

noon there was a session on explanation of 'miracles'. A videoconference was also arranged between the child scientists and the scientists at Ahmedabad. N. M. Ashok and A. R. Prasanna from Physical Research Laboratory and P. S. Thakkar and R. M. Pandya from Space Applications Centre of ISRO, Ahmedabad answered

questions on mysteries of science and technological advances.

The fifth day started with a teleconference programme between the child scientists and scientists at Bangalore. As is the usual practice, the children asked questions on water, atmosphere and biodiversity. The scientists at the other end patiently

answered all questions one by one, with lots of examples.

Narottam Sahoo, Gujarat Council of Science City, Sola-Santaj Road, Ahmedabad 380 060, India
e-mail: narottam@scity.org

MEETING REPORT

Science–society interface: Pugwash Conference on HIV/AIDS*

The Pugwash Conferences on Science and World Affairs brings together scholars and public figures to work towards reducing the danger of armed conflict and seek solutions to global security threats. The organization evolved primarily because of the manifesto of Bertrand Russell and Albert Einstein of 9 June 1955 which called upon 'scientists of all political persuasions to assemble to discuss the threat posed to civilization by the advent of thermonuclear weapons...'. The then prime minister of India, Jawaharlal Nehru offered to host the first meeting, which subsequently had to be turned down due to the Suez Crisis. The earlier offer of Cyrus Eaton to finance and hold the meeting was reconsidered and the first meeting was held in the village of Pugwash, Nova Scotia, Canada in 1957. It is from this small town that the organization takes its name. The first meeting was attended by 22 eminent scientists, and since then the organization has grown into an active platform to bring together, from around the world, influential scholars and public figures concerned with reducing the danger of armed conflict and seeking cooperative solutions for global problems. In 1995, the Pugwash Conferences on Science and World Affairs was awarded the Nobel Prize. M. S. Swaminathan is the current chairman of this organization.

The Pugwash Conferences until 2000 focused on nuclear peril, but then reviewed and reoriented its basic mission to include new threats to human security, particularly those like HIV/AIDS that cannot be attributed to an enemy. During the same time, in 2000, the UN Security

Council passed Resolution 1308 which recognized HIV/AIDS as a security threat; thereby encouraging all countries and especially the most affected areas, to consider it on par with conventional defence and security issues. Till date, four workshops have been organized in South Africa to examine the multiple dimensions of HIV/AIDS. It was decided to organize the fifth meeting in India due to the fact that the country harbours the second largest population (5.2 million) of HIV/AIDS infected people.

Elaborating on the purpose of the conference, M. S. Swaminathan in his introductory address stated that the Chennai Conference was an attempt to bring together experts from the first wave countries such as South Africa, Kenya and Uganda, where the epidemic has struck with great intensity and those from the second wave countries where the epidemic threatens to spiral out of control, to exchange successful and replicable strategies for the prevention, management and mitigation of HIV/AIDS.

The panelists at the Public Forum included N. Ravi of the *Hindu*, Soumya Swaminathan (moderator) of the Tuberculosis Research Centre, Sujatha Rao, Sheila Sisulu, Mary Crewe and Padma Chandrasekaran. The focus of all the panelists was on the need to develop and implement a holistic approach towards HIV/AIDS with equal attention accorded to prevention, treatment and care. Prevention of course, would be the first and most effective line of defence. Recalling experiences from South Africa, Sheila Sisulu of the World Food Programme stated that the message of prevention during the earlier phase of intervention was divisive and only sought to find new groups to blame. This phase was also blind to the social fabric of the country; and

often ended up targeting the most marginalized groups of the society. Further, the approach failed to utilize traditional forms of community organizations that were dismissed as being pagan.

Sujatha Rao, National Aids Control Organization, Government of India, stated that India has moved ahead from its earlier phase of denial and focus on blood safety to a more comprehensive programme on HIV/AIDS. She also said that the approach had to focus more on prevention rather than on treatment because medications/medical intervention continue to be problematic areas because of very high and often unaffordable costs. Rao said that while strengthening the health system is the top priority for action, a nutritional focus also needs to be brought into the approach. P. Krishnamurthy of the Voluntary Health Services, spoke on the initiative of the Government of Tamil Nadu, while Mary Crewe highlighted the complex interplay of social and cultural factors in the HIV/AIDS scenario.

Padma Chandrasekaran of Avahan – India Aids Initiative stated that although rapid strides have been made in developing two vaccines for HIV/AIDS, it may take a decade for the general release of the vaccine and 10 years more to make it affordable. Viewing HIV/AIDS as a problem that will force more people into poverty, Chandrasekaran stressed upon the need to continue working on prevention and support programmes, especially amongst marginalized sections of the society.

The presentations and the subsequent discussion with the audience at large highlighted prevention as the most viable strategy in mitigating HIV/AIDS. Therapeutic options are limited at this point of time to anti-HIV drugs that can prevent rapid spread of the virus and postpone some of the complications. These include

*Based on the Pugwash Conference on HIV/AIDS: Sharing of Experiences, What Works? organized in Chennai from 7 to 9 April 2006 by the M. S. Swaminathan Research Foundation.

drugs such as AZT, 3TC, D4T, Saquinavir, Nevirapine, etc. that are unaffordable to a majority of the population.

