INTERNATIONAL WORKSHOP ON THE ROLE OF SCIENCE CENTRES IN DEVELOPMENT STRATEGIES, NATIONAL COUNCIL OF SCIENCE MUSEUMS (NCSM), KOLKATA (INDIA), NOVEMBER 30 – DECEMBER 2, 2002

PARTICIPATING COUNTRIES: 11 MEMBER COUNTRIES OF THE NAM S&T CENTRE

NUMBER OF PARTICIPANTS: >20

Fruits of science and products of technology continue to shape the nature of our society and influence events, which have a worldwide significance. The scientific methods and culture need to be popularized among the masses for the creation of scientific temper and building up scientific manpower to fight against superstition and obscurantism. Furthermore, an adequate knowledge and proper understanding of the basic principles of science not only give the pleasure but also augment confidence and self-reliance among the people. There is an ever-increasing need to encourage public understanding of science and technology in the developing countries. In this regard, science centres play a key role in the advancement of a developing nation under the changing socio-political and socio-economic scenario.

The Centre for Science and Technology of the Non-Aligned and other Developing Countries (NAM S&T Centre) accords a high priority to this area. Therefore in order to review the status of the science centers, science museums and related establishments in the world, particularly in the developing countries and to exchange ideas and experiences pertaining to their present and future developments and cooperation, the NAM S&T Centre organized with the approval of its Governing Council an international workshop on 'The Role of Science Centres in Development Strategies', jointly with the National Council of Science Museums (NCSM), Kolkata, India during November 30 to December 02, 2002.

The 3-day workshop was held in the premises of NCSM. Kolkata, India and was attended by one representatives each from eleven countries, namely, Colombia (Dr. Nohora Elizabeth Hoyos T, Director, Maloka Science Centre, Bogota), Egypt (Prof. Mahmoud I. Nasr, Deputy Chairman, Central Metallurgical Research and Development Institute, Cairo), Iraq (Dr. Abdul-Al-Ameer Aziz Morad, Manager of Educational Museums, Ministry of Education, Baghdad), Malaysia (Mrs. Mismah Bt. Jimbun, Science Officer, National Science Centre, Kuala Lumpur), Mauritius (Mr. Dayachand Balgobin, Curator, Rajiv Gandhi Science Centre), Nepal (Dr. Dinesh R. Bhuju, Ecologist, Royal Nepal Academy of Science and Technology RONAST, Kathmandu), South Africa (Mrs. K. B. Mosimege, Asst. Director, Dept. of Science & Technology, Pretoria), Sri Lanka (Dr. Nanda Amara Wikramasinghe, Director, Dept. of National Museums, Colombo), Vietnam (Ms. Ngo Thi Loan, Project Officer, Centre for Regional Research and Development, Hanoi) and Zambia (Mr. F. H. Mungo, Director, National Science Centre) and a number of specialists from India. Bangladesh, Pakistan and Saint Lucia, which had nominated their representatives, however

could not participate, but Mr. Syed Shahid Hussain, Curator of the Pak Museum of Natural History in Islamabad and Mr. Motielall Singh from St. Mary's College, Saint Lucia submitted their country status reports for inclusion in the final proceedings.

The workshop was spread over three technical sessions besides the inaugural and interactive sessions. Mr. I. K. Mukherjee, Director General, NCSM, Kolkata and Prof. Arun P. Kulshreshtha, Director, NAM S&T Centre jointly inaugurated the workshop. At the inaugural session on the 30th November morning Mr. Mukherjee mentioned that last decade has witnessed phenomenal growth in the number of science centres in North America, Europe, Latin America, India, China and the rest of Asia and Pacific Rim and currently there are about 1492 science centres in the world. However, in Africa the picture is highly dismal, as the number of science center has consistently declined with their present number being only 13 as compared to 18 in 1990. Defining the role of science centres, he added that a science centre caters to a very wide cross-section of the society and is intended to organize outreach programmes on science and technology to access people at large. In addition to the permanent displays made in the science centres, focussed programmes for particular communities of the society are also conducted to increase awareness and to inculcate a spirit of inquiry among different sections. He accorded high priority to supplement formal school education by its doing-science approach, creation of scientific temper, collection and dissemination information in regard to science and technology, generation of scientific culture in the present knowledge-based society, and development of trained scientific manpower and assessment of the role of science centres. Science centre activities can very effectively and substantially fill up what is lacking and bring back quality in science learning through an interactive doing-science approach. Mr. S. K. Roy, Director, CTRL, Kolkata, India gave the Vote of Thanks at the conclusion of the inaugural session, which was attended by among others, Mr. A. S. Manekar, Director, National Science Centre, New Delhi, India, Mr. P. K. Bhaumik, Curator, NCSM, Kolkata, Mr. Madhusuhan Banerjee, In-Charge, Sukanta Academy, Tripura, India, Dr. T. K. Ganguly, Director, Science City, Kolkata, Mr. S. Goswami, Director, Birla Industrial and Technological Museum, Kolkata and Dr. J. Mishra, Programme Associate, NAM S&T Centre.

