

PRESENTATION

ON

**CONSERVATION & SUSTAINABLE DEVELOPMENT
OF THE HIMALAYA**

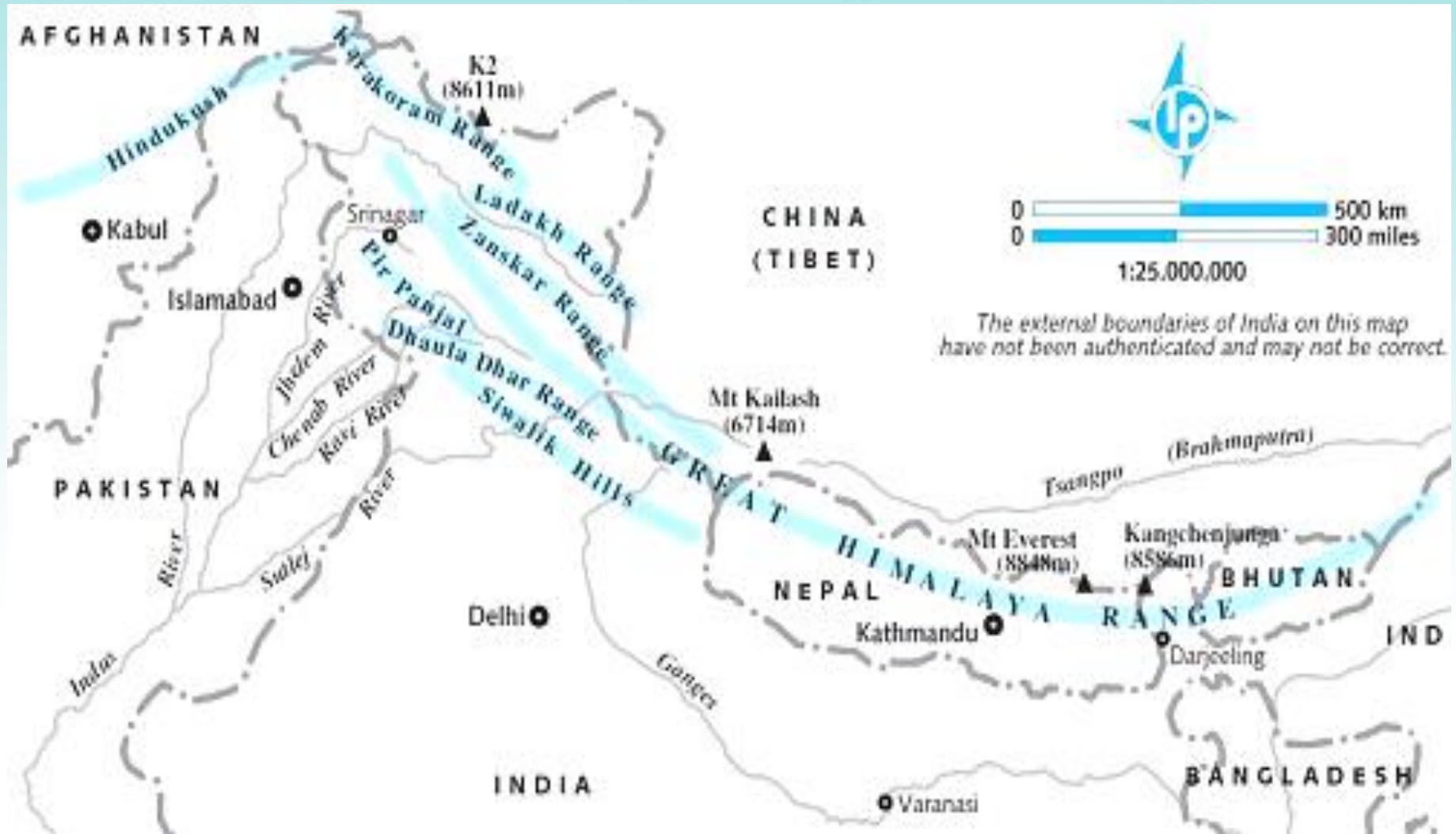
BY

MOUNTAIN DIVISION

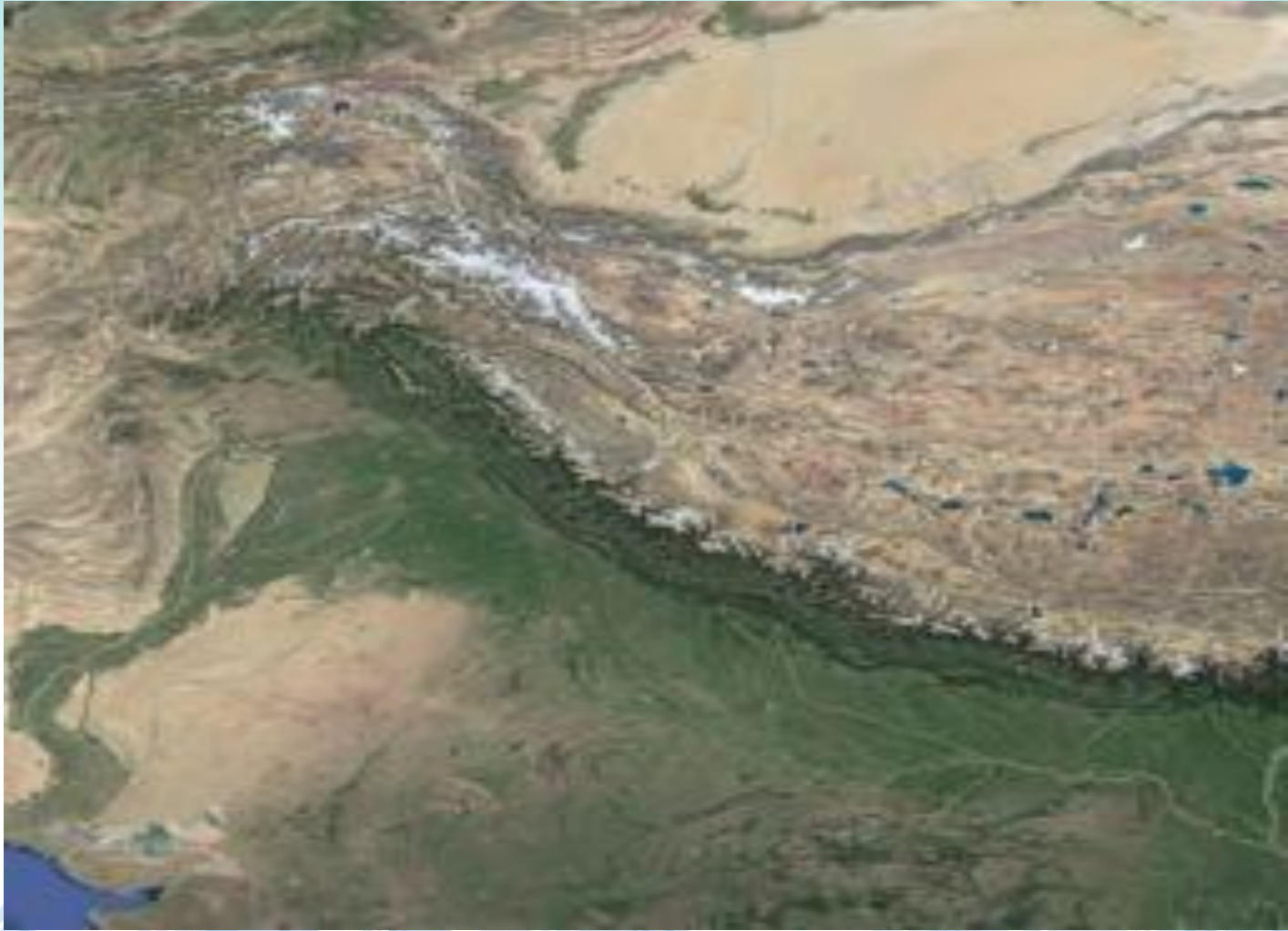
MOEF&CC

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Himalayan Range



The Himalayan Range



The Himalaya – Some Facts

- The Himalaya is the **tallest mountain range** in the world spread across **8 countries**.
- **Youngest mountain range in the world**. Formed about 10 millions years ago. Stretches across **2400 km**. Extremely fragile and prone to landslides and erosion.
- Highest number of **8000m** peaks (**14**) such as **Mt. Everest, K2, Kanchenzonga, Annapurna, Makalu, Cho Oyu, Dhaulagiri, Nanga Parbat** , etc
- Categorised as (a) Western Himalaya (**Afghanistan, Pakistan, India**), (b) Central Himalaya (**India, Nepal, Tibet Autonomous Region of China**), (c) Eastern Himalaya (India, China, Bhutan) and (d) Far-eastern Himalaya (**India, Myanmar, China, Bangladesh**)

The Himalaya – Some Facts

- Source of the mighty Ganges, the Indus, the Brahmaputra, the Yangtze, etc and central to 10 River Basins of South Asia, Central Asia and China.
- The combined drainage basin of the Ganges, the Indus and the Brahmaputra are source of water for about 600 million people in the mountains as well in the plains of India.
- Almost the entire population of all countries across the Pan-Himalayan Region are dependent upon the Himalaya as the **source of livelihood and ecosystems services & Goods**
- Supports diverse cultures and communities across the Pan-Himalayan region
- Most of the human population live in abject poverty with poor infrastructure and standard of living.

