

ENVIRONMENTAL EDUCATION AND PEOPLE WITH DISABILITIES

Sujatha Padmanabhan*

It may come as a surprise to many an environmental educator today, that way back in the 1920s, Salim Ali, the world famous ornithologist, conducted nature education sessions for pupils from the School for the Blind at Mumbai. He was then a Guide Lecturer in the newly opened Natural History Section of the Prince of Wales Museum. Of his experiences, he wrote thus, " I particularly enjoyed talking to pupils from the School for the Blind, because of the lively interest they showed, and I never ceased to marvel at their almost magical aptitude for grasping anatomical details merely by passing their fingers over the exhibits of skulls and bones specially prepared for them." The reality today, however, is that people with disabilities are largely left out from most mainstream activities and programmes, which include the opportunities to partake in environmental education programmes.

This paper seeks to understand the need for inter linkages between groups working in the field of environmental education and disability, in order to explore the possibilities of extending existing environmental education opportunities to people with disabilities. This is a group that is presently marginalised from mainstream society. The present exercise is part of a national level exercise, the **National Biodiversity Strategy and Action Plan** (NBSAP) which has been initiated by the Ministry of Environment and Forests and which aims to produce a national level strategy and action plan for biodiversity for the whole country.

The NBSAP project, whose technical component is being coordinated by an environmental action group, **Kalpavriksh**, aims at formulating a strategy and action plan for biodiversity conservation through a bottom-up approach by involving a large number of persons from various sectors (NGOs, academics, farmers, scientists, fisherfolk, etc) in the process. Plans will be made at four levels that will feed into the fifth level, which is the national level. The four levels are: 1) **local**, where plans will be made for twenty local sites, like for example Uttara Kannada district in Karnataka, or West Garo Hills in Meghalaya 2) **ecoregional**, where plans will be made for ten regions that cut across state boundaries, like for example Western Ghats, Gangetic Plains, East Coast, etc 3) **state**, where plans will be made for all states and union territories and 4) **thematic**, where plans will be made for 13 themes that link closely to biodiversity, for example culture, health, education etc.

One of the thematic plans is on Education, Awareness, Training and its link to biodiversity conservation and sustainable use. This thematic plan is being coordinated by the Centre for Environment Education, Ahmedabad. *It is hoped that the recommendations of this paper will feed into this plan, and later get incorporated into the*

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national level plan. Since biodiversity is a subset of environment, the focus of this paper is on environmental education as a whole, rather than only on biodiversity.

Through this paper an attempt is made to

- Understand the current situation regarding the inclusion of people with disabilities in environmental education programmes
- Elicit the reasons for the necessity of such inclusion
- Suggest strategies which would facilitate such inclusion

(This paper includes suggestions for both children and adults with disabilities)

Methodology

Perspectives were gathered on the above three objectives from the following three participant groups:

- (1) People with disabilities
- (2) Individuals/groups working in the field of Environmental Education
- (3) Individuals/groups working in the field of Disability

In order to elicit responses from the participant groups, three different questionnaires were sent out to each of the groups. Over 160 questionnaires were distributed to the three groups, and 62 responses were received.

In addition, three organisations working in the disability field (Spastics Society of Northern India, New Delhi; Vidyasagar, Chennai; and Mary Rice Centre, Shillong) agreed to act as nodal agencies to elicit responses from the participant groups. Of the three nodal agencies, Spastics Society of Northern India and Vidyasagar, conducted day long workshops to which people representing the target groups were invited. At the workshops, environmental issues were discussed through audiovisual presentations, activities and games, after which the questionnaires were filled out.

Current scenario

It appears that while people with disabilities are largely excluded from environmental education programmes, the situation is beginning to change, given the fact that over the last decade awareness regarding disability issues has grown. An analysis of the responses to the questionnaires received yielded the following information with respect to the involvement of people with disabilities in environmental education programmes: children with orthopaedic, mental, multiple, visual and hearing disabilities have been involved to some extent in activities like birdwatching, nature camps, outdoor adventure skills, audio visual programmes and vermicomposting.

