

Education, communication, training and capacity building for the visually impaired through Touch and Smell Garden – unique in MSSRF

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Enhancing the knowledge of visually impaired

As per the survey, India has one third of the world's blind population and there are estimated to be ten million blind, of whom at least a third may be children. Every year, there are approx 500 school children who experience the joy of Nature by the senses of “Touch and Smell” and by reading in Braille, in the Garden established in MSSRF, Chennai.

This garden redefines the term ‘barrier free environment’ for the disabled with thoughtful landscape designing and a selected range of shrubs and herbs, the Touch & Smell Garden turns a botanical excursion into an experience in tactile and sensory perception.

This empowers children of marginalized groups in both rural and urban sectors, with knowledge relating to biodiversity and environment, through the Information Technology.

A Sensual Road Map

The concept is simple and only requires a particular way of looking at things, as it were. The Touch & Smell Garden ensures that the visually impaired are not denied the joys of discovering nature. It is very much possible for them – here, the emphasis is on the ‘visual’ aspects of a typical garden, like flowers and ferns, aromatic plants and leaves that are distinct to ‘touch’. This makes the garden more relevant, enjoyable and educative for the visually impaired visitors. The idea was conceived by Prof. M. S. Swaminathan to recreate all aspects of a Botanical garden to the visually impaired. Therefore, the plants found in the garden have plant description and details in Braille. The plants are also arranged in hanging pots all along the walkway to make it easier for the students to touch, feel and smell the leaves of the plant and immediately learn its name. Visually impaired students connect and associate the aroma and the name of the plant with ease and hence the name, “Touch and Smell garden”.

Lay-out

The garden is divided into 5 identical blocks, with jasmine (*Jasminum flexile*) in the entrance, accessed by specially selected tiles. The tiles are carefully chosen as they are patterned with a specific purpose in mind - the chequered tiles are the principal pathways. At every corner, embedded

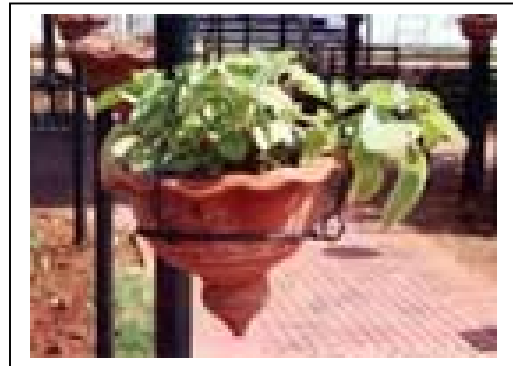


soft marble pebbles indicate change in direction. Small sized pebbles indicate the presence of a Braille board. These strategically placed Braille boards give

additional information on how to navigate, detailed description about the plants. This way, the layout becomes a tactile route map. Once the instructions are given at the entrance to the garden, independent mobility for the visually impaired is ensured, within the garden.

The plant diversity in the garden

The garden houses fragrant, coarse leaved aromatic and medicinal plants which are of economic importance with the natural fencing with *Adathoda vasica*. Some of the examples are *Mentha spicata*, *Ocimum gratissimum*, *Majorana hortensis*, *Ocimum kilimandscharicum*, *Ruta graveolens*, *Ruta*



officinalis, *Gymnestria sylvestre*. In addition, there are hanging pots all along the edge of the path, with plants like *Coleus ambionicus*, *Ocimum basilicum* and *Geranium*. A special rough mat indicates the presence of hanging pots all along the pathway.



The aquatic plants' section is an additional inspiration. Water adds an extra dimension to the senses. There are lilies, lotus and *Eicchornia* species in specially made water tanks built exclusively for these plants. The children are extremely thrilled with this addition as they

are now able to feel and touch a lotus leaf, which they would otherwise not have had an opportunity to do. This new section was created after suggestions and feedback from children.

Communication and Capacity Building

The feedback from the visually impaired children has been very encouraging. Some of them have suggested that their biology class be held in the garden, some others want to start a similar garden in their school, and still others wish to become scientists to serve the visually impaired.

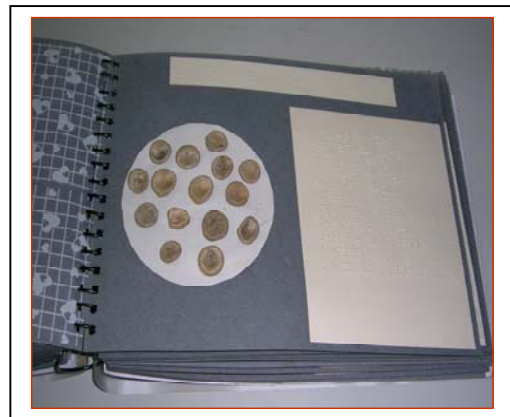


The information provided in the Garden forms the theme for Quiz and elocution competitions that are held twice a year. It is also an opportunity to assess the success in imparting knowledge on biodiversity and conservation to the garden's young visitors.

It has been Prof. M. S. Swaminathan's aim to serve as a training centre and have as many blind schools and institutions replicate this model in their campuses. Towards this we have had a couple of meetings with heads of blind schools and institutions from Tamil Nadu, working with the visually impaired. It has been heartening to note the interest in setting up such gardens across the country and a number of gardens have come up after suggestions and help from our foundation.

Seed Album and Computer facility

In addition, while the students rest after their visit around the garden, more information about the Environment, plant diversity is given to visitors through audio system. Also, seed albums with a number



of species are another means through which students are exposed to plant diversity. The albums have a sample of seeds where they touch and feel and alongside the seeds, information is given to them about the plant and its economic importance. Most spices and condiments are represented these seed



albums. A computer equipped with Braille software connected to a Braille Embosser provides an interface between the normal and visually impaired children. The software allows the visually impaired to communicate and express themselves as it allows conversion of text

from 14 Indian languages to Braille and vice versa. A number of resource materials are available through this option of print outs from the Braille embosser. Our future plans include a bringing out a couple of books on plants, environment etc. through this facility with inputs from visually impaired children.

Conclusion

The components of environment are intricately interrelated, interconnected, interdependent and exists in a state of dynamic equilibrium. This initiative helps the visually challenged children to study the diversity of nature and experience the wealth of the floral kingdom and share their concern for plant biodiversity conservation in their own way. This garden allows the visually impaired to enjoy and learn more about nature through a fun and yet an effective manner.