सत्यमेव जयते
Department of Science and Technology
Ministry of Science and Technology
Government of India

JNU

Stakeholders Workshop on Traditional Knowledge Systems of Leh-Ladakh

Network Programme on Convergence of the Traditional Knowledge Systems for Sustainable Development of the Indian Himalayan Region—A Task Force under National Mission on Sustaining the Himalayan Ecosystem (NMSHE)

The Himalaya constitutes a unique geographical and geological system and recognized as a diverse social, cultural and environmental entity globally. The Himalaya is also described as "Abode of Gods". The Indian Himalayan Region (IHR) covers about 17% of the country's geographical area along its northern boundary and inhabited by 4% of its population. Stretching 2500 km in length from Jammu and Kashmir in the west to Arunachal Pradesh in the east, the region also includes 10 more states of the country viz., Himachal Pradesh, Uttarakhand, Sikkim, Meghalaya, Manipur, Mizoram, Nagaland, Tripura, Darjeeling district of West Bengal and Hill Areas of Assam. Multiple ethnic compositions are a remarkable feature of the IHR as it is home to nearly 25% of the total number of indigenous groups of the country. These groups alongside other local communities are the repositories of a vast array of traditional knowledge. Existence of a number of traditional institutions reflects on the robust social capital in the region.

Being the youngest and the loftiest mountain chain in the world, the inherent and growing vulnerabilities of this fragile ecosystem particularly in the wake of climate change have been widely recognized. Evidences such as **Leh in 2010, Kedarnath in 2013** and **Kashmir in September, 2014** point out increasing frequency and intensity of climate change induced extreme weather events in the region in recent times.

Government of India (GoI) attaches highest priority to manage the Himalayan ecosystem sustainably which is critical for ensuring the ecological security of the country. Presence of a large number R&D institutions, universities, civil society organizations and their active engagement in the implementation of various ongoing conservation and development related programmes in the region reflect on the emphasis laid on the protection of Himalayan environment by the Government. In addition, to give a directional shift to the development, GOI has released National Action Plan on Climate Change (NAPCC) in 2008 with 08 missions to address critical issues impinging on the sustainable development of the country. The National Mission on Sustaining the Himalayan Ecosystem (NMSHE) is the only area specific mission under NAPCC. The mission is being coordinated by Department of Science & Technology, GoI, New Delhi. The NMSHE envisages laying stress on ecological dimensions of development of the IHR rather than the conventional development approaches followed thus far at colossal ecological, socio-economic and cultural costs.

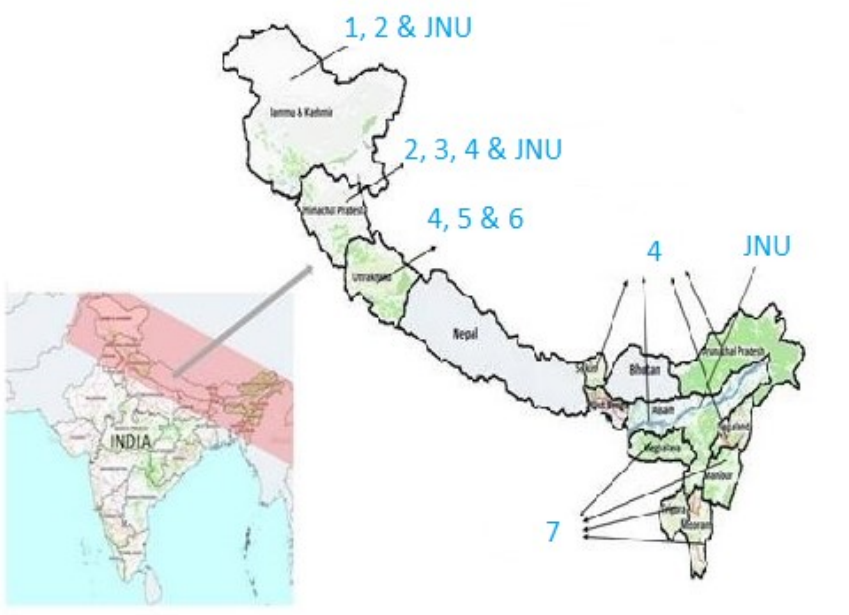
The new approach in turn focuses taking advantage of rich traditional knowledge systems (TKS) of multiple local societies representing several hundreds of years of long natural experiments in organizing life successfully in the Himalaya. However, in present times the knowledge systems across the region are eroding fast under the influence of modernity and the window to learn from such systems is shrinking alarmingly. Recognizing the potential of TKS in finding sustainable solutions for the problems of the region, a Task Force titled "*Network Programme on Convergence of Traditional Knowledge Systems for Sustainable Development in the IHR*" has been constituted and operationalized recently under NMSHE. The Task Force is expected to provide a suitable platform for documentation and protection to the rich TKS of the IHR communities. The initiative could go a long way in helping formal decision support systems to enhance the life-sustaining role of the Himalayan ecosystem for millions of people residing within and beyond its boundaries.