MAJOR PROGRAMMES OF MOUNTAIN DIVISION

- Implementation of conservation & Sustainable of the Himalaya through **GB Pant National Institute of Himalayan Environment & Sustainable Development**
- Nodal Division for implementation of the **National Mission on Himalayan Studies (NMHS)**
- Regional Cooperation with countries of the Himalayan Range through **ICIMOD**

Conservation & Sustainable Development of the Himalaya

- Under the **NMHS**, R&D projects are funded by the Ministry through 100% Central assistance as:
 - **Large Grants** (> Rs 5 crores)
 - **Medium Grants** (upto 5 crores)
 - **Small Grants** (upto 50 lakhs)
- GB Pant National Institute, Almora is the **Nodal Agency** of the Ministry for implementation of the **National Mission on Himalayan Studies** (NMHS)
- A total of **27 projects** were released during **2015-16** for a tune of **Rs 43.27 crores**

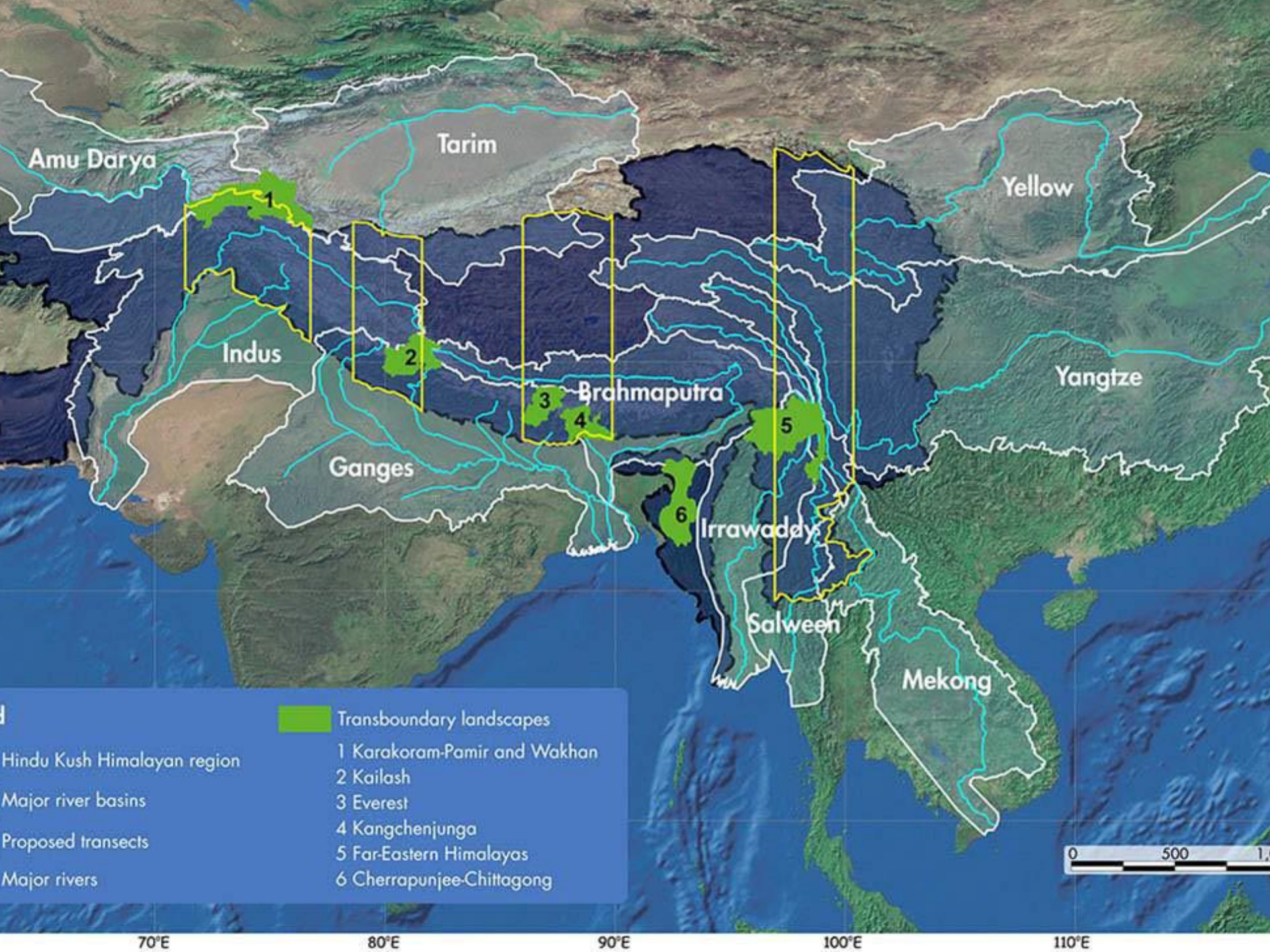
International Centre for Integrated Mountain Development (ICIMOD)

