



# DREAM 2047

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## VP News

## Inside

### Vigyan Prasar - AIR Radio Serial: Prithivi Aru Antariksha

Radio as a means of science popularization has always played a vital role in India due to its all pervading reach and affordability of the masses. Vigyan Prasar (VP) has always been striving to utilize this medium in its efforts to take science to the people. As a result three very successful serials were jointly produced and broadcast since 1997; viz. "Paryavaran Calling" with AIR Bhopal, "Bipanna Basudha" with AIR Guwahati, and "Chhoo Mantar" with AIR Delhi. All India Radio, Dibrugarh (AIRD) took keen interest to collaborate with Vigyan Prasar and produce a 26-part science serial "Prithivi Aru Antariksha" (the Earth and the Space).

A workshop to plan for this serial and identify the topics, experts, and to finalize operational aspects, was organised by VP at Dibrugarh on 24-25 January 2001. About 30 experts from academic institutions, research laboratories and science popularizing agencies participated in this workshop jointly organised by AIRD and VP. Dr. Devdas Kakati, Vice-Chancellor of the University, inaugurated the workshop on 24 January 2001 in the presence of a host of eminent personalities of Assam. Dr. Kakati appealed to the scientific community to address to the needs of the society and interact more with the common man. The other speakers included Shri Munin Bhuyan, Station Director of AIRD, Shri A.K. Misra, Fellow, VP, and Shri N.C. Tumung, Asstt. Station Director of AIR, Dibrugarh.



A section of the participants in the workshop on "Prithivi Aru Antariksha" discussing various aspects of the project.

#### EDITORIAL

#### EARTHQUAKES



#### HOMI BHABHA CENTRE FOR SCIENCE EDUCATION



During the course of the workshop, 26 topics were identified. In order to cater to a wide target group, with special emphasis on students, it was decided to frame most of the episodes in a drama or feature mode. Every episode would contain a simple introduction to the topic and comments from some experts. Each episode would end with 5 quiz questions related to the particular topic. Provision for registered listeners and phone-in quiz would be incorporated. The broadcast would begin from 06 April with a curtain raiser episode to be followed by 26 independent episodes. There would also be a valedictory episode on 28 September 2001 to summarize the entire project. The broadcast time would be on Friday evenings at 8:00-8:30 pm. Dr. Paramananda Mahanta, Professor of Physics, Dibrugarh University was unanimously voted the Coordinator of the project to steer it through the 6 months.



... think scientifically, act scientifically ... think scientifically, act scientifically ... think scientifically, act...



## Rising From the Rubble

As the country was celebrating the 52nd Republic Day, the Earth shook violently in Gujarat sending tremors all over the country and all the way to Nepal and China. The cities and villages that stood testimony for centuries to the vicissitudes of history were reduced to a heap of rubble during those fateful two minutes. Even the cities far from the epicentre – Ahmedabad (300 kms) and Surat (400 kms) were not spared. Besides the thousands of human lives lost, the loss to livestock, property, houses and structures was enormous. Those who survived were not too fortunate either. Their world has completely changed.

The first phase of providing immediate relief in the form of shelter, food, medical treatment, clearing the debris, providing potable water, and fuel etc. would be completed in near future. Despite sympathies, and relief reaching them from all over the country and different parts of the world, it would be a long time, probably years before those affected could be successfully rehabilitated. The fear-psychosis and the trauma that have gripped the survivors, revival of their confidence in themselves, construction of earthquake-proof houses, continuing medical care of those left disabled, re-establishment of schools, offices and institutions, care of the orphaned children and their education, special attention to women who lost their families and their rehabilitation are but a few aspects Government and non-Government organisations will have to address their attention to.

Yet another aspect is that such calamities lead the affected people to reinforce their belief in fatalism and superstitions. It is both a duty and challenge to those engaged in the relief operations – and those engaged in science communication – to explain to them the difficulties involved in scientific predictions as a result of incomplete data or the incomplete understanding of the scientific phenomena. It is essential to establish once again their belief in science and scientific approach helping them resolve the conflict within – heart and head pulling in opposite directions.

It is unfortunate that the young science of seismology – dating back no more than a century – still cannot predict with certainty when and where the Earth will next shake and release its destructive energy from within. What science can now tell us is which areas on the Earth's surface are more prone to earthquakes. It is still more unfortunate that this knowledge was available but not used in Kutch. Nor has it been used in the North and the North-East, the regions more commonly associated with earthquake dangers in India. Although the location of future events of

major seismic activity can be identified with some probability, the probability of success in locating their timing remains extremely low. The country cannot afford to go through the agonising trauma of another Gujarat. During floods and cyclones, at least we have some time to evacuate the people to safer places. Not so with earthquakes. This then is a sufficient reason why we need to launch vigorous programmes on "earthquake preparedness" in regions or zones identified as vulnerable to major earthquakes. There is not much time to lose.

Where do we begin? Here are a few suggestions: (1) Development, production and dissemination of educational packages, posters and publications giving scientific information on earthquake phenomena and on topics such as design of earthquake resistant houses, do's and don'ts to minimise the loss of human life and damage to property, and other relevant software; (2) Organise awareness campaigns/programmes giving scientific information and tips to minimise loss of life and property; (3) Development of core-groups especially in the earthquake prone regions and familiarising them with physical and emotional needs of the victims – educational, medical, housing and obtaining financial assistance to initiate a trade etc. and continuous rapport with scientific and Government/non-Government agencies for better co-ordination during relief operations and rehabilitation programmes; (4) Promotion of ham radio activity for establishment of emergency communication network. Incidentally, ham radio has proved its utility time and again during several natural calamities earlier and also during the present disaster. NCSTC/Vigyan Prasar ham radio station actively participated in establishing an emergency communication network with ham stations set up in the affected areas of Kutch and at other places; (5) Training of village persons in first-aid in collaboration with District and Village Panchayat authorities and Primary Health Centres and development of a medical kit for use during disasters; (6) Carrying out earthquake drills in schools and development of an earthquake survival kit; (7) Development of websites giving important and latest information on topics related to earthquake.

Meanwhile, Gujarat continues to feel tremors. Let us sympathise and empathise with the affected people, identify their problems and work for possible solutions, thereby helping them in the process of rehabilitation. Let us help Gujarat rise from the rubble as fast as possible. We cannot avoid disasters, but we can learn to manage them.

□ V.B. Kamble

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