



उत्तराखण्ड अंतरिक्ष उपयोग केंद्र  
विज्ञान एवं प्रौद्योगिकी विभाग  
उत्तराखण्ड



वन विभाग, उत्तराखण्ड

## **Memorandum of Agreement (MoA)**

**BETWEEN**

**UTTARAKHAND SPACE APPLICATION CENTRE**

**AND**

**Uttarakhand Forest Research Wing**

**FOR**

**IMPLEMENTATION OF VARIOUS RESEARCH ACTIVITIES  
IN THE STATE OF UTTARAKHAND**

**Program Period 2019-2022**

## Memorandum of Agreement (MoA)

*For scientific collaboration and knowledge sharing on various programme activities  
for the state of Uttarakhand*

**WHEREAS**, Uttarakhand Space Application Centre, (hereinafter referred to as USAC) is an autonomous institution under the Department of Science and Technology, Government of Uttarakhand and was established in 2005 with its headquarter at Dehradun. USAC is registered as a 'Society' under the 'Societies Registration Act 1860'. Besides being notified as a nodal agency for creation of the State Natural Resources Management System (SNMRS), the centre is expected to act as the hub for data repository for all primary and derived layers based on digital interpretation of remote sensing data, vectorization and interpretation of other ancillary data. USAC is mandated to provide scientific and technical support to the user departments in their programs and activities. The centre is expected to carry out its programs in active collaboration with line departments to create a decision support system for developmental planning. This would include forest resource management, water resources, agriculture and horticulture, developmental communications in the form of telemedicine and tele-education, disaster forewarning system, rural development through micro-watershed development programmes and several other programs.

Address: Uttarakhand Space Application Center (U-SAC), 92, Phase II,  
Vasant Vihar, Dehradun, Uttarakhand (India) 248006

Overall guidance: Director, Uttarakhand Space Application Centre, Dehradun

Contact person: Dr. Gajendra Singh, Scientist/Engineer-SC

Phone: +91-135-2762098 and 2763393 Fax +91-135-2769851

E-mails: usac\_hq@yahoo.in, mpbisht@gmail.com,  
gajendrawat@yahoo.com

**WHEREAS**, Uttarakhand Forest Research Wing (hereinafter referred to as UFRW), a government body under Uttarakhand Forest Department, with its headquarter at Haldwani, Distt. Nainital. UFRW is engaged in research led scientific conservation of biodiversity and management for sustainably increasing productivity of forests, NWFP, other natural resources for development of various aspects of biodiversity, forestry, agro forestry, natural resources, eco-tourism and livelihood options of forest

dependent communities for meeting the challenges of increasing demands, environmental stability and other concerned issues.

Address : Office of the Conservator of Forest, Research  
Uttarakhand, Haldwani, Distt. Nainital.  
Contact person: Conservator of Forest (Research)  
Phone & Fax: +91-5946&235136  
E-mail: cf\_fresearch@rediffmail.com

### **General Objectives of Agreement**

There are several avenues (eg., Biodiversity assessment, mapping and monitoring, MAPs, Orchids, RETs, ecosystem services assessment, training programmes) where, USAC and UFRW can generate information to the benefit of one and all for the state of Uttarakhand. USAC would support for developing Geo-Spatial Database in forestry sector in collaboration with UFRW.

Thus, having recognized the common objectives and realized the need for a close collaboration for implementation of the mutually agreed activities within the State of Uttarakhand, both parties agree to sign this Memorandum of Agreement (LoA) as described in the following sections with clear description of roles and responsibilities of both the parties.

Uttarakhand Space Application Centre, Dehradun and Uttarakhand Forest Research Wing, Haldwani hereby enter into a Memorandum of Agreement (hereinafter MoA) for carrying out collaborative research and exchange of knowledge on Medicinal and Aromatic Plants (MAPs), Orchids, Rare, Endangered and Threatened (RET) species distribution etc, for the state of Uttarakhand.

This MoA is aimed at strengthening collaboration between USAC and UFRW towards scientific exchange in the area of biodiversity and conservation in the state of Uttarakhand and knowledge sharing.

### **Duration of Agreement:**

Three years from the date of signing MoA and extendable as per the requirement of the state and mutually agreed by both the parties.

## **Roles and Responsibilities of USAC**

- i. Provide technical inputs to the officials of UFRW dealing with geospatial analysis of RETs, MAPs and other natural resources of the state.
- ii. Support officials of UFRW in terms of local knowledge on the status of distribution of MAPs, RETs and Orchids in the state of Uttarakhand.
- iii. Provide technical inputs in implementation of Participatory Natural Resource Management Plans, Extension and Education activities including GIS application in different research projects.

## **Roles and Responsibilities of UFRW**

- i. Provide support in terms of harmonization/ information on established long term monitoring plots and ground truth verification thereof.
- ii. Provide logistic support (accommodation etc.) to the USAC officials to carry out various research on MAPs, Orchids, RETs and various natural resources in the state of Uttarakhand.
- iii. Provide various baseline information on the status of various habitats and provide exposure visits to the officials of USAC.

## **Joint Responsibilities**

- i. Academic exchange among the scientists/officials and researchers in the areas of mountain biodiversity and sensitive habitats
- ii. Participation in major events and workshops especially dealing with the geospatial analysis of MAPs, habitat analysis and natural resource mapping
- iii. Planning joint field surveys and assessments, sharing of knowledge and techniques
- iv. To conduct joint workshops and awareness programmes for various stakeholders of the state.


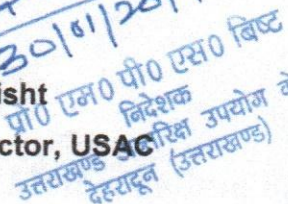
## **Financial Implications:**

UFRW would meet out the cost as per the requirement of objectives on annual basis. USAC and UFRW would also explore the possibilities to have joint long-term projects from various external funding sources/ agencies.

Signed on this day of 30th January 2019 at place .....

Signed on Behalf of  
Uttarakhand Space Application  
Centre, Dehradun

Signed on Behalf of 30/01/2019  
Uttarakhand Forest Research Wing,  
Haldwani

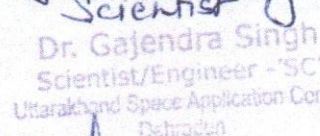
  
Name: Dr. MPS Bisht  
Designation: Director, USAC  
Seal:   
प्रति एमओ पीओ एसओ बिष्ट  
निदेशक  
उपयोग केन्द्र  
उत्तराखण्ड  
देहरादून (उत्तराखण्ड)

Name: Sanjeev Chaturvedi  
Designation: Conservator of Forests (Research)  
Seal: Conservator of Forests  
Research Circle  
Uttarakhand, Haldwani

Witness 1:

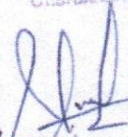


Witness 1:

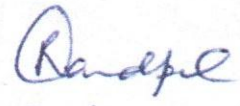
Name: Dr. Gajendra Singh  
Designation: Scientist  
  
Dr. Gajendra Singh  
Scientist/Engineer - 'SC'  
Uttarakhand Space Application Center  
Dehradun

Name: J. C. Joshi  
Designation: Dy. Conservator of Forest  
Dy. Conservator of Forest  
Research-Uttarakhand  
Nainital

Witness 2:

Name: Shashank Lingwal  
Designation: Scientist  


Witness 2:

Name: R. C. Kandpal  
Designation: Assistant Silviculturist  
Silva Sil. Uttarakhand  


Shashank Lingwal  
Scientist/Engineer - 'SC'  
Uttarakhand Space Application Center  
Dehradun