

BEST PRACTICE

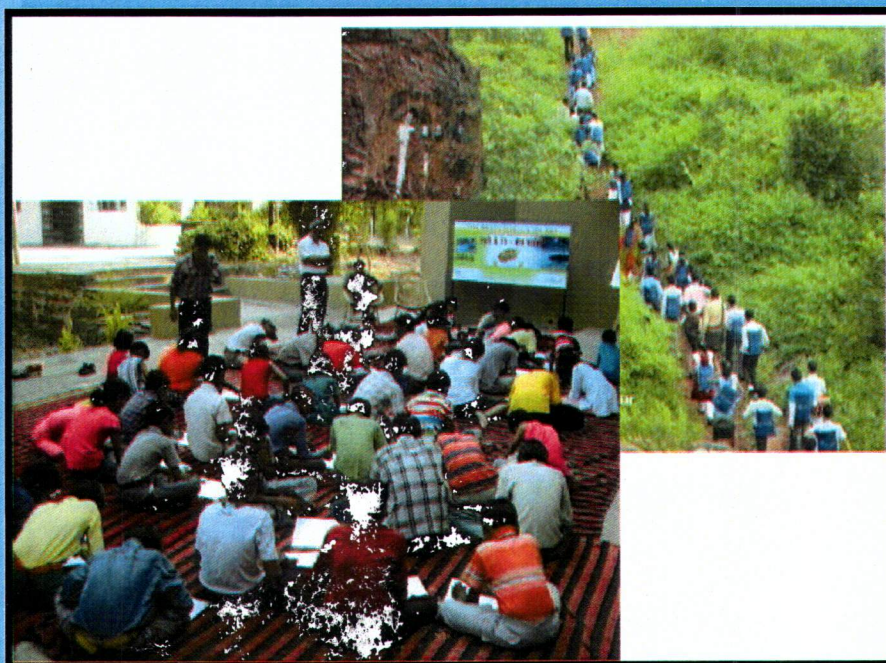
AWARENESS GENERATION IN CHILDREN ABOUT ENVIRONMENTAL ISSUES

Documented & Published by

**RCVP Noronha Academy of Administration &
Management, Madhya Pradesh**

Website: academy.mp.gov.in

E.Mail: dgrcvpnaa@mp.gov.in



Documentation Supported by:

**Department of Administrative Reforms & Public
Grievances Ministry of Personnel, Public
Grievances & Pensions, Government of India**

Contents

Chapter	Subject	Page
	Preface	3
	Acknowledgement	4
	Abbreviations	5
1	Introduction	6-11
	1. Status of Environmental Education Prior to Interventions	
	2. Stakeholders	
	3. Formal & Informal Environmental Education Program	
2	Plans & Strategy	12
	1. Objectives	
	2. Strategy Adopted	
	3. Efforts by Institutions	
3	Convergence	13-31
	1. School Education Department	
	2. Forest Department	
	3. Environmental Planning & Coordination Organization	
	4. Ecotourism Development Board	
	5. State Biodiversity Board	
	6. Regional Museum of Natural History	
	7. National Afforestation Ecodevelopment Board, Regional Center- Indian Institute of Forest Management, Bhopal	
	8. Regional Science Centre Bhopal (RSCB)	
	9. Centre for Environment & Education, Bhopal	
	10. World Wide Fund for Nature	
	11. Bhopal Birds	
	12. Aravali Foundation for Education (AFE)	
4	Issues & Recommendations	32
	1. Affectivity	
	2. Sustainability	
	3. Way Ahead	
5	Conclusion	33-34
6	Bibliography	35

Preface

The conservation of environment is embedded in the Indian culture and traditions. The art of living practiced nationwide imbibes respect and care for flora and fauna in the country. Attempts to generate awareness on environmental conservation in India were made by a few institutional mechanisms to provide a common platform for education in schools. Children are perceived to be the best messengers of waves of change. Lessons on values of moral education and natural resource conservation to children bring a fresh breeze of attitudinal and behavioural changes in society towards environment.

