

Consultation workshop (Webinar)
on
Himalayan Knowledge Network (HKN) - Bridging Science, Policy & Practice
(Date: 25-06-2021)

(A brief report)

- ❖ **Prof. MPS Bisht**, Director, USAC, Dehradun
 - ❖ Director USAC, highlighted the importance of HKN initiative for the Himalayan state and stated that Unfortunately, the region is often referred as data-deficient (e.g. on long term climate and land use changes), therefore, knowledge and learning to customize policies and practices to IHR specific situations are limited. There exists a big gap of synergy and convergence across disciplines, sectors and actors working on the issues of IHR. He has also highlighted the activities undertaken by USAC.

- ❖ **Dr. G. C. S. Negi**, Scientist & Nodal Person, HKN, GNPNIHE, Kosi-Almora
 - ❖ He presented detailed information on the Himalayan knowledge network (HKN). Stressed upon the need for establishing a centralized system for data/ information management for IHR. NITI Aayog, Government of India, has identified GNPNIHE as a Centralized Data Management Agency (CDMA). Realization of CDMA, however calls for a strong network of knowledge institutions. This has necessitated establishment of "Himalayan Knowledge Network" (HKN). Highlighting the importance of HKN he told that it is proposed to enhance collaboration and networking among all relevant institutions for Himalayan-specific R&D and education and practitioners of conservation and development. HKN would synergies research and academia for addressing pressing environmental challenges for fostering conservation and development outcomes in tune with regional, national and international priorities. Dr. Negi informed that NITI Aayog has also mentioned in his recent report that there should be one place where all research person/authorities can easily get data related to Research and Development.

- ❖ **Dr. Gajendra Singh**, Scientist & Nodal Person HKN, Uttarakhand
 - ❖ He told that HKN will work to promote and ensuring environmental sustainability while identifying options for human development in the state based on innovative researches, communication and participation of all concerned stakeholders. He told that USAC has responsibility to identified two (02) Priority Thematic areas for the sustainable development of the state and prospective institutions/ resource person identification for preparation of thematic documents in consultation with the various research

organizations, universities, line departments and NGOS available in the state.

- ❖ **Dr. Gopal Singh Rawat**, Former Director, WII, Dehradun
 - ❖ Dr. Rawat chaired the discussion session for identification of 02 thematic areas for the Uttarakhand state and highlighted key challenges in the state viz., Habitat degradation, increasing invasive species, forest fire in Biodiversity/ forests, low spring discharge, lowering water table, low water quality, pollution, natural hazards, climate change, urbanization, responsive tourism declining traditional agriculture practices are some key issues highlighted in the deliberation.

In the discussion each speakers are requested to priorities only 2-3 relevant issues pertaining to the state.

- ❖ **Sh. Sargam Singh Rasaily**, Additional PCCF, UKFD, Dehradun
 - ❖ Uttarakhand is very susceptible to earthquake/disaster. Whenever any disaster hit Uttarakhand, we don't have any road network data, which should be included
 - ❖ Doubling farmers income should be another key challenge to be addressed
 - ❖ Historical and meteorological data along with demographic data should also be noticed
 - ❖ Solid waste management should also be included
- ❖ **Prof. S. K. Gupta**, Head of Tourism Department, HNBGU, Srinagar
 - ❖ Responsive tourism should be increased to the state to increase the livelihood options for the inhabitants.
 - ❖ There is need to attain sustainability or a proper planning of tourism. Information is required on transport, destinations, available facilities, medical, accommodation and others.
 - ❖ We have to deal with destination management and need data at micro level for each of the agencies who are involved in the tourism sector.
- ❖ **Sh. R. N. Jha**, Member Secretary, UKSBB, Dehradun
 - ❖ There is huge gap between policymaker and implementers. So, we must have to come up with certain prescriptions to overcome this barrier. Climate change is key issue for the state of Uttarakhand.
 - ❖ Biodiversity conservation and implementation of access and benefit sharing mechanism (ABS).
- ❖ **Prof. Lalit Tiwari**, Director Research, KU, Nainital

