NMHS Fellowship Guidelines and Broad Thematic Areas (BTAs)

A. General Guidelines:

- 1. The Institutions/organization already awarded fellowships in 2017-18 will not be considered for fellowships in current year.
- 2. Special focus will be on unrepresented IHR states especially the North-eastern Himalaya, so preference will be given to the Fellowship proposals from such areas.

B. Indicative list of identified Thematic Areas of Work (TAW) to be covered under NMHS Fellowships.

1. Water Resource Management

Water Security through rejuvenation of springs and catchments;

- Developing methodologies and templates on inventorization and rejuvenation of the natural springs in the Himalayan Watersheds towards increasing the water availability at watershed scale;
- Technology standardization for water harvesting and thus improving the efficacy of water availability round the year;

Study of Hydropower Development in the IHR;

- Creating new database on hydropower potential and carrying capacity assessment of the Hydropower in IHR basins;
- Methods of cumulative/strategic impact assessment of hydropower at basin scale

Assessment of water-induced hazards;

- Monitoring and modeling for prediction of hazards, i.e. inundation, flashfloods and landslides;
- Development of early warning systems

2. Livelihood Options and Employment Generation

Promoting Bio-resource Planning for Rural Development;

- Digital database and model generation on the Himalayan resource status, availability and use-patterns;
- Testing field models for bio-resources management plan at the Himalayan village ecosystem level including integrated eco-restoration models for degraded wasteland;
- Carrying Capacity studies on eco-tourism opportunities in the Himalayan ecosystem;

Up-scaling tested eco-friendly economic activities for improved livelihoods and employment generation;

 Adoption/adaptation studies of tested farming options/ technologies for improved livelihood and rural employment generation;

> Database Development on Himalayan Indigenous Knowledge Systems (IKS);

- Operational database on the Himalayan Indigenous Knowledge System;
- Digital Library on the Himalayan IKS;

Technology development and backstopping;

• Development of appropriate rural technologies for income generation.

3. Biodiversity Conservation and Management

- Mountain Biodiversity Database and Information System (MBDIS);
 - Formation of Mountain Biodiversity Database and Information System;
 - Establishment of Mountain Biodiversity Network in association with State Biodiversity Boards (SBB);
- Assessment of ecosystem health and harnessing potential for overall development by involving SBB and BRs in IHR;
 - Creation of ecosystem integrity profiles for critical Himalayan ecosystems;
 - New assessment, evaluation and development approaches for ecosystem health and services;
- Promoting recovery of threatened species by involving state and institutional partners;
 - Establishment of field based recovery models of threatened Himalayan species particularly in the degraded ecosystem across the IHR;
- Up-scaling outreach through conservation education;
 - Sensitization/motivation of educational Institutions on nature learning

4. Skill Development and Capacity Building

- Creation of different delivery systems of appropriate rural technologies through skill enhancement;
 - Increased, improved and alternative livelihood options for farmers, particularly for marginal, BPL ones and other weaker sections of the Himalayan society in different states;
- Land management practices for improved livelihoods;
 - Adoption/ adaptation of tested options/ technologies for improved livelihood in the IHR;
- Documenting and valuing traditional ecological, ecological knowledge and practices;
 - Validation and promotion of Himalayan Indigenous Knowledge System (IKS);
 - Exploring the possibilities for Intellectual Property Rights (IPR) on selected IKS.

5. Infrastructure Development

- Options for Ideal and safe Himalayan Habitat
- Assessment of technical and financial viability.

6. Physical connectivity

- Options for all weather connectivity for improving accessibility
- Financial viability assessment for such projects

7. Handling of hazardous substance

- Identification and quantification of hazardous materials used in IHR context
- Safe transport, storage and handling of Hazardous material in Himalaya and its financial viability