

Department of Geography  
Kumaun University, Nainital, Uttarakhand, India

**EQUIPMENT UTILIZATION AND SHARING PLAN**

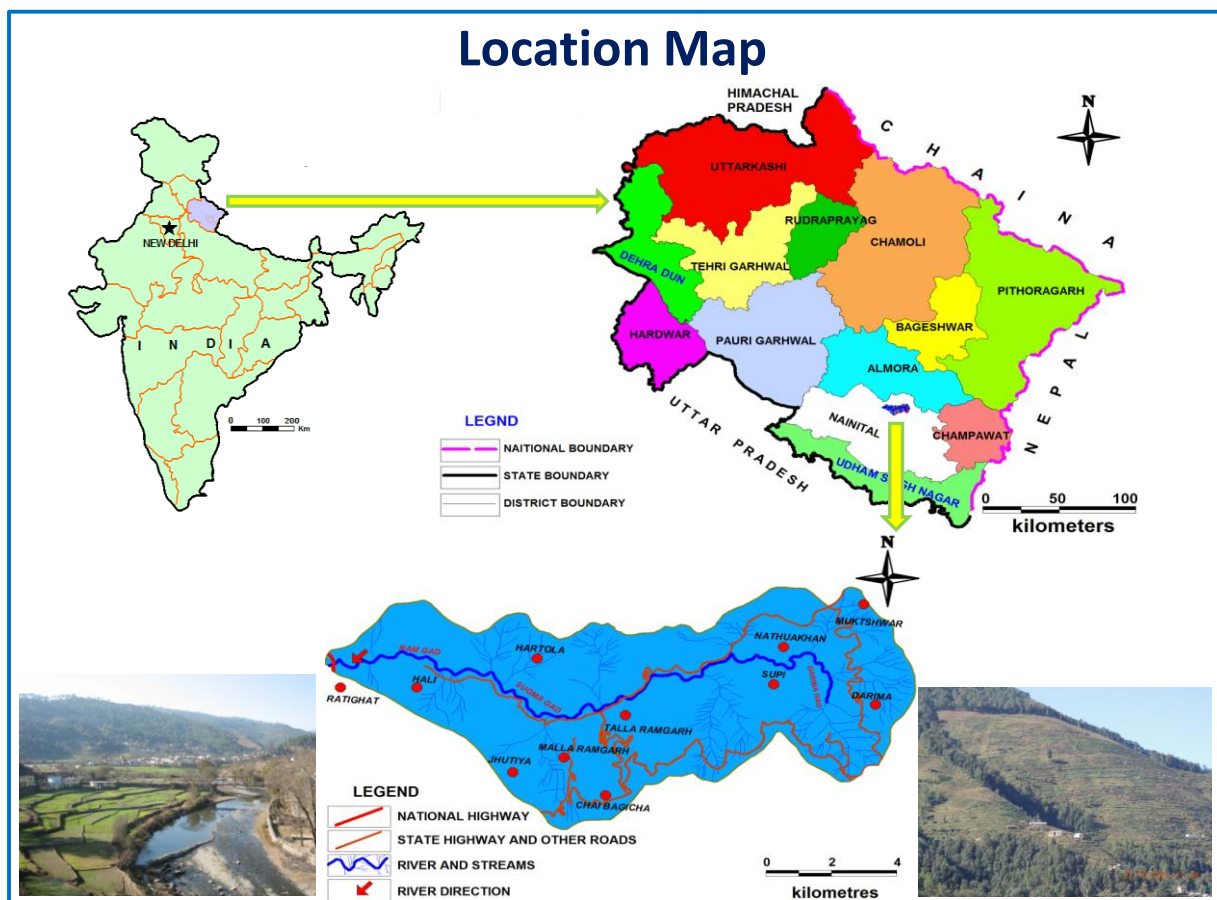
**A. Lab Equipment: Computers Procured under SUNRAISE Project**

S. No.	Programmes	Courses	Utilization Plan
1	M.A./M. Sc	<p><b>Course Components:</b> (i) Natural Resource Management; (ii) Integrated Watershed Management; (iii) Integrated Mountain Development with Special Reference to the Indian Himalaya; and (iv) Climate Change, Impacts and Adaptation in Himalaya</p> <p><b>Computer Application Requirements:</b> (i) Remote Sensing and GIS Applications; (ii) Three dimensional terrain modelling; (iii) Hydrological modelling of watersheds; (iv) Flood early warning system; (v) Development of local level climate scenarios; (v) Analysis of rainfall pattern; (vi) Landslides modelling</p>	<p>The Computers and Printer will be installed in RS-GIS Laboratory of the Department of Geography, Kumaun University, Nainital under the administrative control and responsibility of the Department of Geography. Laptop will be used during the field work by the students</p> <p>The machines will be accessible for use to M.A./M.Sc. and Ph.D. Students of Geography and other subjects.</p> <p>In order to ensure the wider utilization of the facility a roster of use by different categories of students will be developed and implemented in consultation with all concerned Departments of the University under the supervision of the Department of Geography.</p>
2	Ph.D. Course Work	<p><b>Course Components:</b> (i) Introduction of Aerial Photographs, Satellite Data; (ii) Global Positioning System (GPS); (iii) Geographical Data and Geographic Information Science</p> <p><b>Computer Application Requirements:</b> (i) Interpretation of Satellite Data and Computer Aided Mapping; and (ii) Application of Geographical Information System (GIS); Global Positioning System (GPS); Data Integration and Modelling. The similar components are included in the Ph.D. Course Work of other disciplines, such as botany, forestry and Geology</p>	<p>The Department of Geography will depute one of its faculty members as overall in-charge of Computer Facility who will always ensure the wider utilization of the facility during as well as beyond the life of the project.</p> <p>Besides, the normal utilization of the computer facility by the M.A./M.Sc. and Ph.D. Students of the University; we also propose the utilization of high configurations machines for the capacity building of local level government agencies in the application RS, GPS and GIS in mountain specific development planning level planning.</p>
	Ph.D. Research	<p>More than 75% Ph.D. Students in Geography and other allied disciplines propose the applications of Computer, Remote Sensing, GIS and GPS in their research</p>	
3	Training Programmes for Local Government Officials	<p>The Department of Geography organizes Capacity Building Training Programmes for local level government departments in the development of Natural Resources Database Management System (NRDMS), Disaster Management; and Climate Change Impact Assessment from time to time. The Training Modules include the use and demonstration of GIS, RS and GPS.</p>	<p>In view of this, RS, GPS and GIS application Training Programmes and Workshops will be organized, particularly during summer and winter vacations in the University when the computer laboratory will not used by the students.</p> <p>The maintenance of all the computers procured under the project will be responsibility of the Department of Geography and University.</p>

