IMSA Organized 'Met-Aware-2016'

A Meteorological Awareness Program

A meteorological awareness program, *Met-Aware-2016*, aimed to create public awareness towards different aspects of weather and climate was held on July 16, 2016 at Anand & Vallabh Vidyanagar (VV). The program had three parts: (i) Two popular lectures followed by an 'Open House', (ii) Weather Observatory and Museum visit at AAU, and (iii) Educational visit to Amul Dairy.

(1) Two popular lectures followed by an 'Open House'-

First part of the program i.e. a Scientists-Students interactive session along with 2 lectures by experts in the field of weather/climate/satellite meteorology was arranged at G.H. Patel College of Engineering & Technology (GCET) auditorium and co-organized with NV Patel College of Pure & Applied Sciences (NVPAS), Sardar Patel University (SPU), VV. This event was attended by around 340 participants including students and faculty members from SPU. The Chief Guest of the event, Shri Rajeev Jyoti, Deputy Director, Space Applications Centre (SAC - ISRO), Ahmedabad, and the Guest of Honor, Prof. S. G. Patel, Honorary Secretary, Charotar Vidya Mandal (CVM) honoured the event by their presence and addressed the participants. Two popular lectures full of information on general meteorology and satellite meteorology were delivered by Dr. C. M. Kishtawal, Group Director (AOSG), SAC and Dr. Manorama Mohanty, Senior Meteorologist, IMD Ahmedabad. The most vibrant and interactive session of the event i.e. "Open House" received huge response from the students. The Panel of Experts consisting of Shri Rajeev Jyoti, Dr. P.K. Pal, Dr. Raj Kumar, Dr. C.M. Kishtawal, Dr. Vyas Pandey, Dr. A.S. Rajawat, Dr. Manorama Mohanty, Dr. S.M. Bhandari and Dr. R.P. Singh answered the questions asked by the participants. They solved a number of thought provoking queries from diversified field raised by the students. The students continued their interaction with the scientists during the lunch time till the end of this session. The program was supported by Dr. Basudeb Bakshi (Principal - NVPAS), Dr. Himanshu J Trivedi (HOD, Physics department, NVPAS), and volunteered by Dr. Mehul Pandya (SAC).

(2) Weather Observatory and Museum visit at AAU –

The second part of the program comprised of a Visit to weather observatory and museum at Anand Agriculture University (AAU) followed by an educational visit of IMSA members and their family members to Amul Dairy (Anand). At Amul Dairy the participants saw working of a milk processing unit, production of different milk products along with a visit to the picture gallery / museum /audio-video documentary to see the evolution of White Flood Revolution in India.

The Amul Model of dairy development is a three-tiered structure with the dairy cooperative societies at the village level federated under a milk union at the district level and a federation of member unions at the state level.

The IMSA participants reached Amul, Anand factory by 1430 hrs. The Members were welcomed by Shri S. S. Sundaran (Amul - OSD). He briefed about the total programme at AMUL. The total visit was comprised of Museum/Photo Gallery, a Short Film and the Factory visits.

In the museum, participants were welcomed by Ms Smruti. There were old photographs in the museum depicting the various stages of formation and development of the cooperative movement AMUL. She explained that, in 1946, under the inspiration of Sardar Patel, and the guidance of leaders like Morarji Desai and Tribhuvandas Patel, the Kaira District Co-operative Milk Producers Union Ltd. began with just two village dairy co-operative societies and 247 litres of milk and is today better known as Amul Dairy. She also explained how the suffering farmers fought all odds to make the AMUL in the present form. Amul grew to new heights under the leadership of Tribhuvandas Patel, the founder Chairman and the committed professionalism of Dr Verghese Kurien, the father of White Revolution, who was entrusted the task of running the dairy from 1950. Members were overwhelmed by the site of historical photographs at the Museum. The photographs included the visit of Pandit Jawaharlal Nehru, Sardar Patel, Shri. Lal Bahadur Shastri, Indira Gandhi and so many renowned persons. One of the interesting photograph was that of a garage and its model where Dr. Kurien stayed in his initial years of stay in Anand, after denial for getting a proper accommodation, and lead the noble cause. This was followed by a documentary film where the history as well as the present scenario of Amul were shown. From North to South and from West to East Amul has been an

inspiring taste to many. Documentary also described the glances of avoiding Polson, the middle man and the British Empire to form the cooperative movement. After the documentary, the members were offered flavoured AMUL milk.

The next and the most interesting part of this visit was the factory visit. Mr. Richard took us to the factory. He explained the various products Amul have, the plants in India and abroad and systematically explained the various stages of diary activities from collection of milk from farmers to the end product generation through practical demonstration at various stages. The fall of big cylindrical butter, packaging of butter cubes, milk powder etc. were really interesting. Members were excited and cleared their innumerable doubts on all aspects of milk processing. Overall, it was an interesting and memorable visit.

Participants saw various instruments used to collect different meteorological parameters at AAU weather observatory. Dr. Vyas Pandey, HoD (Agrometeorology, AAU) and Dr. Manoj Lunagaria comprehensively explained the working of the instruments and importance of the in-situ observations of the weather parameters. The participants enjoyed the visit to the museum and gathered vast information on agricultural tools, techniques, practices, and many crop varieties and grain/seeds before high-tea provided by AAU.

(3) Educational visit to Amul Dairy –

The visit to the Anand Agriculture University (AAU) on 16th July was indeed a great experimental learning/experience. The highlight of the tour was the chance to see the recording instruments of weather parameters. There were many of them. Prof. Vyas Pandey, Head of Agro-meteorology Department of AAU, explained the importance of various weather parameters and their recording mechanism using different instruments. Some of the instruments were manual and some were automatic. He explained about the different types of thermometers for recording Maximum, Minimum, dry bulb and wet bulb temperature which



were placed in the Stevenson's screen . Sun shine recorder for measuring the duration

of bright sunlight



, rain- gauge (both manual and self recording)





for measuring wind, wind vane



for wind direction. Hair

Hygrograph for continuous recording of relative humidity. He also explained about the function of automatic weather stations, Soil thermometer to measure the temperature of soil at different depth. USA Pan Evaporimeter for measuring evaporation of water.

--- D. Ram Rajak, Indrani C. Singh, P. Jayaprasad and Manorama Mohanty, IMSA