- ❖ We want development but not seeing adverse impact of it, therefore, environmentally friendly tourism should be taken care of
 - ❖ Need to develop state level action plan how to involve students of universities in various sectors viz., biodiversity conservation, monitoring, tourism based activities or natural disaster.
- ❖ **Dr. Avinash Anand**, CEO, USWDB
- ❖ Migration commission has also mentioned pasture development as an important aspect in Uttarakhand's progress. The focus should be management of the pastureland of the state so that the fodder quality of the alpine can be sustained.
 - ❖ It would be better to have a separate rangeland management plan for the state of Uttarakhand.
- ❖ **Mrs. Poonam Chand**, Ad. Director, Uttarakhand Tourism
- ❖ Increasing responsive tourism to enhance the livelihood of the inhabitants is key initiative to the state. UNTWO has developed Sustainable Tourism criteria which have since been adopted by GoI, Ministry of Tourism. Therefore, we should have to think towards responsible and sustainable tourism in Uttarakhand.
- ❖ **Dr. Rajesh Khulbe**, Scientist, VIPKAS, Almora
- ❖ Promotion of Agri- horticultural crops and
 - ❖ Natural resource management,
 - ❖ Agriculture and natural resource management are inseparably linked together. Agriculture with nutritional security should also be targeted, and through this agri tourism will become integral part of it.
- ❖ **Dr. Manju Sundriyal**, Scientist, USERC
- ❖ Biodiversity conservation specially, medicinal and aromatic plants, wild edibles, NTFPs should be included.
 - ❖ Rural peoples/communities are immensely dependent on natural resources specially women group. Consideration of these women would be useful for the state.
- ❖ **Dr. Kiran Negi**, HESCO
- ❖ Should target for livelihood and employment opportunity
 - ❖ Horticulture sector along with water resource information should be included.
- ❖ **Dr. Pankaj Tiwari**, AAROHI

- ❖ Waste management in the hills is very critical. Waste management based studies should be encouraged.
 - ❖ Agro-based biodiversity initiatives should be documented, especially where people are following their traditional practices.
 - ❖ Eco-tourism; responsible tourism link with agro-based tourism should be encouraged.
- ❖ **Dr. V.R.S. Rawat**, Former Scientist, FRI
- ❖ Climate change is bound to happen. Mitigation efforts are at global level, world governments efforts are on the way. Extreme climatic events are on increase and more prevalent in Himalaya i.e., cloud bursts, excessive rainfall, flash flood etc. We need priorities for adaptation to climate change at local level for communities in Himalayan region.
- ❖ **Sunesh Sharma, HIMMOTTHAN**
- ❖ Spring shed management should be included for the detailed study.
 - ❖ Climate change / vulnerability assessment for the state would be useful.
- ❖ **Dr. Sandeep Bhatt**, IIT Roorkee
- ❖ Coherency of data is missing. So, the synthesizing the data should be the key part of it.
 - ❖ Scaling of data is another key issue.
- Dr. Pankaj Joshi**, WWF, Dehradun
- ❖ Eco friendly based tourism for the state
 - ❖ Increased conservation education at various level viz., school to university.

Based on the inputs received from various departments following four major areas were identified. It was decided that based on the Government of the Uttarakhand priority any two can be selected for development of the thematic document.

- (i) Disaster Management
- (ii) Responsive tourism
- (iii) Agro-Horticulture Development
- (iv) Biodiversity management

The consultation workshop was concluded with the vote of thanks proposed by Er. Shashank Lingwal, USAC.

Photographs: Some photographs of the webinar

Key challenges in the state

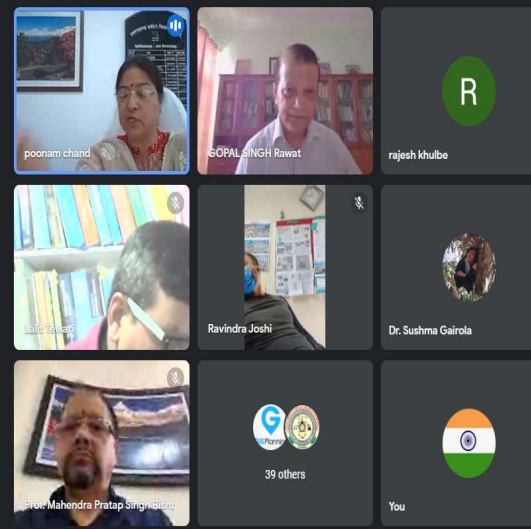
- ❖ **Biodiversity/forest:** Habitat degradation, invasive species, forest fire
- ❖ **Water Resources:** Low spring discharge, water table, low quality, pollution
- ❖ **Natural Disaster:** Landslide, cloudburst, avalanches, earthquakes
- ❖ **Climate Change:** Unusual events, glacier retreat, changes in occupation
- ❖ **Urbanization/migration:** unplanned settlement, swelling of hill towns
- ❖ **Tourism:** responsive tourism, nature/adventure/leisure tourism
- ❖ **Social Infrastructure:** Lack of robust health and education facilities
- ❖ **Culture & Horticulture:** Declining traditional practices, crop raiding



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Towards Responsible & Sustainable Tourism In Uttarakhand

- The Draft Tourism Policy envisions sustainable & responsible tourism in the State. Similarly, the United Nation World Tourism Organization (UNWTO) has developed Sustainable Tourism Criteria, which have since been adopted by Government of India, Ministry of Tourism.
- In other States too, Tourism Policies are increasingly focusing on sustainable & responsible tourism.



