

Communication for Conservation – Linking the Gap with Nature Camps

SANGHAMITRA DEOBHANJ

Assistant Teacher, Ranihat High School, Cuttack – 1, Odisha
Department of School and Mass Education, Government of Odisha
E-mail: deobhanj@gmail.com

ABSTRACT

Nature camps are incredible personal experiences in the lap of nature. Nature acts as the best teacher. People are usually so engaged in their daily work that they communicate less with nature and also understand less the lessons it teaches. Nature camps are held in groups, mostly in wildlife sanctuaries for one day or more. They facilitate correlation of natural resources, natural phenomena, etc. with school subjects to make a better impact on the student's learning about nature.

An attempt with one hundred high school science teachers in Cuttack city has been made in the present study, to analyze their responses and views regarding participation in nature camps for effective science communication. It was agreed by the majority that visits to nature camps help to have better understanding of the environment and the related local and global issues, than their peers who do not visit. They also cited some limitations and also advantages of the visits. Nature camps enhance communication regarding biodiversity, conservation, pollution, global warming, climate change, etc. among students as well as community members. The gap between the classrooms and the real world can be linked through these nature camps for global peace and sustainable development.

KEYWORDS: Nature Camp, Communication, Wildlife, Environment Protection

Introduction

Nature provides the essential support to human life. Food, clothes, shelter, medicine, recreation, pets, plants, animals, birds, mental health, in fact almost everything around us has a connection with nature. Nature, the beautiful physical world around us, makes life enjoyable and meaningful. India, the land

of Buddha and Mahavira, following the ethical principles of “*Jivah Rakhshati Rakhshatah*” (Protect life and be protected), has been conserving all creations of Mother Earth since time immemorial, thereby maintaining a fine and delicate balance between man and nature.^[1]

Protection of forests and the environment has been ensured under the constitutional framework. The chapter on fundamental duties of the Indian Constitution clearly imposes the responsibility on every citizen to protect the environment. Article 51-A (g), says that “It shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wild life and to have compassion for living creatures.^[2] And added by 42nd Amendment) Act, 1976, article 48A says that, “State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country.” However, there are often violations of rules and regulations. The rising population along with increasing human interference with nature are major concerns of environment protection today.

Increasing biotic and anthropogenic pressure on forests have adversely have affected the biodiversity and the habitat as a whole.^[3] With proper communication, everyone should be made aware of the harm already done to the nature as well as the upcoming dangers to it, so as to not only think but work towards nature conservation.

Nature Camps

The National Nature Camps Programme is an initiative of the Ministry of Environment and Forests in Environment Education, which is aimed at creating greater awareness, understanding and empathy of children with and for the environment. Through this initiative it is hoped that every child who goes through middle school (classes VI to VIII) will get at least one opportunity for a 2-3 day camping experience during these years. The ‘Nature experience’ for children and teachers has huge potential to trigger their sensitivity towards nature appreciation and conservation, leading to positive environmental actions at different levels.^[4]

Nature camp provides everyone a unique venue for development and growth of new concepts and ideas about our environment. It allows the campers to become independent and self-confident, learn new skills, while socializing and making new friends. Nature camps make the campers aware about many aspects of the environment. It provides out-of-box thinking, vast exposure and experience to learn many things about nature.

Nature Camps and Science Communication

Communication promotes exchange of information, freedom of expression, and free flow of ideas through different media. Nature camps provide an interesting and informative medium for science communication. This has greater relevance in achieving the Sustainable Development Goals, SDGs, set out in the 2030 Agenda for Sustainable Development by United Nations.

Global ecological problems, many of which are direct outcomes of the interference of human beings in nature need to be communicated effectively to the public. Science communication has a greater responsibility to counter the harmful effects of global warming and the consequent climate changes. Science-based solutions need to be implemented in view of the complex environmental and developmental challenges in India.

Activities like nature trails, walks, field visits, films/documentary shows, games, quiz, presentations, role plays, group discussion, interactive sessions are scheduled in such a manner as to make a personal relationship with nature and to realise the individual as well as collective responsibility towards protection of nature. Campers get ample opportunities to explore the nature and learn about the importance of nature and biodiversity in their lives.

Nature Camps and School Students

Students often attend school throughout the year, with the same peer group, in the same set up, which often leads to specific perceptions. A child may be marked as backward, low-achiever, quiet, introvert, etc., but in reality he/she can be a champion in another setting. Children, who go out for a day or more, meet a whole other group of people in a diverse

environment. Many times, children break out of their supposed categorization when given the chance.

