

# **Touch, Feel and Learn Plant Bio-resource Centre at the Regional Museum of Natural History, Mysore, India: A New Resource Centre for People with Visually Impairment**

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## **1. Introduction**

Museums are public service institutions funded by the society. This is highlighted by the definition of museums by ICOM, the only international professional body concerned with museums. Accordingly, museums are “non-profit making, permanent institutions, in the service of the society and its development and open to the public, which acquire, conserve, research, communicate and exhibit, for the purpose of study, education and enjoyment, material evidence of people and their environment”. The essence of this definition is that as public service institutions museums must be open to the common people and their services accessible to all.

An important aspect of the definition of museums mentioned above is that Museums are educational institutions. This essentially involves that these are informal educational institutions serving all types of public including the Persons with Disabilities. In addition, Museums also serve to supplement formal education.

Museums are the custodians of our heritage inclusive of cultural, natural and scientific. The Universal Declaration of Human Rights also echoes that ‘everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits’.

The philosophical or museological reason for Museums to be accessible by all is given below. Museum communication including education and exhibition is based on senses such as seeing, hearing, touching, and tasting objects or aspects of

objects in museums. Museum objects do not know the boundaries of language and literacy. Objects may be seen, touched, details of them heard, some might be even tasted, in museums. In addition, Museums utilize many supplementary media such as audio-visuals and the service of interpreters to enhance the educational potential of objects in exhibitions. Senses play an important role in disability as well. Many disability conditions are based on the lack/ impairment of senses such as vision and hearing. Museum settings, which use multi-sensory communication techniques, thus have great potential to become unique educational resources for the disabled.

The recent trend all over the world is that Museums strives to adopt strategies for change from its traditional research-oriented collection-centric institutions to dynamic education-oriented visitor-centric institutions to serve all categories of the community including the Persons with Disabilities. The strategies adopted in making Museums accessible to public involve equality of access to education and interpretation provided by museums.

The emerging importance of Museum Access Studies (MAS) in the ICOM movement as well as in India, points to the importance given by Museums to this social concern. One of the examples in this regard in India is the establishment of a Touch Feel and Learn Live Plant Bio-resource Centre at the RMNH Mysore. The project is in its final phase.

## **2. The Museum**

The RMNH is the Southern Regional Office of the National Museum of Natural History which is a sub-ordinate office of the Ministry of Environment and Forests, Government of India. With its head quarter in New Delhi, the NMNH has a few more regional museums of natural history: Mysore (Southern India), Bhopal (Central India) and Bhubaneswar (Eastern India). The RMNH at Mysore was opened to public in 1995. It is visited on an average of 500 visitors on normal days and about 1000 on Sundays and other festival days. It is also visited by students from nearby states. Children with disabilities though infrequently visit the Museum. In order to facilitate more visits by children with disabilities, the Museum arranges transport facilities on a regular basis. Usually disabled students are not able to understand biology in their classroom lessons. Because of many reasons including security they are not exposed to nature or biodiversity in its natural atmosphere such as protected areas, sanctuary

## **3. The Touch, Feel and Learn Garden project**

The Touch, Feel and Learn Garden project (TFLGP hereafter) was sanctioned by the National Bio-resource Development Board, Department of Biotechnology, Ministry of Science & Technology, Government of India, initially with a budget of

seven lakhs for a period of three years starting from October 2003. The Project is in its final stage of opening to the visitors.

The TFLG acts as a herbal garden, a biological park and a butterfly park in the long run giving a variety of biological experience to the visitors. The main feature of the TFLG project is that it facilitates informal education of children with visual impairments in an entertaining way where learning can be fun. It also exposes them, in a controlled environment where safety is taken care of, to the realities of nature, water, plants, aquatic animals and other aspects of natural heritage which are generally non-accessible to them. The Garden facilitates as an environment for capacity building exercise for the disabled children and their accompanying adults (parents, teachers etc) so as to empower them in their life. Their talents could be used for the management of Local Biodiversity Registers thus helping in preserving traditional natural heritage especially of medicinal plants. The Garden may also be used in future as a gene bank for future studies by Persons with Visual Impairments

An important highlight of the structure of the Garden is the Sunken bridge concept useful to People with Disabilities who otherwise do not have chance to experience aquatic flora and fauna in secured area.