The Ministry of Environment and forests in Government of India initiated a program on National Environmental Awareness Campaign (NEAC) in 1986 and National Green Corps (NGC) in 2001. The State of Madhya Pradesh is geared to take this challenge ahead as it represents India's 12 per cent forest area and State's 32 per cent geographical area. The State government is committed to spread awareness on environmental conservation. A group of organizations are working closely to generate awareness on conservation of environment among children in MP. The synergy of multiple institutions brought by the combined efforts changed the approach of the people towards environment. As the State is developing at a rapid pace, it is all the more important to get the younger generation involved in the conservation campaign. This will maintain a harmonious balance of development with conservation in times to come.

An attempt to document all such efforts together to showcase the importance of environment in the heartland of incredible India as one of the best practices in civil services is made in this document.

Acknowledgement

The Academy acknowledges the contribution from the partner institutions in providing information on their initiatives on generating awareness on environmental conservation amongst children. These are Environmental Planning and Coordination Organization, Forest and School Education Departments, Ecotourism Development Board, State Biodiversity Board, Regional Museum of Natural History, Indian Institute of Forest Management, Bhopal, Regional Science Centre Bhopal (RSCB) and non-governmental institutions like World Wide Fund for Nature, Centre for Environment & Education, Bhopal, Aravali Foundation for Education (AFE) and Bhopal Birds for providing valuable information about how the task is carried out in the State.

The leaders of all the government, public sector and civil society institutions are congratulated for converging ideas, efforts, resources and finances to make the events happen for generating awareness about environmental issues among children in a creative way. The Academy is grateful to Principal Secretaries of School Education, Forest and Housing and Environment Departments, Principal Chief Conservator of Forests and Chief Wildlife Warden; Executive Director of Environmental Planning & Coordination Organization; Chief Executive Officer, Ecotourism Development Board, Member Secretary, State Biodiversity Board; Director, Regional Museum of Natural History; Director M.P. and Chhattisgarh World Wide Fund for Nature and President, Bhopal Birds.

The job of putting together all the information on the subject and documentation was designated to Dr. U.R. Singh, retired Director, EPCO, Bhopal by the Principal Secretary, Housing and Environment Department, government of M.P. His knowledge on the topic and experience of coordinating with institutions in both government and public sector organizations has enriched the documentation to a great extent. The efforts of Ms. Ruchi Jain in the Academy to give this work a shape by electronically organizing the text is acknowledged. It would not have been possible to complete the work without the day to day assistance from the office team in the Academy consisting of Ms. Yojna Meshram and Mr. Narendra Srivas.

Abbreviations

S.No.	Abbreviation	Expanded
1.	AFE	Aravali Foundation for Education
2.	CBSE	Central Board of Secondary Education
3.	CEE	Centre for Environment & Education, Bhopal
4.	CEO	Chief Executive Officer
5.	EC	Eco Clubs
6.	EDB	Ecotourism Development Board
7.	CEE	Canter for Environmental Education
8.	EE	Environmental Education
9.	EPCO	Environmental Planning & Coordination Organization
10.	EVS	Environmental Studies
11.	ID	Identity
12.	IIFM	Indian Institute of Forest Management, Bhopal
13.	MAB	Man and Biosphere Programme
14.	MAP	Management Action Plan
15.	MoEF	Ministry of Environment & Forests
16.	MP	Madhya Pradesh
17.	MT	Master Trainer
18.	NCERT	National Council for Education Research and Training
19.	NEAC	National Environmental Awareness Campaign
20.	NGC	National Green Corps
21.	NGO	Non-Governmental Organization
22.	RCNAEB	Regional Center of National Afforestation Eco-development Board
23.	RMNH	Regional Museum of Natural History
24.	RRA	Regional Resource Agency
25.	RSCB	Regional Science Centre Bhopal
26.	UNESCO	United Nations Educational, Scientific and Cultural Organization
27.	WWF	World Wide Fund for Nature
28.	YES	Young Climate Saver Programme

