Children as change agents: A case study from Karnataka

- by Adithi Muralidhar

The physical, mental, behavioural and intellectual benefits of being amidst nature has been documented by many (see Children & Nature Network, 2012) and yet recent literature has emphasized how young children are spending less time outdoors and getting dissociated from their surroundings and nature; this particularly holds more true for urban children. Limited green spaces in the city, safety concerns regarding children, and these days, an increasing preference for digital recreation, are among the many barriers that keep city kids away from the outdoors. A growing body of evidence indicates that (environment) conservation education needs to be more contextualized, with linkages between science, technology and society emphasized. By including real, relevant and local issues in their curriculum, children will be able to relate to (environmental) problems that they face on a day-to-day basis. Besides, more hands-on opportunities for children to be involved in activities that have potential to promote environmental consciousness are also being researched and developed. Having said that, efforts need to go into exploring the gaps that exist in today's conservation education programmes; which in turn will help in setting up a sound foundation for designing well-structured programmes.

Common sense as well as research tells us that any conservation effort should involve the local people, who are the major stakeholders in any environmental project. Taking this further, it is essential to recognize that tomorrow’s stakeholders are today’s children and therefore they need to be involved in such efforts. But this is easier said than done. One of the major hurdles in implementing any conservation project is that of establishing a good rapport with the local people and being accepted by them as a credible person. This is particularly true if the change-maker hails from an urban background. Being accepted is a demanding task, and this reluctance to accept can (understandably) be attributed to years of being misguided and let down by politicians and so-called (city dwelling) well wishers.

Picture 1: Kuveshi village scape

The Kuveshi Story

For several years, Hypnale Research Station (HRS) has been carrying out long-term conservation projects in the Northern Western Ghats (NWG) area. This conservation hub is part of a larger plan to build a network of Wildlife Research Stations across the NWG, focused towards conservation of biodiversity through local community engagement. Initiatives have been undertaken to establish contact with the local people by focusing on efforts to encourage community-led environmental conservation movements and ensuring that key stake holders have a say in what happens to the environment around them. And it is here, where efforts are being made to promote conservation education, particularly among the younger generation.

Picture 2: Hypnale Research Station, at Kuveshi

The primary occupation of the hand full of villagers here is farming. Over the years, interaction with the locals led to a deep understanding of their farming practices, traditional knowledge of biodiversity, their culture and values. Time passed and the children of Kuveshi became familiar with the HRS team members and starting visiting the research station (located in Kuveshi village) in their spare time. The research station was a nature interpretation centre of sorts with posters of birds, butterflies, moths and trees displayed on the walls. The centre was equipped with some basic instruments like a microscope, magnifying glass, spotting scope, and the children were actively encouraged to observe things around them.

Picture 3: Children learn to use a spotting scope

Attempts were also made towards encouraging the youngest inhabitants of the village to take part in the conservation efforts, through more formal channels. Kuveshi has one government school that caters to about 15 children ranging from classes 1 to 5. They attend the school at the same time and sit in the same classroom, share resources and have one teacher, who comes from a nearby town. The teacher who is a nature enthusiast himself played a pivotal role in the conservation education programmes.

Picture 4: Ravi, the teacher and his students

Two years have passed and the children have:

- access to resources (in local language) on environment
- access to an activity book for children based on wildlife and environment
- basic laboratory facilities in the school
- received books and posters which will serve as a repository of information for them, like a library
- received additional curriculum oriented resources on science, namely the Small Science textbooks (Marathi) developed by Homi Bhabha Centre for Science Education
- participated in art competitions, exhibitions, bird watching and nature trails
- received one laptop for the school via 'Know Thy Neighbour' project
- been a part of informal talks and discussions, film screening and slide-

shows, addressing issues of local environmental and sustainability practices

- received solar lanterns for every child (and hence family), as there is no electricity supply in the village
- received first aid kits, basic health and diet charts
- attended hygiene and health care sessions (specifically, girls)

Picture 5: Children taken on bird watching trail

Picture 6: Teacher showing children a slide show on wildlife in the area

At a time when even a remote village like Kuveshi faces constant threats from deforestation, fragmentation, illegal hunting, pollution and human-animal conflict, it is important that the locals are well-informed and equipped with the know-how on how to deal with possible future environmental problems. The locals have an inherent love for their land, but financial pressures drive them outside the borders of their village to seek opportunities in bigger towns and cities. Additionally, securing the environment for future generations, means that time and efforts need to be invested in today's children. Developing a scientific temper, along with creative and critical thinking skills can empower them to deal with the environmental problems they face on a daily basis. The on-going project at Kuveshi is an effort to provide a level playing field to all its residents, to enable children to become active participants in tomorrow's world, and to equip children with communication and technological skills.

They may choose to stay back in the village - in the Western Ghats like their forefathers and foremothers, or move to the glamorous cities of Goa or Karnataka. Whatever their decision is, it should be of their own accord taking into account all that matters to them.

Picture 7: A girl's drawing (tiger, domestic rooster)

As Kuveshi stands at the cross roads between 'conservation' and 'development', time will tell how well these efforts have paid off.

How can you help?

- Donating teaching and learning resources (science/ environment related) to the schools at the project site. Resources in Kannada or Marathi would be great!
- Develop and share with us innovative activities related to environment for children.
- Sharing with us research papers on environment education, that can improve our understanding of the domain.
- Donate your time, money or resources.

All photos courtesy of: Hypnale Research Station

To get involved, contact Nirmal Kulkarni: ophidian_nirmal@yahoo.co.in
For additional information: http://herpactive.com

And if you just want to brainstorm about ideas for environment education, contact Adithi: adits.mdhar@gmail.com

Readings:

Bhide, S., & Chunawala, S. (2016). Making a case for outdoor engagement in environmental studies at Indian schools. *Proceedings of the XVII IOSTE SYMPOSIUM Science and Technology Education for a Peaceful and Equitable World*, Braga, Portugal, 11-16 July, 2016.

Children & Nature Network. (2012). Annotated bibliography on Health benefits to children from contact with the outdoors & nature. Available: https://www.childrenandnature.org/wp-content/uploads/2015/04/CECCNNWorldwideResearch.pdf

Dutta, D. (2016). Teaching for a resilient tomorrow, *Teacher Plus, 14(*4), 24-26, April 2016. Online version: http://www.teacherplus.org/focus/teaching-for-a-resilient-tomorrow

Dutta, D., Chandrasekharan. S. (2015). Developing an educational framework for ecological sensibilities: A philosophical perspective. Abstract book of the 3 rd International Conference on Creativity and Innovations at Grassroots, Ahmedabad, India.

Muralidhar, A. (2014, January). Closer to nature: Outdoor learning. *Teacher Plus,* pp 50-53. Online version http://www.teacherplus.org/ecowatch/closer-to-nature-outdoor-learning

About the author: *Adithi Muralidhar is an ardent nature enthusiast based in Mumbai and has a keen interest in science & environment education, sustainability and socio-cultural issues. She occasionally tweets at @Adithi_M*