

Eco club students of the Government Inter College in Roorkee which is the seat of technical institutions regularly record the weather parameters every day. Whether a holiday or a working day, eco club students under the guidance of Ansari make note of the rainfall, the maximum and minimum temperatures, relative humidity, wind velocity and wind direction. The data collected thus is sent to one of the Technical Resource Centres of the U - PROBE on a weekly basis. The meteorological instruments needed for recording the weather data have been set up at the school from the U-PROBE project . A view of the sample of the weekly data recorded and maintained by the students is given here.



Installing the weather station

Weekly weather data										
Date	Time (a.m.)	Rainfall (mm)	Temperature					Relative Humidity (%)	Wind Velocity Km	Wind Direction
			Dry Bulb	Wet Bulb	Max Temp	Min Temp	Dew Point			
29/6/09	11.00	26.2	29.8	26.6	32.7	21.5	25.3	77	2	1 NE
30/6/09	11.00	7.9	28.6	26	32.5	17.2	24.9	80	2	1 N
1/7/09	11.00	2.3	27.2	25.6	34.7	19.2	24.9	87	2	1 W
2/7/09	11.00	0	30.6	27.2	33.9	19.3	25.8	76	2	1 NE
3/7/09	11.00	0	29.4	26.6	34.3	19.5	25.4	79	2	1 S
4/7/09	11.00	0	33.4	27.8	37.3	21.5	25.6	64	2	1 SE
5/7/09	11.00	0	34.6	28.2	37.8	21.4	25.8	61	4	2 SE

Eco club students of the school really enjoy the data collection. Since the components of the project are directly linked with their curriculum, it has deepened their understanding and increased their interest. They have also won several awards in number of meteorological related quiz competitions organised across the State. Dr. N. K. Goel Professor of IIT Roorkee , which is one of the five Technical Resource Centre's (TRC's) of the programme, mentions that the data collected by the eco club students is very useful in terms of State and National data documentation and will play an



Demonstrating the data reading

important role in understanding variations in rainfall and temperature in the long run and help in the water resources planning of the State. He has found that the errors in the data collected by the students are not many.

The nodal agency of NGC, Uttarakhand Sabhi Ke liye Shiksha Parishad, a board which is the administering authority for school education in Uttarkhand, has joined hands with the Technical Resource Centre of U-

PROBE and has taken up this activity in NGC schools. Linking knowledge of weather with other aspects of environment is an important objective of U-PROBE and hence, this project has jelled well with eco club schools. NGC, they believe is the appropriate platform for linking the weather data with the environmental aspects. The nodal agency and Technical Resource Centre together are trying to achieve this objective by involving eco club students in the State. To begin with, these agencies together have made efforts to incorporate weather and climate in teacher training modules. Through this, they are exposing students, eco club students in particular to various aspects pertaining to biodiversity, its conservation and linkages with other environmental components, particularly to weather and climate aspects. Being the mountainous region, the impact of climate change in Uttarakhand is predicted to be highly disturbing and hence this linkage will benefit the developmental planners.

It is also interesting to note that Indian Meteorological Department has its observatories and weather stations in about 12 locations across the State. U- PROBE has established school observatories close to 50 in 50 different schools and 50 more are in the pipeline. NGC schools provide great scope for U – PROBE to collect long term weather data from different zones of the State and link with environmental aspects for better planning.

This initiative demonstrates how eco club and other related projects if implemented in coordination can achieve meaningful sustainable patterns in the society. It shows how the young green corps can churn out amazing outputs if their capacities are improved.



Recording the wind speed

What is U-PROBE?

Department of Science and Technology (DST), Government of India with the participation from other government departments has launched a programme for the participation of youth in acquiring, generating, using and disseminating real-time and scientific field data. The programme entitled "Participation of youth in Real-Time/Field Observations to Benefit Education" (PROBE). The aim is to encourage participation of students in acquiring, generating and using meteorological data to understand day-to-day environment. The programme through scientific observations and use of information technology tools hopes to make science education interesting and useful. Very similar to Globe (Global Learning and Observation to Benefit the Environment), the programme supported by MoEF, this initiative too plans to link students, teachers, scientific community and the development workers at the grassroots level. It is envisaged to be a countrywide programme to be implemented in about 10,000 schools.

Pilot experiment is being taken up in one hundred schools in Uttarakhand with the participation of State Education Department. Considering the mountain state of Uttarakhand, the theme of the programme is mountain meteorology and programme is therefore called Uttarakhand-PROBE or U-PROBE. It aims at the participation of school children in data collection and observation with special reference to Climate and Weather related information. The data thus collected will be studied and analyzed by scientists and will help the development planners to make strategies for sustainable mountain development.