CHAPTER 1: INTRODUCTION

The country's 12 per cent of the total forest area is located in Madhya Pradesh. This is a matter of pride for the citizens' of the State which in turn enhances their responsibility towards it. Undulating terrain and watersheds are spread around inhabitations in every one of the fifty one districts in the State. Blessed with such natural gift, people are considerate to conserve the natural resources for posterity, which is embedded in their traditions, history, culture and way of life. The government organizations, civil society and media, all the stakeholders are consciously aware of the importance of educating children to conserve natural heritage. Discovering the proximity of greenery around, the institutions devised ways to deliver the message for natural resource conservation to school children. In an effort to do this, a remarkable synergy was successfully attained. The initiatives thus introduced in primary and secondary schools developed visible effects on the attitude of children in the State.

An effort to document these initiatives in environmental education by various institutions is made here with the financial assistance from Department of Administrative Reforms & Public Grievances, Ministry of Personnel, Public Grievances & Pensions Government of India. The information was collected, collated and presented for dissemination as one of the best practices in Civil Services.

1.1 Status of Environmental Education Prior to Interventions

A number of environmental disasters due to uncontrolled and irreversible harvesting of natural resources were witnessed during the decade of seventies worldwide. The concern was expressed in the United Nations Conference on the Human Environment in Stockholm, Sweden in 1972. The Conference heightened awareness of the global implications of environmental problems and set in motion events that lead to the general acceptance of the idea of sustainable development as a means of realizing the developmental needs of all people without sacrificing the earth's capacity to sustain life. Its declaration with 26 principles concerning the environment and development created ripples on conservation of natural resources worldwide.

During 1980, Indian Government took several steps in environment education. Some of the major tragedies like Bhopal Disaster gave the wakeup call for India to take note of crises situation and realize the need of environmental awareness and education among the citizens. India has emphasized the importance of education in growing concepts to manage the resources since Vedic era. Realizing the importance of early education for the school children, environmental education was institutionalized in India. The Central and State governments provided environmental education in the basic structure of school education, which proved to be a powerful tool for developing affinity to nature in the society.

1.2 Stakeholders

There are multiple stakes in environmental education as people are conscious of the long term impact of human behaviour on environment. The government agencies and public sector organizations recognized the need to induct Environmental Education (EE) in school curriculum and activities. The international organizations like World Wide Fund (WWF) for Nature hold high stakes in the commitment towards EE. There are national, State and local organizations which are constantly contributing to devise ways and means to inculcate the awareness desired in children. Some of these institutions with direct inputs to formal and informal EE in M.P. are listed below:

- School Education Department
- Forest Department
- Environmental Planning & Coordination Organization
- Ecotourism Development Board
- State Biodiversity Board
- Regional Museum of Natural History
- National Afforestation Ecodevelopment Board, Regional Centre- Indian Institute of Forest Management, Bhopal
- Regional Science Centre Bhopal (RSCB)
- World Wide Fund for Nature
- Bhopal Birds
- Centre for Environment & Education, Bhopal

- Aravali Foundation for Education (AFE).

The approach of these organizations in converging efforts to develop and deliver to school children is explained in Chapter 3 on Convergence.

1.3 Formal and Informal Environmental Education Programme

The need to introduce environmental conservation in the education system to refresh the tradition of respecting natural resources in Indian culture was reiterated by the provisions laid down in the Constitution of India. The Directive Principles of Policy, Article 48-A States “the State shall endeavour to protect and improve the environment and safeguard the forests and wildlife of the country” and the Fundamental Duties

The National Policy on Education (NPE)-1986 recognized Environment as “There is a paramount need to create a consciousness of the environment. It must permeate all ages and all sections of society, beginning with the child. Environmental consciousness should inform teaching in schools and colleges.

This aspect will be integrated in the entire educational process”. “Protection of the environment is a value which must form an integral part of the curriculum at all stages of education”.