Nature camp is always fun and exciting for the young generation. A day or more at nature camps encourages the young students to get out of their comfort zone and to take some risks, learn new skills, without the fear of failure and resulting consequences. Nature camps for children with special needs can broaden their view by exposing them to the outer world, to other children, animals, birds, sports and activities.

Between 2001 and 2004 the American Camp Association^[5] conducted national research with over 5000 families from 80 ACA-Accredited camps to determine the outcomes of the camp experience as expressed by parents and children. Parents, camp staff, and children reported significant growth in:

- Self-esteem
- Peer relationships
- Independence
- Adventure and exploration
- Leadership
- Environmental awareness
- Friendship skills
- Values and decisions
- Social comfort and
- Spirituality.

The findings from this national study indicated that a camp is a unique educational institution and a positive force in youth development. The experiences in the camps develop a sense of pride and connectedness to the environment.

Forest and Wildlife Diversity of Odisha

Forests in Odisha are of tropical-moist-deciduous type, blanketing hills, plateaus and other high-altitude isolated areas in the north-eastern side, while tropical-dry-deciduous variety dominate the southern side.

Table 1: Odisha forest area and wildlife

Geographical Area	1,55,707 sq.km.
Protected forest cover	58,136 sq.km.
Percentage of protected forest area to total forest area of the state	10.37
Percentage of protected forest area to total geographical area of the state	5.36
Number of sanctuaries	19
Number of national park	1
Proposed national park	1
Number of species of amphibians (percentage of Odisha to India)	27 (9%)
Number of species of reptiles	131 including three crocodilian species (25%)
Number of species of birds	479 (39%)
Number of species of mammals	87 (21%)
Number of species of fish	600 (19%)
Number of species of threatened animals as per IUCN Red data book	54, including 17 reptiles, 15 birds and 22 mammals
Total mangrove cover	231 sq.km.
Number of tiger reserves	1
Proposed tiger reserves	1
Number of elephant reserves	3
Number of biosphere reserves	1

Source: Wildlife of Odisha – 2016⁵, Forest and Environment Department, Government of Odisha

Nature Camp at Bhitarkanika

India is home to a vast variety of flora and fauna. Nature camps and nature education programmes are arranged in many states of India throughout the year depending on local specifications.

Bhitarkanika National Park is the core area of Bhitarkanika Wildlife Sanctuary, situated in Kendrapara and Bhadrak districts of Odisha, spread over 145 sq.km. Saltwater crocodile (*Crocodylus porosus*), Indian python, King cobra, black ibis, darters and many other species of flora and fauna are found in Bhitarkanika. Mangroves are salt tolerant, complex and dynamic ecosystems that occur in tropical and subtropical intertidal regions. Bhitarkanika has such rich, lush green vibrant

ecosystem lying in the estuarine region of Brahmani-Baitarani rivers. Nature camps are held regularly in Bhitarkanika sanctuary.

Table 2: Nature camp held at Bhitarkanika during the years 2016-17 to 2018-19

Details of awareness camp	No. of participants
2016-17	
Nature camp for school children	35
2017-18	
Nature camp for school children	52
Nature camp for school children	51
Nature camp for school children	43
Nature camp for school children	44
Nature camp for school children	42
Nature camp for school children	52
Nature camp for school children	80
Nature camp for school children	50
2018-19	
Nature camp for school children	46
Nature camp for school children	41
Nature camp for school children	30

Source: Office of Divisional Forest Officer, Rajnagar Mangrove (Forest) and wildlife Division

Significance of the study

The present study focuses on the role and significance of nature camps, for science communication and for awareness about the environment. Nature camp is globally accepted as a valuable tool for environmental education. It is also understood that the nature camps have the potential to bridge the gap that occurs between the knowledge gained in classrooms and the real situations in the environment.

Schools and communities need to promote environmental awareness as a priority, then only the aim of global sustainable development would be easier to achieve. And, as the teachers are in a lead position of exercising profound transformation in the ecosystem, it is very important to know the perspective and attitude of the teachers towards the exposure to environment and

environmental issues through visits to nature camps. There is a need to identify the factors that promote environmental awareness and good practices amongst the young generation to support sustainability and conservation of natural heritage.

Objectives of the study

The following are the objectives of the study:

- To assess the relevance of nature camps in science communication for the community
- To find out the views of the teachers towards nature camps
- To find out the significance of nature camps in linking classroom learning with real world and environmental issues

Delimitation of the study

- The study is delimited to Cuttack district.
- The study is conducted on government high school science teachers having six years or more of teaching experience.
- The study focuses on science communication for the community through nature camps.