The need to provide care and support to HIV/AIDS patients was repeatedly stressed; but very little understanding exists in India on palliative care. Palliative care, in its most abbreviated sense, is providing symptomatic relief to patients with termi-

nal illnesses or serious ailments that have not responded to curative therapies. Palliative care does not involve actual and active therapeutic intervention, and can be provided at hospices. Although removal of the social stigma attached to HIV/AIDS is the ideal target, hospice-care rather than home care can indeed be a more viable option in providing care and

support to people with HIV/AIDS. Unfortunately though, hospices are a rarity in our country and so is our interest in palliative care.

Jayshree Vencatesan (*S. Ramaseshan Fellow*), Care Earth, # 5, 21st Street, Thillaiganga Nagar, Chennai 600 061, India. e-mail: jvencatesan@careearth.org

MEETING REPORT

Impact assessment of the Indian Ocean tsunami*

A book, *26th December 2004 Tsunami: A Geoscientific Perspective*, was released at the meeting organized by the Department of Science and Technology (DST), Government of India and Anna University (AU), Chennai. D. Viswanathan (AU) in his presidential remarks briefly explained some of the important activities of AU pertaining to Science and Technology developments in general and Earth System Science including ocean-related research activities in particular.

M. Prithviraj (ESS, DST) explained about the discussions held with academic institutions and national agencies in order to evolve integrated short-term projects after the onslaught of the tsunami on the Indian coasts. He elaborated how the ESS division of the DST launched and executed seven integrated projects under four major themes aimed at field survey and data collection in all the tsunami-affected areas on the Indian mainland and Andaman and Nicobar Islands. G. Victor Rajamanickam (SASTRA, Thanjavur), editor-in-chief of the above-mentioned book, gave a brief note on the contents of the book, which has two sections. The first section consists of two perspective papers on the Great Indian Ocean tsunami and seven theme papers highlighting the findings and significant observations of the research projects supported under this endeavour. The second section contains papers pertaining to post-tsunami activities contributed by national agencies like DST and DOD, New Delhi; Geological Survey of India, Kolkata; Department of Atomic Energy, Mumbai; and academic institutions namely IITM

and IIT, Roorkee. It is envisaged that the book would serve as a reference volume to the future researchers and provide basic information to the coastal community, the industry, media, government and non-governmental agencies in the management of such natural hazards.

About 150 members participated in the meet. Topics covered in the meet included effects of tsunami on coastal Andhra Pradesh, Tamil Nadu, Kerala and Andaman and Nicobar Islands; issues and challenges in post-tsunami rehabilitation; architecture and planning of infrastructure; sensors for hazard mapping and vulnerability assessment.

In the first technical session, Rajendra Prasad (Andhra University) gave an account of inundated areas, volume of erosion/deposition and their areal extent, average depth of erosion, thickness of deposition, coastal property loss and coastal geomorphic changes that took place due to tsunami along Andhra Pradesh coast. T. N. Prakash (CESS, Trivandrum) discussed the impact of the tsunami on shoreline changes, nearshore bathymetry, geomorphology, backwater siltation, concentration of placer deposits and human/property loss along the Kerala coast. He also explained about the various rehabilitation plans the Government of Kerala has taken up for the worst affected area between Neendakara and Arattupuzha. Based on tsunami characterization and maps prepared using post-tsunami IRS images, Ramesh (AU) discussed coastal inundation, changes in shoreline, coastal geomorphology and land use/cover pattern of Andaman and Nicobar islands. Assessment made regarding damage to coastal ecosystems like coastal waters/aquifers, mangroves, coral reefs and sandy beaches/dunes were presented in the meeting. He also discussed the damage to settlement

and coconut plantation, emergence of land, change in water chemistry and types of restorations that can be taken up on the islands. B. R. Subramanian (NIOT), based on inundation of seawater due to Indian Ocean tsunami, felt the necessity of incorporating elevation levels for new/expanded settlement areas under the town and country planning acts so that human life and property are saved from the natural hazards. He listed the towns along the Indian coast, where immediate attention in this regard is required. All developmental activities need to adopt the construction codes stipulated for each region, he felt.

In the second session, S. M. Hussain (Madras University) presented results of micro-palaeontological studies using tsunami sediments of Tamil Nadu and Andaman and Nicobar islands. P. Seralathan (CUSAT, Cochin) and S. Kaliappan (AU) discussed respectively the post-tsunami sediments characterization and water quality in the coastal areas of Tamil Nadu. Prabhakar (Department of Atomic Energy, Kalpakkam) projected the impact of tsunami on township and power plants at Kalpakkam. P. G. Diwakar (RRSSC, Bangalore) and Srinivasan (NGRI, Hyderabad) showed the impact of tsunami on east coast of India and Andaman and Nicobar islands respectively using post-tsunami high-resolution satellite data.

In the third session, NGOs and research students of Architecture and Planning, AU made the following three presentations: (i) Issues and challenges in post-tsunami rehabilitation by DHAN Foundation, Madurai; (ii) Sensors for hazard mapping and vulnerability assessment by PASCO Geomatics India Pvt Ltd; and (iii) Architecture and Planning of Infrastructure using tsunami database of Cuddalore coast by the research students of AU.

*Based on the National Meet on 'Indian Ocean Tsunami – Its Impact Assessment and Lessons for Future' held on 5 June 2006 in the Anna University Campus.