Article 51-A (g) underlines “It shall be the duty of every citizen of India “to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures”, thus ensuring the responsibility of State and its citizens to protect and conserve environment. Therefore, the State and the citizens are constitutionally duty bound to be compassionate to life on earth. In response to a Public-Interest Litigation in Hon'ble Supreme Court of India issued the following directives to the government:

- Drawing attentions of the public at large, teachers, parents and students to environment education.
- Helping centre and State authorities structure the implementation of environment education in formal education under the guidance of National Council of Education Research & Training (NCERT).
- Providing an opportunity to stakeholders to take advantage of unified standard system of Environment Education (EE).

The NCERT prepared its new syllabi and text books in accordance with the following basic recommendations of the National Curriculum Framework (2005):-

- i. Systematic infusion of components of EE into the curricula of all disciplines.
- ii. It is ensured at school level that adequate time is earmarked for activities related to environmental conservation as affidavit accepted by the Supreme Court in December 2010 includes EE concepts, compulsory evaluation with at least 10 per cent of the total marks on EE content and major emphasis on project-based learning on conservation ethics. It is envisaged that environmental awareness and pro environment attitude may also be achieved over the time through this approach.
- iii. The EE in Primary and Secondary School Curriculum is provided in four Groups as A, B, C and D. The Group A Class I & II are taught on EE concerns addressed through activities to enable the children comprehend basics of environment components. For Group B with Class III to V, EE is being imparted through Environmental Studies (EVS). Group C for Class VI to X follows infusion approach for EE. Ten per cent of assessment of grand total is based on EE besides project and field work in separate time carved out from existing timetable. The Group D for Class XI & XII incorporates a separate compulsory course of 50 marks based on core syllabus and project work besides infusion in electives. Marks are to be added to the total marks. Time to be carved out of existing time table such as time allocated to general studies.

Following the acceptance of the affidavit by Hon'ble Supreme Court, the NCERT published a Handbook on Environmental Education in 2011, which provides source material for the core course of the XI and XII standards. Project books were developed for standards VI to X. Each student is expected to carry out at least two projects every year, and the whole class is expected to carry out at least 20 different projects.

Further, the MP School Education Board also designed syllabus based on the model curriculum developed by the NCERT. The broad coverage for EE and Disaster Management in the syllabi of Class IX, X, XI, and XII is outlined below

as an example of mainstreaming of EE in formal school education system in MP:

CLASS – IX (2007-2008)

- I. Understanding Ecosystem
- II. Depletion of Resources
- III. Waste Generation and Management
- IV. Environmental Values and Ethics

CLASS – X (2007-2008)

- I. Restoring Balance in Ecosystem
- II. Environmental Pollution
- III. Issues of the Environment
- IV. Striving for a Better Environment

CLASS – XI (2008-2009)

- I. Man and Environment
- II. Environment and Development
- III. Environmental Pollution and Global Issues
- IV. Energy, various agricultural operations related to cultivation of medicinal plants

CLASS – XII (2008-2009)

- I. Biodiversity
- II. Environmental Management
- III. Sustainable development
- IV. Sustainable Agriculture

The teaching methodology on the topics is mostly by examples, visits, audio-visuals, projects and discussions in the class. This initiative in formal education helped in laying down the foundations of environmental conservation concepts in school children of the State. It raised their awareness on environment related issues to a great extent.

The National Green Corps (NGC) functions as a link between formal and non-formal environmental education was launched in 2001 by Ministry of Environment and Forests, Government of India (MoEF). NGC was launched at national level for school students with a thrust to 'Catch Them Young'. The unique partnership

between the MoEF and the State government agencies along with the dedicated NGOs working in the field of EE has contributed significantly to the success of the programme. Under the NGC, Eco Clubs (EC) are constituted in every district. About 75,797 Eco Clubs were supported by MoEF across the country in 2013.