- ICIMOD is funded by **donor countries** & **international agencies across the world** for **integrated mountain development programmes & initiatives across the Himalayan region**.
- ICIMOD functions **as a facilitator** for the **8 members countries** of the Himalayan Region – **India, China, Nepal, Myanmar, Pakistan, Afganistan, Bhutan and Bangladesh** for **conservation and sustainable development of the Himlaya**.
- MoEF&CC is the **Focal Point in the GOI** on activities pertaining to ICIMOD
- GB Pant Institute is the **Nodal Institution** for ICIMOD activities

MAJOR INITIATIVES OF ICIMOD

Three Trans-boundary Landscape Initiatives :

- 1. Kailash Sacred Landscape Conservation and Development Initiative (KSLCDI)** (China, India & Nepal)
- 2. Kanchenjunga Landscape Conservation & Development Initiative (KLCDI)** (Bhutan, India & Nepal)
- 3. Landscape Initiative for Far Eastern Himalayas (Hi-LIFE)** (China, India & Myanmar)



ISSUES

- Problems of the **12 Himalayan States** of the **Indian Himalayan Region** (IHR) vary from State to State
- **Variable climate & rainfall pattern** (extreme arid to extreme wet), **different of ecosystems** (ranging from **cold deserts to sub-tropical evergreen rainforests**, diversity of cultures & indigenous communities
- Different farming practices – from subsistence farming to shifting cultivation
- Strategies and plan of action therefore i) **need to be localised** and ii) **specific to mountainous/hilly region** and iii) **specific to each of these States/regions.**

STRATEGY FOR CONSERVATION OF HIMALYAN ECOSYSTEM

- GB Pant **Institute** upgraded recently in June 2016 as **National Institute** to address issues across the 12 Himalayan States in our country.
- The mandate of the Institute has also been changed from **Conservation of the Himalayan Environment** to **Sustainable Development of the Himalayan Region** for addressing environmental, economic and social issues and concerns.
- The IHR is an **integral unit** and issues of livelihood, conservation of natural resources leading to sustainable development have to be addressed in an integrated manner.

STRATEGY FOR CONSERVATION OF HIMALYAN ECOSYSTEM (contd)

- Focus on 4 broad thematic areas – (1) Food security, (2) Water security (3) Livelihood issues including Infrastructure development & Quality of life and (4) Conservation of natural resources
- Must prioritise critical issues which are specific to various regions/State across the Pan Himalayan States from Leh – Ladakh in J&K in the western Himalayas to Manipur-Arunachal Pradesh in the eastern Himalayas.
- Focus on the i) priority areas of concern, ii) policy initiatives and iii) frame & implement strategies through greater stakeholder participation involving State Governments, local communities, researchers, NGOs, etc for sustainable development of the Himalayan Region

Specific Areas of Action (contd.)

- **Development and application of technologies** for water & soil conservation specific to mountainous/hilly region
- **Access to Simple cost effective technologies** on water & soil conservation in terms of water & food security.
- **Low cost housing using materials** resilient to natural disasters.
- **Catchment area protection** – identify critical patches across the IHR which require urgent remediation & and conservation
- **Development of infrastructure** and civic amenities such as roads, schools, Hospitals & health care centres, etc

SPECIFIC AREAS OF ACTION (contd.)

❑ Solid Waste Management (SWM) by involvement of local communities for:

- Segregation of wastes
- Manure from organic wastes
- System of waste collection in villages
- Integration with '**Swatchh Bharat**' campaign

❑ Selection of villages for:

- Demonstration projects
- Best Practices
- Success stories
- Involving youth and women to replicate the technologies/ projects in all villages and to spread awareness

Specific areas of Action (contd)

➤ Identify and promote sectors leading to minimum env impacts and maximum economic returns:

- Manufacturing sector (not using/using less water)
- Medicinal Plants, Aromatic Oils
- Non-Timber Forest Produce (NTFP) and Cottage industries
- Social forestry, community/village forestry, Agroforestry
- Raw materials for pharmaceutical industry
- Organic farming
- Horticulture, Export of Flowers & Fruits grown in farms

➤ Sectors that should be avoided:

- Mining
- RED category of industries
- Other energy and water intensive industries
- Industries generating lot of solid wastes

SPECIFIC AREAS OF ACTION (contd.)

