

**NCR-PROBE:
Meteorological and Environment Education & Awareness for Youth in
Schools of Delhi**

The Meteorological and Environment Education for Youth in Schools of Delhi programme is supported by STAC Division, Department of Science & Technology, Ministry of science & Technology, Govt of India

Introduction

All weather forecasting begins with knowing what is currently happening in different parts of the country as well as in the world. If from around the world one knows the different temperatures, the high and low areas, humidity, cloud development, where winds are coming from and at what speed and understands the basic seasonal, local, national and global weather patterns, he or she would have a good idea of what will probably happen next in a particular location. However, you can never be absolutely certain. Meteorological and earthquake observations have greater bearing about our understanding of climate change, agriculture, plants, animal lives and atmospheric process. Our scientists have made great strides in understanding the meteorology and in making meteorological predictions by collecting and analyzing data through various instrumentalities. By weather we mean the atmospheric conditions of a certain place at a certain time. To describe atmospheric conditions we usually give temperature, humidity, air pressure and wind direction and speed. These are the major components of weather, and they are the elements that continually interact to give Earth constantly changing weather and sometimes fearful storms. We have also developed automated system of meteorological observation and predictions through advance computer system, popularly known as super computer. Our entire economy, as agriculture is a major component of our economy, is totally dependent on meteorological observation and predictions. Our advanced knowledge in meteorology and predictions need to be communicated to our youth so as to create the required knowledge and optimize our human resources potential.

With the help of computers, our experts use all this data to make predictions. We haven't made gains in controlling natural disasters, but we have made great gains in understanding about natural disasters making meteorological predictions. It is essential that we must communicate the same to our teachers so as to enable them to understand the interrelationship between our socio-economic lives and disaster preparedness and use the same to learn as well as educate others.

Objective

1. To explain to the school children, teachers and staff about meteorological observation, computer use and data utilization; and climate change and impact on society.
2. To educate the school children, teachers and staff about the Impact of weather and climate on:
 - Atmospheric process,
 - Society,
 - Agriculture
 - Plants and
 - Safety from natural hazards.
3. To practically demonstrate the recordings of data about:
 - *Temperature:* (Minimum Temperature in degree Celsius– Mercury Thermometer, Maximum Temperature – Alcohol Thermometer, Humidity – Dry bulb Thermometer and Wet bulb Thermometer)
 - *Wind direction:* (Wind vane)
 - *Wind velocity:* (Cup Anemometer)
 - *Rainfall:* (Rainfall –Rain gauge)
 - *Dew point:*
 - *Cloud cover and*
 - *Sunshine duration.*

Thematic Issues

The speakers and participants in the seminar deliberated on the various issues relating to meteorological and environment education for youth in schools of NCR Delhi. The deliberations focussed on the following thematic issues:

- ⇒ NCR-PROBE overview
- ⇒ Relevance of Meteorology and Environment Education in Schools
- ⇒ Meteorological Hazards and Safety
- ⇒ Need for Training of Master Trainers
- ⇒ NCR – PROBE Programme in Defence Schools of Delhi
- ⇒ Role of India Meteorological Department in PROBE
- ⇒ Weather Related Services of IMD
- ⇒ Meteorological Observation in Indian Air Force
- ⇒ Information Tools in Meteorology
- ⇒ Experience in Observing Meteorological Data in Schools

Methodology

The methodology is based on two parts; the first part focused on *Workshop mode* and the second part on *Education & awareness* along with exposure & practical demonstration.

Participants: Workshop (27th Oct, 2005)

The participants in the workshop were representative students and teachers from each of the following schools of NCR Delhi participating in the PROBE project:

- 1) Army Public School, Kribi Place Delhi Cantt, New Delhi
- 2) Army Public School, Dhaula Kuan, New Delhi
- 3) Army Public School, NOIDA.
- 4) Air Force School, Subroto Park, New Delhi
- 5) Air Force Bal Bharati School, Lodhi Road, New Delhi
- 6) Naval Public School, Chanakyapuri, New Delhi (Represented by a Teacher)
- 7) Apeejay School, Sheikh Sarai, New Delhi, (participated be a special invitee for the workshop as it has independently initiated meteorological observation programme and units in the school).