Another flagship environmental awareness programme for informal education of MoEF-Gol is National Environmental Awareness Campaign (NEAC), a multi-media campaign which utilizes conventional and nonconventional methods of communication for disseminating environmental messages to a wide range of target groups. The NEAC is being implemented through designated thirty four Regional Resource Agencies (RRAs) with full funding by MoEF-Gol. Several NGOs, educational institutions, professional and scientific bodies, community organizations, and also a whole range of other agencies participate in the campaign. NEAC is a well designed project proposal, guidelines, role of RRA, mode of implementation, reporting and fund disbursement. A set of Regional Committees constituted by the MoEF-Gol appraise the proposals for financial support. The Campaign activities are spread over a fixed time frame and effectively reflect the theme of the year. The NEAC is a blend of awareness and action component which are defined in guidelines. The financial assistance usually ranges between ₹5,000 and ₹20,000 annually. As RRA, Environmental Planning & Coordination Organisation (EPCO) has published about a dozen books on different annual themes of NEAC.



CHAPTER 2: PLANS & STRATEGY

2.1 Objectives

The main objectives of the making children aware of the environmental conservation are:

- a. To make school children aware of the environmental conservation
- b. To enable them to appreciate the importance of environment
- c. To educate them through various ways to engrain the concept on their young minds
- d. To prepare them as responsible future citizens

2.2 Strategy Adopted

The generation of awareness among school children about environmental issues was taken up by all the sectors in the State. The organizations took up no extra human or other resources to groom the school children into this direction.

Whatever miniscule finances were available with them, they could prepare a roadmap to scale up the efforts to make children aware of the impact of environmental conservation. The convergence of organizational resources reflected a good synergy, which had an indelible mark on the young minds.

2.3 The Roadmap

The institutional provisions for creating awareness on environment in the Constitution of India, directives of Hon'ble Supreme Court, NCERT, CBSE, National Education Policy and National Green Corps were already placed at the time. This was followed by State's enabling mechanisms to integrate environmental education in school curriculum and organize activities leading to raising awareness on natural resource conservation ethics among children. Minimum efforts could bring about major impact due to the intent of the government.

CHAPTER 3: CONVERGENCE

The man, material and money resources from institutions, Central and State, all converged to attain a common goal of raising awareness among school children in M.P. The inbuilt provisions in education system, small funds allocated for leading to outdoor experiences by children. Going through the actual experience of environmental components only can instill a spirit to conserve the resources and leaves an indelible imprint on the young minds. All such efforts made by some nine organizations in the State are documented in the text. A great deal of effort was also made by both print and electronic media in M.P. which could not be documented due to limitations of resources.

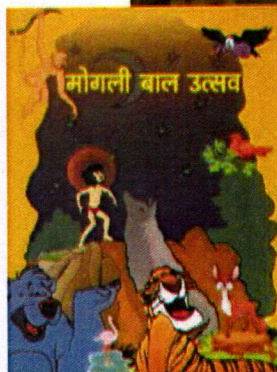
3.1 School Education Department

Apart from incorporating the directives from National Curriculum Framework in the school education syllabus, the Department extended the activities on EE by collaborating with various agencies. One such effort was to organize a State wide **Mowgli Utsav**. The territory of Pench Tiger Reserve, spread over 758 square kilometers including Pench National Park (293 square kilometer) and 346 sq km other forests, is known as Mowgli Land. This is supposed to be territory of Mowgli, the wolf-boy popular fictional character of universally popular Jungle Book authored by Rudyard Kipling. The area was home of Mowgli, a boy raised by wolves. The Jungle Book is based on Robert Strendale's "Seonee camp life in the Satpuras", "Mammalia of India and Ceylon" and "Denizens of the Jungle". Kipling's Jungle Book comes from a pamphlet of Sir William Henry Sleeman titled "An Account of Wolves: Nurturing Children in Their Dens". The pamphlet describes a boy caught in the year 1831 near Seoni in Santabavdi village that was brought up among wolves. The Jungle Book describes the actual geographical locations found in Seoni district like Wenganga River, its valley and mountain ranges.