**B. Community based Weather Equipment Installed in the Rural Areas of District Nainital:**

- In order to build the capacity of rural communities, particularly for improving women [who are the primary resource developers in the Himalayan mountains] direct access to climate information we have installed low cost automated and manual weather equipment in the Ramgad Watershed located in the Middle Himalayan Ranges of District, Nainital, Uttarakhand.

**Figure 1: Location Map of Ramgad Watershed**



- The automated weather station are located at two villages, and manual equipment have been installed in 7 villages of the Ramgad Watershed. The women have been trained in the collection and analysis of weather information.
- The information is collected after every 24 hours, the climatic trends of month, agricultural season and of the year are presented and discussed in the village meeting every month.
- The students and faculty of the network member institutions of the project are most welcome to visit the weather equipment sites, interact with the community and observe the monitoring process.

Figure 2: Location of the Community Based Weather Stations in Ramgad Watershed

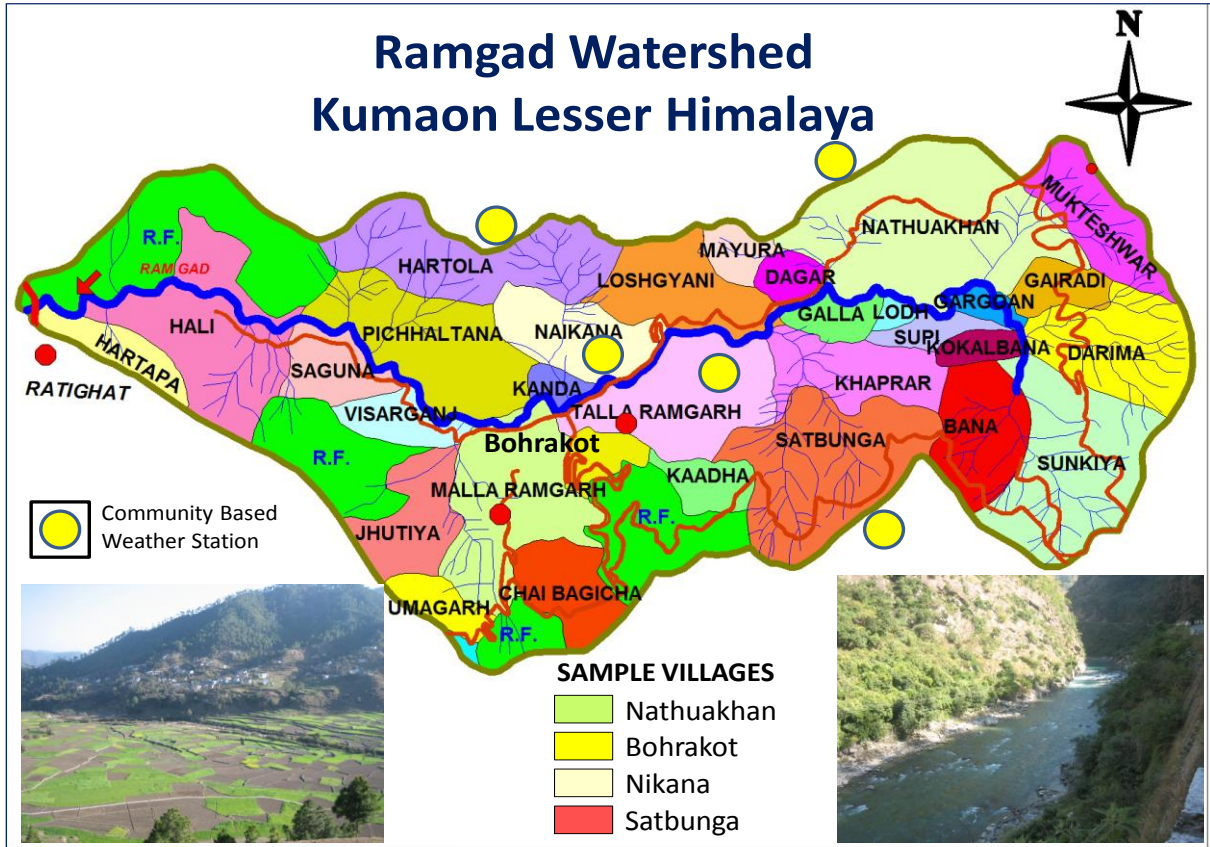


Figure 3: Low Cost Community Managed Weather Equipment



**Figure 4: Community Managed Automated Weather Station**