Organisations working in the field of disability have planned environmental inputs themselves, often linked to the classroom syllabus, and have not involved environmental educators for any kind of inputs. This has often lead to the inputs not being given in a sustained manner, and also with inadequate technical knowledge of the subject, and inadequate teaching material.

Why should people with disabilities be included in environmental education programmes?

A question of Rights

Article 23 of the UN Convention on the Rights of the Child, 1989, (which India has ratified) states that “State Parties recognise that mentally or physically disabled children should enjoy a full and decent life in conditions which ensure dignity, promote self reliance and facilitate the child’s active participation in the community.”

“Active participation in the community” or inclusion, is indeed the biggest challenge for people with disabilities today. Society is almost completely designed for able-bodied living, and such an environment becomes “disabling” for people who have an impairment. To illustrate this with an example: it would be impossible for a person with total visual loss to read this paper without the help of a sighted person. In this case, blindness, the physical impairment, has led to a disabling situation due to the paper not having been produced in Braille, or being recorded on tape.

Hence, “disability” is a problem that is located outside of the person with disability. It is caused by the fact that society’s structures, systems, physical environments etc. are so designed that they segregate and exclude. A person who cannot walk has an impairment, but lack of mobility is a disability, a situation which is socially created and could be solved by ramps and lifts in buildings, wide entrances and doors, affordable wheelchairs and more (French, 1993)

The situation in India with regard to awareness about disability rights has seen some positive changes over the last decade. Disabled rights groups have been formed in a number of cities all over the country and people with disabilities have increasingly been voicing their protests over exclusionary practices and also fighting for their rights. As a result a group that was largely invisible in society, or was visible mainly as an object of ridicule or pity (particularly in our urban metropolitan cities), is slowly being given opportunities to partake in society. Though much change still needs to be effected, most of all an attitudinal change towards a section of society that is perceived as “different”, a beginning has surely been made towards inclusion.

“The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995” came into force in the year 1996. This law is an important landmark and is a significant step in the direction of ensuring equal opportunities for people with disabilities and their full participation in nation building. The Act provides for both preventive and promotional aspects of rehabilitation like education, employment and vocational training, job reservation, research and manpower development, creation of barrier-free environment, etc.

Yet, while there has been a thrust to involve able-bodied people in various environmental education programmes, disadvantaged groups like the disabled often get excluded. The

reasons for this are many, and some are spelt out later in the paper, but the deeper issues are those that relate to values and attitudinal biases that discourage inclusion.

A question of Responsibilities

The exact number of persons with disabilities in India is not known. The 1981 census revealed that 0.16% of the population was disabled. The grossly inadequate method of enumeration used in the 1981 census led to the enumeration of disabled persons being dropped in the 1991 census. The results of the 2001 census are still awaited. However, it is estimated that there are 70 million people with disabilities in India (Agarwal 2001).

As an integral part of society they too must be made aware of their responsibilities towards conservation. If environmental education aims to foster the values, attitudes and skills required to protect and improve the environment, then it is crucial that people with disabilities are also included. They too must be seen as consumers of natural resources, who have as much of an impact on the environment as any other group.

People with Disabilities as possible spokespersons for conservation issues

Many people with disabilities have made a significant contribution to the field of disability, not only by initiating rehabilitation services, but also helping to raise awareness about disability issues and campaigning for disability rights. The very fact that they have been discriminated against often results in their being able to relate to other social issues, sometimes in ways that reveal more sensitivity. The possibility of developing people with disabilities as environmental spokespersons by sensitizing them to conservation issues has not been adequately explored. Interestingly, out of the responses to the questionnaires, two persons have said that they feel that people with disabilities do articulate their views strongly.

The story of Caroline Casey clearly illustrates the above conviction. Caroline, a visually impaired woman from Ireland, traveled on an elephant through the states of Kerala, Karnataka and Tamil Nadu from January- May 2001. She did this in order to raise funds for the Sight Savers Project (to support operations that would restore sight to people), and for projects that work for the conservation of the Asian elephant. The degree of Caroline's visual impairment is such that in Ireland she is registered as legally blind. The 1000 Kms. that she traversed enabled her to raise 250,000 pounds.