List of Participants in
Online Consultation Workshop to develop Network
Under
Himalayan Knowledge Network
Organized by
Uttarakhand Space Application Centre (USAC)
In collaboration with
G.B. Pant National Institute for Himalayan Environment(GBPNIHE)
On June 25, 2021

Sl. No.	Name	Affiliation
1.	Prof. (Dr.) M.P.S. Bisht	Director, Uttarakhand Space Application Centre
2.	Dr. G.C.S. Negi	Sr. Scientist, G.B. Pant National Institute for Himalayan Environment
3.	Dr. G.S. Rawat	Former Director and Dean, Wildlife Institute of India
4.	Sh. S.S. Rasaily	Addl. PCCF, Uttarakhand Forest
5.	Sh. R.N. Jha	Member Secretary, Uttarakhand State Biodiversity Board
6.	Prof. (Dr.) S.K. Gupta	H.N.B. Garhwal University, Srinagar Garhwal
7.	Prof. (Dr.) Lalit Tewari	Kumaun University, Nainital
8.	Dr. Avinash Anand	C.E.O., Sheep and Wool Development Board
9.	Ms. Poonam Chand	Addl. Director, Uttarakhand Tourism Development Board
10.	Dr. Rajesh Khulbe	Sr. Scientist, VIPKAS- ICAR
11.	Dr. Manju Sundriyal	Sr. Scientist, USERC
12.	Dr. VijayrajRawat	Former ADG, Forest Research Institute (FRI)
13.	Dr. I.D. Rai	Scientist, Indian Institute of Remote Sensing (IIRS) –ISRO
14.	Dr. Sandeep Bhatt	Indian Institute of Technology (IIT) – Roorkee
15.	Dr. Harish Chandra Andola	Doon University
16.	Dr. Kiran Negi	HESCO
17.	Dr. Pankaj Tewari	AAROHI
18.	Dr. Sunesh Sharma	Himmothan
19.	Dr. Pankaj Joshi	WWF, Dehradun
20.	Dr. A S Nain	Director Research, Pantnagar University
21.	Dr. VRS Rawat	Former Scientist, FRI
22.	Dr. Ravindra Joshi	GBPNIHE
23.	Sh. Arvind Pandey	Faculty, SSJ University – Almora
24.	Sh. Avdesh Biljwan	Faculty, Central Sanskrit University
25.	Dr. Aruna Rani	Scientist, USAC
26.	Dr. Priyadarshi Upadhyay	Scientist, USAC

27.	Dr. Sushma Gairola	Scientist, USAC
28.	Dr. Gajendra Singh	Scientist, USAC
29.	Sh. Shashank Lingwal	Scientist, USAC
30.	Sh. Pushkar Kumar	Scientist, USAC
31.	Sh. R.S. Mehta	Sr.A.O., USAC
32.	Sh. Sudhakar Bhatt	P.R.O., USAC
33.	Dr. Pradeep Rawat	Ayurvedik Chikitsalaya, Rudraprayag
34.	Sh. Arun Pratap Mishra	Botnical Survey of India (BSI)
35.	Sh. Vineet Pal	GIS Analyst, U.S. Nagar
36.	Sh. D.S. Dhama	GIS Analyst, Champawat
37.	Ms. Deepa Bisht	GIS Analyst, Nainital
38.	Mr. Mohit Bahuguna	GIS Analyst, Haridwar
39.	Ms. Neha Nevedita	GIS Analyst, Almora
40.	Ms. Aarti Joshi	GIS Technician, Almora
41.	Ms. Surbhi Gambhir	CHEA
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43.	Ms. Saumya Agnihotri	DSB Campus, Kumaun University – Nainital
44.	Mr. Hem Pandey	Kumaun University – Nainital
45.	Ms. Aarti Badoni	Kumaun University – Nainital
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47.	Sh. Naveen Chandra	USAC
48.	Sh. Sanjay K Diwedi	USAC
49.	Ms. SonamBahuguna	USAC
50.	Ms. Bhawana Farswan	Intern, USAC
51.	Ms. Aarti Khanduri	Asst. Professor, Sridev Suman University
52.	Ms. Vandana Negi	Sridev Suman University
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60.	Sh. Lalit Singh	HNBGU, Srinagar
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65.	Sh. Pankaj Lohni	Kumaun University – Nainital
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