Besides Principals from the following schools of NCR Delhi participated in the workshop:

- 1) Kendriya Vidyalaya, Sector-VIII, R.K. Puram, New Delhi
- 2) Kendriya Vidyalaya, Pragati Vihar, New Delhi
- 3) Kendriya Vidyalaya, Masjid Moth, New Delhi
- 4) Kendriya Vidyalaya, Delhi Cantt, New Delhi
- 5) Kendriya Vidyalaya, Vigyan Vihar, New Delhi
- 6) Kendriya Vidyalaya, Pitampura, New Delhi
- 7) Kendriya Vidyalaya, Tagore Garden, New Delhi
- 8) Kendriya Vidyalaya, Gole Market, New Delhi
- 9) Kendriya Vidyalaya, Janakpuri, New Delhi
- 10) Kendriya Vidyalaya, APS, Gurgaon
- 11) Kendriya Vidyalaya, APS, Tughlaqabad, New Delhi
- 12) Kendriya Vidyalaya, Lawrence Road, New Delhi
- 13) Kendriya Vidyalaya, Rajkori, New Delhi
- 14) Kendriya Vidyalaya, Sector-II, R.K. Puram, New Delhi
- 15) Kendriya Vidyalaya, JNU, New Delhi
- 16) Kendriya Vidyalaya, Rangpuri, New Delhi
- 17) Kendriya Vidyalaya, Pushp Vihar, New Delhi

The other participants were from the Department of Science & Technology, Government of India, National Informatics Centre, Directorate of Meteorology, Indian Air Force, Department of Environment and Forest and Directorate of

Education of Govt of NCT of Delhi, School of Planning & Architecture, Delhi College of Engineering.

Programme Design: Workshop (27th Oct, 2005)

Inauguration Session

Weather around us – A Video Clipping
Welcome to the Workshop Dr. (Mrs.) Malti Goel Adviser & Scientist 'G', DST, Govt. of India
Role of India Meteorological Department in PROBE Shri B. Lal Acting Director General India Meteorological Department, New Delhi
NCR – PROBE Programme in Defence Schools of Delhi Dr. H.N. Srivastava Additional Director General (Retd.) India Meteorological Department, New Delhi
Need for Training of Master Trainers Dr. S.K. Dash Professor, Centre for Atmospheric Sciences, IIT Delhi
Message of Prof. V. S. Ramamurthy Secretary, Department of Science & Technology, Govt. of India
Inauguration of Workshop and Address by Honb'le Shri Kapil Sibal Minister of Science & Technology and Ocean Development Government of India Followed by: <ul style="list-style-type: none"> • Launch of Measurement Protocol (Brochure) • Launch of website NCR-PROBE
Viewpoint of the students' representative on participation in NCR-PROBE
Vote of Thanks Dr. Asutosh Satpathy President Resource Development Centre, New Delhi

Presentation Session

Themes	Name of the Speakers
Meteorological Observation in Indian Air Force	Shri Ajit Tyagi, V.S.M. ACAS (MET) Air Vice Marshal Directorate of Meteorology New Delhi Tel: 23011042
Meteorological Hazards and Safety	Dr. H.N. Srivastava Additional Director General of Meteorology (Retd.) New Delhi Tel: 26976087
Relevance of Meteorology and Environment Education in Schools	Dr. M.C. Mathur Addl. Director (Schools) Directorate of Education Govt. of NCT of Delhi Ph: 23890283
Weather Related Services of IMD	Shri B.P. Yadav Director, NHAC, IMD, New Delhi Tel: 24629798
Information Tools in Meteorology	Shri Deepak Goel Scientist – 'D' National Informatics Centre New Delhi
Experience in Observing Meteorological Data in Schools	Ms. Urvashi Narang Head, Geography Section, Apeejay School, New Delhi