Research methodology

The present study is Descriptive in nature with qualitative and quantitative methods employed in data collection and analysis.

Population and sample

The general population for this research paper consisted of all the teachers teaching in the schools of Cuttack district. For selecting a sample, one hundred science teachers were identified and selected through purposive sampling, i.e. non probability sampling technique. The selection of the teachers was made at the district level science teachers training programme, from the participating teachers from different schools of the district.

Tools used in the study

A small questionnaire was prepared by the researcher in Odia language, to solicit the responses of the participating teachers to

get data on the objectives of the study. It consists of a check-list having ten items with specific responses and another ten items with scope for open ended response. It was distributed amongst the participating science teachers at the teachers' training venue. All the items had queries related to their opinions about nature camps. The individual open-ended question items had opportunities for the respondents to give their views elaborately as per their personal choices.

Research Questions

The individual items in the questionnaire included the following aspects:

- Opinion of science teachers towards participating in nature camps
- Opinion of science teachers towards science communication through nature camps
- Beneficial aspects of nature camps and related resources for different categories of students
- Challenges and problems a teacher finds in access to nature camps

Results and Findings

Data collected from the sample teachers from different schools were compiled, analyzed and interpreted to draw some conclusions regarding the larger population. The main focus was on the necessity and feasibility/applicability of integrating participation in nature camps in the practice of science communication and making the whole community sensitive about the environmental issues.

The analysis and interpretations were done as follows:

- The response of more than sixty percent of teachers is found to be positive regarding participation and stay in nature camps. It is found that only one-fourth of the respondents were aware of the nature camp arrangements in the wildlife sanctuaries and national parks. And interestingly, it is found that only five percent of the respondents had personal experience of attending nature camps at least once. It was

agreed by the majority that visits to nature camps help to have better understanding of the environment and the related local and global issues, than their peers who do not visit.

- This implies that more detailed information regarding the available nature camps needs to be provided to all the educational establishments. Regular meetings, interactive sessions need to be arranged between forest officials, resource persons, school authority, teachers, students, and community members.
- Nearly seventy percent of the respondents gave affirmative response for better science communication at the camps and after the camps. One respondent wrote in the remark column that each camper can be a potential ambassador of specific environment issues and spread out the right messages to others.
- Science communicators should venture into this area and avail the opportunities to communicate about the related researches, scope of further work, major findings of the work done in specific sectors for environment conservation, protection of natural resources, etc. Science teachers must adopt the approaches to link the classroom teaching to the experience gained in visiting the nature camps to improve students' learning about science concepts.
- Majority of the teachers, nearly three-fourth of the respondents, remarked that visits to national parks, sanctuaries, etc. can prove beneficial to all types of students – gifted, less talented, less interested, introverts, shy, girls, children with special needs, etc.
- All types of students should be encouraged to visit the natural heritage sites and attend nature camps as per convenience.
- The challenges or difficulties for participating in the nature camps were categorised. Some are found to be personal, some are about safety, and some are about stay and food arrangements during the camp days, rest about permissions, expenditure and provision of funds.
- Previous campers, researchers, science communicators, forest officials and camp organisers should make regular

visits to the educational institutions and interact with school community to remove the apprehensions and to make them understand the benefits of nature camps.

Discussion

To cater to the need of a growing economy and increasing human population, natural ecosystem is being fragmented and destroyed. People need to have knowledge about nature and understanding of biodiversity, conservation, pollution, global warming, climate change, etc. Nature camps provide a surrounding that can result in beneficial changes in students' self-esteem, interpersonal relationships, and feelings of connection with the nature.

When students learn how ecosystems function and how ecological balance is essential to be maintained, their attitude changes and they develop more ecologically responsible behaviours. These nature camps are significant for linking/addressing the gap between the theoretical knowledge imparted in classrooms and the practical knowledge in real life situations.

Nature has always been a treasure of experience and learning. The one-day or two-day programmes improve the campers' self-esteem, develop their interest and curiosity about nature, and boosts outdoor skills. Students need to be given opportunities for outdoor activities instead of staying indoors, because there is so much to see, do, and learn about the real world. Nature camps encourage creativity, increase decision making, and impart disciplinary skills in students. These camps help in connecting with nature. These contacts make the campers physically, mentally, emotionally and academically strong and healthy.

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