Caroline had set up the Aisling Project Charity, as an inspirational, adventurous fund-raising initiative for the National Council for the Blind, Sight Savers International and for the protection of the Asian Elephant. In her words, "My wish for the Indian Challenge was to create an adventure and inspire people into thinking of disability in a positive way. I wanted to help open people's eyes. The journey was about saying, 'We all can make a difference', proving the positivity of alternative ability in the workforce and in society." (www.theaislingproject.org)

A chance to contribute

It is important for people with disabilities to be able to have a chance to contribute to their neighbourhood or community. This sounds like a trite thing to say, but the power of contribution could be highlighted through two very interesting examples:

Vidyasagar is an organisation that works with people with disabilities in Chennai. Since 1997, children from their school project, many of whom have a neurological disability and use wheelchairs, have joined in Chennai's annual turtle walks. These walks are organised during the turtle nesting season every year, by the Students Sea Turtle Conservation Network, as an attempt to protect the nesting sites and eggs of the endangered Olive Ridley sea turtle. A group walks a five kilometer stretch of beach at night looking for the eggs which are taken to a hatchery. Over the last five years, over 50 children from Vidyasagar have participated. On every trip four children who use wheel chairs are a part of the group from Vidyasagar. In fact the severity of the disability has not been an issue at all, according to the staff of the organisation. Nor has the time of the walks or maneuvering the wheelchairs over beach sands been a deterrent! Interestingly, some of the children have become regulars on these walks, and two students continue this involvement even though they are now no longer on Vidyasagar's rolls.

The second example is from the Spastics Society of Northern India (SSNI), New Delhi. The students of SSNI lent their support to the Narmada Project affected people in a small way. They had been exposed to the issues around large dams as part of a classroom project. It so happened that in the early 90s, people to be displaced from some villages in Maharashtra had organised a *dharna* in Delhi at Rajghat. The families had lost the precious little that they owned as the rising waters of the river had submerged their huts. Some of the students visited the *dharna* site with relief material that they had collected, where they had the opportunity to meet Baba Amte. Issues like submergence, displacement, loss of livelihoods, hitherto alien to these students, were brought up in a lively discussion with the villagers. To quote a few lines about the interaction from a special newsletter of the organisation, "When we were ready to leave some of the villagers thanked us warmly for our support. They said that even though they had lost all their possessions, they felt that being able to walk without difficulty was a blessing that they still had. As we left in our van, Mithun echoed the feelings of the group when he said, 'I may be disabled but at least my home has not been washed away.' Solace, but at what a price!"

A chance to earn

Almost all the respondents to the questionnaire have stated that people with disability could earn a livelihood through conservation/environment related jobs, and though some have stated that this is an area that they have not given much thought to, others have suggested options like gardening or working in nurseries, and vermiculture. The Association for People with Disabilities, Bangalore, has been running a horticulture training programme for people with disabilities with the basic objective to create employment for youth with disabilities. Around 25 youth are trained every year, after which most find employment.

Jana Pada Seva Trust, which is based in Melkote, a temple town in Mandya district in Karnataka, has been running an integrated school for several years. A number of children with disability from surrounding villages study in the school, which offers residential facilities. The trust also has a large farm where a number of crops and fruit trees are grown organically. Children with disabilities were included in many of the activities on the farm, an activity that they enjoyed greatly.

Tasks that are a part of gardening or working in nurseries are so diverse that a match could be made to the abilities of people with disabilities. The nature of the tasks itself could incorporate physical therapeutic exercises (stretching, reaching, etc), and facilitate transfer of skills into other life situations (e.g. filling water cans up to a certain level). Also the activity of tending to plants is a low stress activity which could be therapeutic for disabled people whose life circumstances are sometimes very stressful.

