the topic **“Timeless Tradition: Harnessing Himalaya’s Wild food Heritage for a sustainable future”**. **Technical Session V** themed, **Biodiversity: Agriculture and Forestry** was chaired by Dr. S. S. Samant, and Dr. Vaneet Jishtu, Senior Scientists from ICFRE-HFRI Shimla, HP was Keynote Speaker for the session, and he presented on the topic **‘Role of Wild Edibles and Non-Timber Forest Products in Augmenting the SDGs’** which was followed by oral presentations of participants. **In Technical session VI under theme Innovation in Biodiversity**, Er Rakesh Kumar Singh, Head, Himachal Regional Centre, GBPNiHE, Mohal- Kullu was the chair. Dr. Prem S Kaushal Associate Professor from RCB, Faridabad NCR, New Delhi invited speaker delivered on Topic **“Microbial diversity in protein synthesis as a potential target for therapeutic interventions”** and Dr. Hitesh Kumar from SPU, Mandi who give his insight on **“Understanding the molecular basis of steviol glycosides biosynthesis through genomics”** and after that oral presentations of participants were steered. Panel discussion was conducted on theme **“Status, Significance and Innovative solution for conservation of Biodiversity”** which was chaired by Dr. S.S. Samant. Dr. Vaneet Jishtu, a panelist highlighted the key issues such as reducing Amazon forest cover due to human interference for palm oil etc. He suggested minimal and justified human intervention in ecosystem. Dr. Chanderkanta Vats, a panelist emphasized on need of ground level work to conserve native species, Judicious use of ecosystem resources with participation and engagement of people and awareness and self-introspection. After that Dr. Shreekar Pant, a panelist expressed his views and suggested need for sustainable development. Among the audience Dr. Nandini Thakur, Ravi Thakur & Dr. Man Singh Rana from G.C. Kullu, Dr. Tara Devi from G.C. Mandi, Dr Himani, Kumaon University, Dr. Hitesh from SPU, Mandi etc. also discussed different aspects of biodiversity and conservation. After listening to panelist and audience, **chairperson**, suggested that comprehensive database on all flora and fauna should be available. He also emphasized on need of experts of taxonomy, study natural ecosystems and analyze the results, need to identify endemic, exotic vulnerable and threatened species. He also emphasized on planned urbanization, judicious use of ecosystem services, need to understand traditional knowledge, need for sustainable harvesting techniques, use of mixed and multiple plantations of native species to revive water table and diversity.

#### **Attainment of objectives**

The conference was able to meet its objectives like understanding of Himalayan ecosystem and critical role of biodiversity within it. The specific benefits derived from the conference are, *inter alia* 1. Provided a platform for different stakeholders. 2. Recommendations for policymakers. 3. The interaction with guests has opened up the possibilities of exploring collaborating projects. This will be pursued further by the Institute post conference. 4. About 100 students of college and institutes benefitted from the experienced researchers from academia, industry and research. 6. The faculty and students presented their research and received accolade for their findings.



(Convener Signature)

**Participation Information:**

<b>S. No</b>	<b>Participation in the event</b>	<b>Nos.</b>
<b>I.</b>	Key-note speakers	14
<b>II.</b>	Senior Scientist	20
<b>III.</b>	Young Scientist	20
<b>IV.</b>	Postgraduate Students	35
<b>V.</b>	Undergraduate Students	10
<b>VI.</b>	Industry persons	1
<b>VII.</b>	Other category (Please specify each category)	5

**Photographs Section:** Please paste high resolution photographs in given spaces below or may be submitted directly on online / email in JPEG format.

**1. Inaugural Session**



**2. General Photograph**





### 3. General Photograph



### 4. General Photograph



(Convener Signature)

NOTE- CONSOLIDATED REPORT OF THE APPROVED EVENT MAY BE SUBMITTED ONLINE / EMAIL WITH HIGH RESOLUTION PHOTOGRAPHS PASTED IN THE REPORT OR SUBMITTED DIRECTLY IN JPEG FORMAT.