The next session comprised of the Country Reports presented by various participants. The presentations included the current status of science centres in their respective countries and their role in popularizing the science among the various groups of people by both formal and non-formal means. This was followed by presentation by Dr. J. Sthanapati, Director, NCSM (Hqrs.), Kolkata, who presented a vivid picture on the activities of Indian Science Centres and NCSM. At the conclusion of this session, Dr. T. K. Ganguly, Director, Science City, Kolkata led the participants to visit the Science City.

The participants of the workshop visited the Bardhaman Science Centre in Bardhaman, a city about 100 km north of Kolkata. During the visit Mr. P.K. Bhaumik, Curator, NCSM (Hqrs.), Kolkata presented an overview on the Role of Activity based Science Centres in Developing Countries. He emphasized on how to achieve non-formal education, preserve scientific heritage and design, fabricate and develop the exhibits.

The concluding session in the form of an interactive discussion was held at NCSM, Kolkata. Dr. Nohora Elizabeth Hoyos T., Director, Maloka Science Centre, Bogota, Colombia, Mr. F. H. Mungo, Director, National Science Centre, Zambia and Mrs. Mismah Bt. Jimbun, Science Officer, National Science Centre, Kuala Lumpur, Malaysia were nominated as the respective Focal Points in Latin American, African (including Middle East) and Asian regions to further develop the activities related to science centers in their areas. The participants and country representatives unanimously adopted a set of resolutions named as Kolkata Declaration, which is reproduced below.

KOLKATA DECLARATION

We, the participants in the Workshop on the "Role of Science Centres in the Development Strategies" held at the National Council of Science Museums (NCSM), Kolkata during November 30 - December 02, 2002, resolve the following:

1. The workshop has been extremely successful. We unanimously suggest that more such workshops should be held in future.
2. In order to promote science education, eradicate superstition, increase scientific awareness and spread non-formal science education for the generation of scientific manpower, there is a need to establish more science centres in the developing countries.
3. As per para 48 of the Science Declaration adopted at the World Conference of Science organized by UNESCO / ICSU in Budapest, Hungary in June 26 – July 1, 1999, it was observed that governments, *international organizations* and relevant *professional institutions* should enhance or develop programmes for the training of scientific journalists, communicators and *all those involved* in increasing public awareness of science. National authorities and funding institutions should promote the role of *science museums and centres* as important elements in public education in science. The participants agreed to pursue this with concerned authorities.
4. There is a need to establish a network among science centres, museums and other institutions engaged in science popularization in the developing countries for effective sharing of individual experience. In this context, the quarterly Newsletter of the NAM S&T Centre will report on the developments on the activities of the science centres and museums in the developing countries, in addition to displaying this material on the website of the Centre.

5. Extensive science popularization activities particularly in the rural areas in the developing countries are required. For this purpose, the National Council of the Science Museums of India offered Mobile Science buses to the intending member countries of the NAM S&T centre for a limited period. The length of stay of the exhibition buses will depend on the expenses of the member countries (including money for to and fro transportation of the unit from India, running and conducting the programs).

6. While it is desirable to organize a general workshop on science centres for all developing countries once every alternate year, a regional workshop should be organized during the intervening period.

7. For the purpose of developing science centre related regional programmes, the member countries of the NAM S&T Centre were divided in three zones, respectively, Asia, Africa (including Middle East) and Latin America with one Focal Point each in each of these regions. These Focal Points identified during the workshop were, respectively, Mrs. Mismah Bte Jimbun, Science Officer, National Science Centre, Pesiarah Bukit Kiara, Kuala Lumpur, Malaysia for the Asian region, Mr. M. H. F. Mungo, Director, National Science Centre, Zambia for the African and Middle East region and Dr. Nohora Elizabeth Hoyos, General Director, Maloka Science Centre, Bogota Colombia for the Latin American region.

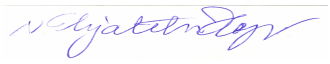
8. Dr. Nohora Elizabeth Hoyos, General Director, Maloka Science Centre, Bogota, Colombia (Focal Point from the Latin American region and participant in the workshop) proposed to organize the first regional workshop at Maloka in Bogota, Colombia in November – December 2003.

9. Assessment of impact of science popularization programme is felt extremely important. Member countries of the NAM S&T Centre may seek the help of the Centre for approaching the international funding agencies like UNESCO, UNDP and private foundations for organizing any workshops and undertaking any studies.

10. The Science Centres in the developing countries should endeavour to include the traditional knowledge and innovations as well as the significant landmarks the development of S&T in their respective countries as part of their exhibits.

11. Exchange of personnel between member countries for providing training for various science popularization activities, including the development of exhibits, is very important. In this connection NCSM expressed that while the training facility would be provided by NCSM without any charges, the individual participants will have to arrange all other expenses, including the hospitality.

12. It was generally opined that all workshops should have a session on “exhibits development”.



Colombia

Egypt

India

Iraq

Malaysia

Mauritius

Nepal

Sri Lanka

South Africa

Vietnam

Zambia

NAM S&T Centre

NCSM