Hurdles faced

Respondents to the questionnaires were asked what they considered to be the main hurdles that have prevented inclusion of people with disabilities in environmental education programmes. The responses elicited could be grouped under the following three main categories:

A feeling of inadequacy on the part of environmental educators

Environmental educators mentioned feeling a lack of specialised training to be able to deal with people with disabilities. Feelings of inadequacy (or discomfort or fear) could be put down to many reasons: lack of opportunities to interact with persons with disabilities because they are not yet part of mainstream society; persons with disabilities are sometimes perceived as “different” because they do not fit into what society by and large defines as the “norm” for behaviour; the establishment of specialized institutions for rehabilitation services has created and reinforced a special aura or mystery about disability.

Such diffidence leads to the misconception that any programme that involves people with disabilities has to be specially designed, specially executed with different methodologies, special materials, activities etc. While there is an element of truth in this in as much as say an outdoor activity may have to be designed for wheelchair users, or a story made available in non-visual modes to people with visual impairment, the focus should definitely be on using existing environmental education programmes. All that is required is sensitivity to some special needs that a group may have, and a realisation that there is often a very thin dividing line between ability and disability.

A lack of expertise

While environmental educators mentioned feelings of inadequacy as a hurdle, people working in the field of disability stated that a lack of knowledge on environmental issues prevented them from carrying out any sustained programme. What was also mentioned

was the inability to sometimes know what to focus on (since one is dealing with very vast subjects) and also how to keep up continuity for a specific group.

Issues of access

As mentioned earlier, access is a major issue for crutch, walker and wheelchair users. Most public places of nature education have physical barriers that bar entry to these users, like a flight of steps or a turnstile entrance. Consider the parks, zoos and the museums of our cities and one would realise that in their planning and design, the needs of disabled individuals were not considered. Even if the entrance barriers are overcome, there are always more to contend with: cobbled pathways in parks; sign or information boards which persons with visual impairment cannot read easily; exhibits in museums which are far above the eye level of a wheelchair user, to mention just a few. Even programmes organised for the general public are not without barriers to information. A leading environmental group in Pune discovered this, when a young participant complained that she could no longer lip-read during a public lecture when the lights were switched off for a slide show.

The Persons with Disabilities (Equal Opportunities, Full Participation and Protection of Rights) Act, 1995, provides that the appropriate government and the local authorities shall, within the limits of their economic capacity and development, provide for ramps in public buildings. Increasingly, groups of disabled activists in some cities are beginning to realise the need for strong advocacy of their needs, and have been catalysts for many initiatives: spreading awareness on disability issues to key target groups like architects, city planners, etc; focussing energies on a certain public building (s), to ensure the modifications are made to enable access. However, at times the challenges are great. For example, if a ramp has to be built the gradient of the slope has to be such that it is possible to negotiate a wheelchair up. The length of the ramp has to be in a certain ratio to the degree of the height of the slope. In already existing buildings this could become a challenge, as the existing space may be inadequate.

In Bhopal the efforts of a group, Arushi, have been significant. They networked with officials of the Regional Museum of Natural History for making it disabled-friendly. To make information regarding the center available to the visually impaired they transcribed brochures and other information regarding the center into Braille. In collaboration with the Regional Museum of Natural History, Arushi also organized one-day workshops on Accessibility for the staff of all museums, parks and zoos of Bhopal.

While efforts like those of Arushi must be promoted, it is equally important to focus on access to public places that are yet to be built. In this connection it is interesting to note that the Central Zoo Authority (CZA), (which was created in 1992 under Section 38 of the Wildlife (Protection) Act), became a regulatory body for the enforcement of mandatory standards and norms for the management of zoos. The National Zoo Policy 1998, states in its section on Amenities to visitors that "Ramps shall also be provided for the benefit of visitors in wheel chairs for approach to animal enclosure and other civic amenities." One

needs to gauge to what extent such rules and policies actually make a difference on the ground.

A very recent laudable initiative is through an eco-education programme by the National Botanical Research Institute (NBRI) at Lucknow. In July 2001 the NBRI inaugurated a garden for the blind. This was the first of its kind in Asia and the sixth in the world. Spread over 0.1 hectares, the garden has descriptions of the flora in braille, and helps persons with visual impairment move around the park with minimum help. Small pebbled portions on the path, which are noted with the help of the cane, indicate an information board on the right. Turnings are indicated by pebbled spaces in the shape of an inverted 'T' (Banerjee, 2002).