- Establishing linkages between local communities with markets that would give maximum returns.
- Buyers-sellers linkages
- Patenting and Geographical Indicators (GI) of products of the IHR such as the 'Pashmina Wool' and other Himalayan products & biodiversity – similar to 'Darjeeling Tea' and 'Basmati Rice'
- Access to benefit sharing, eliminating/reducing middlemen
- Establishment of cooperatives especially for women
- Access to micro credits, introduction to banking services
- Access to Mobile Apps and use of Internet for accessing information on markets giving max returns, technologies and conservation measures .

SPECIFIC AREAS OF ACTION (Contd)

- GB Pant Institute to serve as a Knowledge Platform for dissemination of:
 - Best practices
 - Traditional Knowledge
 - Cost-effective technologies
 - Cost-effective housing using materials & architecture which are resilient to natural disasters – earthquakes, floods, landslides)
 - Conservation measures of water, soil, other natural resources
 - Promoting horticulture & orchards & Dairy farming
- **GB Pant could also network with other institutions and disseminate information on these areas.**

SPECIFIC AREAS OF ACTION (Contd)

- Establish greater synergies with the State Governments of the Pan-Himalayan States
- MoEFCC/GB Pant could be Members of State Dept Committees of various States for policy interventions, adoption of best practices, measures, success stories, etc and for their wider application.
- GB Pant could be Member of Various Technical Committees on cost-effective technologies and conservation measures
- Dissemination of information to local communities through awareness campaigns, pamphlets with FAQs on the above areas in simple text and in local languages

Tourism

- Inputs for preparation of a **Tourism Policy and Guidelines/Code of Conduct for tourists/visitors to the IHR** (Eco-tourism and Spiritual Tourism) specific to Pan Himalayan States
- **Carrying capacity studies** based on scientific principles and assist States for appropriate policy interventions for places of eco-tourism and Religious tourism (eg. Sikkim)
- Identification of **more places/spots for promoting eco-tourism** to ease pressure on existing places of tourism.
- **Identify new trek routes** and developing villages and infrastructure and promoting homestays along the trek routes for socio-economic development of the region.
- **Fiscal measures** (such as levy of tax or cess) for conserving tourism areas

Further Action required by Mountain Division

❑ **A number of Ministries, Departments and R&D Institutions are involved in different aspects of the IHR such as:**

- **Climate Change - Impact on glaciers, stress on agriculture, water, and impacts on the livelihoods of the communities of IHR**
- **Livelihood Issues**
- **Agriculture and farming practices**
- **Water Resources – rivers, lakes of the IHR**
- **Tourism**

Further Action required by Mountain Division

- ❑ The Ministries/Depts and R&D Institutions involved in different aspects of the IHR concerning areas include:
 - **MoEF&CC** (National Mission on Himalayan Studies) (NMHS)
 - **DST** (National Mission on Sustainable Himalayan Ecosystem) (NMSHE)
 - **M/o Earth Sciences** (Glacial studies)
 - **India Meteorology Dept** (IMD) (Impacts of Climate Change on temperature rise, weather patterns, floods, etc)
 - **Dept of Space/Remote Sensing Agencies** for mapping of the IHR in terms of changes
 - **Ministry of Agriculture**
 - **Ministry of Water Resources**
 - **Ministry of Tourism**
 - **NITI Aayog**

- ❑ Information & data of various Studies, Reports and documents available need to be brought into a **common knowledge platform** to avoid duplication of efforts and for use of data and knowledge generated by various agencies in conservation of the IHR

Further Action required by Mountain Division

- ❑ Participate in Inter-Ministerial Groups/Committees for developing a **'Mountain Specific Policy'** on the IHR
- ❑ **Sustainable Development Goals (SDGs)** identified from **Rio+20 Summit** have **3 SDGs** specific to **Mountain Ecosystems**. These are:
 - **SDG-6** : Availability & sustainable management of water & sanitation for all
 - **SDG-15.1** : Target by 2020, **ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands**
 - **SDG-15.4** Target by 2030, **ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.**
- ❑ **Our programmes and policies should be aligned and dovetailed to achieving these goals**

THANK YOU