The visitors (children with visual impairments accompanied by their teachers/ parents/ others) once they reach the Garden are received by the Project Assistant. They are given an introduction after which they are led to the Garden through a gate. Then they move along a tiled pathway. The PA interprets the various aspects of plants allowing the children to touch, feel and learn about plants and its various parts. They are also allowed to learn by themselves by reading Braille labels attached to the plants. Then they are led to a "Maze Garden" where the children are allowed to move by themselves. They can touch the plants on both sides, smell the hanging pots as well as taste a few leaves within their reach. They can move back and forward, and also sideways along the undulating 'crazy' pathway. It is a place for fun while children move around the various closed and open channels to reach the end of the Maze into a rewarding central place where differen

The children are now guided to enter a "sunken bridge" which is a circular pond with a maximum depth of 1.5 meters made of concrete with outlets and inlets for water-drainage. The pond has got a central bridge made in a sloping gentle slope with safety handrails and with water flowing over it for a maximum depth of half a meter. The pond houses many aquatic plants and animals (fishes, amphibian, reptiles etc). The children are allowed move along the sunken bridge, touch and enter into water up to knee position, and feel the aquatic plants and animals in a

safe and secure environment. This thrilling experience of aquatic life in safety is the biggest attraction for the visitors.

At the end of the sunken-bridge experience, the immediate open space is used for evaluation. The feedbacks from the participants are taken very seriously for its implementation.

Anti-skid tiles are used throughout. Directional tiles are also being used to direct the children who are visually impaired. Trees have been selected to attract insects and birds and other animals. Highly scented plants, those with leaves of different shapes, and dead tree trunks with easily felt bark details (e.g. Crocodile Bark tree) are also used.

#### **4. The future**

We expect that with the opening of the Garden by the end of 2006 we will be able to extend its activities. Initially the garden pathways were designed for children with visual impairments. However, a few evaluation sessions with different categories of people with disabilities taught us that the same facility will be highly useful for people with other categories of disabilities such as hearing/ speech impairment, mobility impairment and mentally disability if we make a few structural modifications such as widening the pathways. This is being included in the revised plan of the Project.

We have also arranged a few workshops as part of our evaluation procedures. In January 2006, a programme called “Thamaso Ma Jyothirgamaya” was arranged in which 50 children with visual impairment participated from the states of Andhra Pradesh, Karnataka and Kerala participated in a variety of activities such as visit to the Museum, rowed boats in the Karanji lake Nature park, attended a nature camp in the nearby Bandipur National Park where they could go on an elephant-safari. They were exposed to the world of insects in an interactive session. For the first time in their life they were able to touch and handle human organs such as heart and liver by a new technique developed by a local doctor. The children could also identify the world of colour by a new technique developed locally (pop-up symbolism). We are also planning to have more and more special programmes for the other categories of persons with disabilities.

Ultimately we plan to coordinate all our efforts in museum accessibility into a systematic institutional base by establishing a National Centre for Museum Access Studies (NC-MAS) with the “TFL Garden” as the base. The earlier experience of the author in establishing a National Centre for Museum Visitor and Access Studies as a research centre at the National Museum University in New Delhi has prompted us to establish a similar NC-MAS with the TFL Garden as its resource

base. Since the TFL Garden is the first attempt by the Museum community in India to make its resources accessible to the Persons with Disabilities, we expect that the proposed NCMAS will have a social role to help the Museum scene in India. Towards this end we are planning a few national level workshops for the benefit of Museums and Zoos in India. Already many agencies (Zoo Authority of Karnataka; Commissioner for Museums, Archaeology and Heritage; Karnataka State Open University etc)

I will conclude my presentation by reiterating the motto of our Museum: “Museums for All” which essentially means a Museum which is accessible to all including Persons with Disabilities.