Facilitating Inclusion

An overarching strategy to facilitate inclusion of people with disabilities into ongoing environmental education programmes is **collaboration** between groups working in the two fields. Collaboration between the groups would help in many ways:

Awareness raising and sensitization:

Networking between groups working on environment and disability would help raise awareness about environment and disability issues. While certain issues are clearly a concern of both the groups, like for example the recent shocking links being made between endosulphan spraying of cashew plantations in Kasargode district in Kerala and the increase in incidence of neurological disabilities, there are certain others which are not so apparent. To state one example, the guidelines brought out by the Ministry of Urban Development for greening of urban areas and landscaping includes "tiling to be done only on pavements with heavy pedestrian traffic." While the reasons for this are clearly to be able to allow roadside trees sufficient root aeration, it could make mobility more difficult for wheelchair users. Obviously, for such issues the best solutions would emerge from a dialogue between groups/ministries that view issues from very different perspectives.

While there is a definite need for awareness raising and sensitization on issues related to disability amongst the general public, certain key groups like teachers, education departments, and national and state level institutions like the NCERT and the SCERTs, would be crucial in facilitating inclusion. Where children with disabilities are concerned, the current thrust is for inclusive education, where efforts are being directed to facilitate the education of children with special needs in regular classrooms. Hence, it is hoped that in the years to come children with disabilities would be part of regular schools, and that interventions aimed at involving able-bodied children in environment education programmes, would also include them.

Orientation/training programmes:

While raising awareness is crucial, it is equally important to build capacities of groups through orientation and training programmes. On a national level this needs to happen through schemes like the National Green Corps, an ambitious programme initiated by the Ministry of Environment and Forests, which includes starting of Eco-clubs in 55,000 schools (a hundred schools in each district) across the country, conducting teacher training programmes, and developing locally relevant resource material for conducting the activities of the Eco-clubs. Schools for disabled children need to be included in the programme, and special educators included in the capacity building training for environmental education.

At the same time, much ground could be covered by including a component on disability and environment in the BEd. course syllabus. This would reach out to a large workforce of teachers, who would then already be sensitized to the needs of disabled children, to be able to effectively include them in environmental education programmes that they may initiate.

Developing and sharing of resources:

If collaboration does lead to an increased awareness and sensitization of the needs of special groups, then developing/ modifying educational material, games, activities for people with disabilities would be facilitated.

At the request of a school for visually disabled children at Ahmedabad, Centre for Environment Education (CEE), collaborated with Abilities, a resource centre for disability, to produce an entire package in Braille called “Jungle Tracks”. It contains a set of jungle lore, rhymes and riddles and an activity book in Braille, as well as an audio tape of the stories. CEE has also developed touch and feel models of birds, a tape of bird sounds and a booklet on birds in Braille.

Linking to ongoing programmes/schemes:

As mentioned earlier, programmes initiated at the national level like the National Green Corps should include persons with disabilities within their mandate. Other schemes like the National Environmental Awareness Campaign (NEAC) of the Ministry of Environment and Forests, should also be made available to groups working in the field of disability. This could be done by widely disseminating information about such schemes to groups who would otherwise be excluded. An even greater impact would be achieved if this is declared as a focal subject or theme of the NEAC for one year.

At a local level, groups who are involved in environmental education programmes need to extend their expertise to groups working in the field of disability. Environmental education groups run nature clubs, organise outdoor camps and field visits, initiate community level programmes or campaigns (for example, clean up drives or anti plastic campaigns), hold seminars etc. They need to make special efforts to involve groups that are not mainstream.

Conclusion

In conclusion, the philosophy of inclusion is one that will allow for people with disabilities to partake as equal citizens in society. The barriers that are the most challenging to overcome are those that are attitudinal in nature that see disabled people as different. The very fact that the head of a very well known environment organisation remarked that people with disabilities have “enough problems of their own to be able to worry about the environment” speaks volumes of the miles that still have to be traversed in the efforts to make our society an enabling one!

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