Traditional Knowledge System of Leh-Ladakh

Defining Traditional Knowledge and Knowledge Systems

- *Traditional knowledge can be defined as a cumulative body of local knowledge, know-how, skills and practices that are developed, sustained and handed down through generation to generation within a community, often forming part of its cultural or spiritual identity (www.wipo.int/tk/en/tk/).*
- *Occasionally it also encompasses scientific and other knowledge gained from outside which over a period of time becomes part of local knowledge systems.*
- *Traditional Knowledge Systems encompass knowledge holders, their practices, cultural beliefs, and institutions that organize production, transfer and use of the knowledge (Tengo et.al, 2014; Ambio, 43:579-591).*

Jawaharlal Nehru University (JNU), New Delhi has been entrusted with the task to coordinate and implement the activities of the aforementioned programme with the help of eight network partners across the region. The network partners and their responsibilities vis-à-vis different IHR states have been depicted on the map.



We and our NETWORK PARTNERS in the IHR

1). University of Kashmir, Kashmir, 2). CAZRI, Jodhpur, 3). IHBT, Palampur, 4). GBPIHED, Almora, 5). WII, Dehradun, 6). Doon University, Dehradun, 7). NEHU, Shillong, 8). Vigyan Prasar, New Delhi, 9). JNU, New Delhi

Specific Objectives of the Task Force

- Document, validate & analyze Traditional Knowledge Systems (TKS) in IHR.
- Understand linkage between TKS and Conventional/Scientific Knowledge in order to identify promising TKS for improvement and adoption.
- Capacity building of institutions on TKS for Sustainable Development in IHR.
- Strategic framework for TKS management in IHR in the face of Climate Change adaptation & mitigation; and
- Create digital library based on documented TKS.

Significance of Leh-Ladakh for the Programme

- Of the 10 biogeographic zones of India, three viz., the Himalayan, the Trans-Himalayan and North-East India fall in the IHR.
- Leh-Ladakh represents the major portion of the trans-Himalayan biogeographic zone of the IHR where temperatures remain well below sub-zero and the area cut off from the rest of the country during long winter season.
- Due to its unique location, peculiar climate and rich cultural heritage, it is important to understand how the robust TKS of various indigenous groups of the region helping them in organizing life successfully under such challenging climatic conditions.
- Literature survey and direct observations based reports by researchers from JNU and CAZRI reveal rich TKS of local indigenous groups viz., Boto, Garra, Mon, Balti, Changpas, Dards, and Brokpas concerning weather forecasting, health care, farming systems, food and food storage, livestock husbandry etc.

The Objectives of the workshop

- Introducing the scope and objectives of the programme before local stakeholders in Leh-Ladakh.
- Letting them know about the broad approach and methods of documentation and the envisaged benefits of the programme for local knowledge holders.
- Learning about the aspirations of local stakeholders from the Task Force and soliciting their active participation in the implementation of its activities in Leh-Ladakh.

Envisaged major benefits of the programme for local stakeholders

- The programme will highlight the rich TKS and cultural heritage of the region comprehensively and in the process help document and digitize a whole range of local knowledge, skills, practices and innovations.
- Identification of traditional farming, agroforestry, and agro-horti-pastoral systems that face minimum risks and are resilient from climate change standpoint and enhanced understanding on traditional coping strategies to survive harsh climatic conditions and avoid risks etc.
- Bringing together information for modern conservation and development frameworks on relevant indigenous knowledge, skills and practices to strengthen participatory planning and implementation approach of conservation and development programmes in Leh-Ladakh.
- Help highlighting scientific evidences behind TKS cutting across themes and a number of ideas of high applied value for future research and development of the region.
- Identification of TKS based best practices facilitating development of hybrid technologies for minimizing human drudgery and local climate change impacts.
- Creating new opportunities for livelihood earning.
- Capacity building of a large number of individuals and local institutions for improving communication and reinvigorate traditional knowledge systems etc.
- A framework for protection and management of the documented TKS of various groups of Leh -Ladakh as per Biological Diversity Act (2002) & Rules (2004) and internationally laid down procedures.

Organized by:

School of Environmental Sciences
Jawaharlal Nehru University
New Delhi – 110067

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Leh, Ladakh

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