A fine inter-departmental programme to revive the adventures of a boy brought up by a pack of wolves in the forest was started in the State during

2004, basically designed to educate school children on the importance of environmental conservation through a story. This programme was to generate awareness and curiosity about nature and wildlife amongst school children. The lead department of school education organized it in two phases. First, an intra-school essay competition in junior (class 5-8) and senior (Class 9-12) categories at school level with participation of about 65,000 schools all over the State. This is followed by the selection of four winners from the first round; a girl and a boy each from junior and senior sections qualifying for the second round, inter-school Block-level written quiz, organized at the respective groups. The winners at the Block-level represent the Block in the District-level Quiz competition arranged to select four students to participate in a three-day State level camp organized in Pench National Park in Seoni district. A training of trainers is organized in Bhopal before the event and one woman teacher is selected from every district to accompany the four selected students. A series of workshops conducted is as follows:

- I. State level training workshop for NGC Master Trainers and quiz master is organized by EPCO to train them to coordinate the activities.
- II. First Workshop for facilitators to train them to undertake various activities with students during the camp. This is organized in host district with participation of 15 teachers and 10 officials of Forest Department. Sites for outdoor activities are selected during this workshop.
- III. Second four-day workshop is



organized about a month before the camp to identify activities during the camp. All these activities are undertaken by the facilitators work out the details of each activity.

- IV. Third three-day workshop is organized for facilitators prior to the Mowgli camp.

Thus four students and a woman teacher from every district come together in the Mowgli festival organized at Pench National Park, usually during the first week of February. Besides, a group of 20 teachers is selected to undertake various quizzes, nature interpretation and cultural activities join the camp. The camps are managed outside the park by the Department. All students and teachers are divided into three large groups and 12 sub groups. About four teacher facilitators and four Forest Department facilitators are associated with each large group. All the participants stay in tents and use sleeping bags to experience forest life from close proximity. A special camp kit is developed each year for children. It consists of a rucksack, T-shirt, ID badges, a cap, a water bottle, writing pad and booklets published on general concept of Mowgli Utsav and do's and don'ts. An observation booklet is one of the specialized components of kit, which has questions, pictures, drawings and various camp related activities.

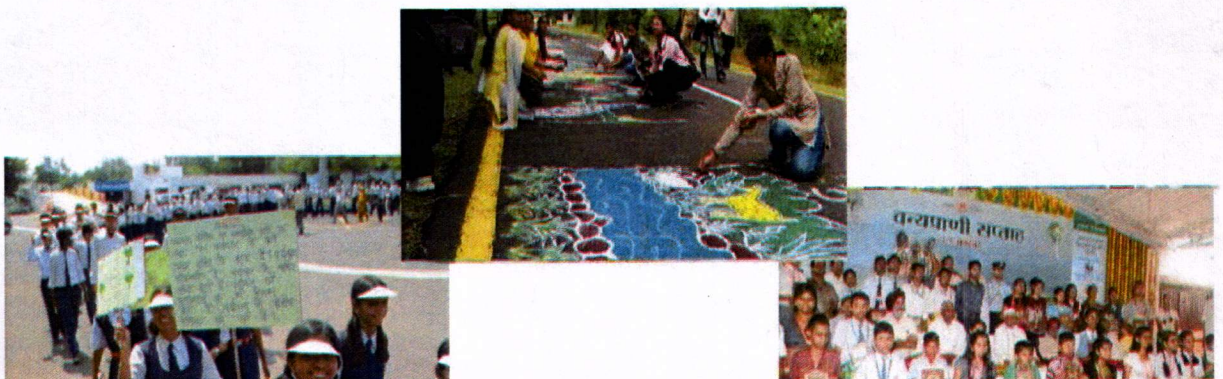
The three-day events include quiz competition, treks and walks on the nature trails and wildlife viewing, boating and other experience in the Mowgli land. The cultural evenings brings the Jungle Book to life. The institutions involved are School Education, Forest, Biodiversity Board, Housing and Environment, Ecotourism Development Board, EPCO, WWF, Tribal Development and the District Administration. The programme is organised by pooling technical and financial resources of several departments and agencies.

3.2 Forest Department

- I. **Van Mahotsav:** The M.P. Forest Department is the largest in terms of land area and human resources in India. The activities are organized by Forest Department include Van Mahotsav, Wildlife Week, Mowgli festival, World Environment Day celebrations, ecotourism and adventure sports for school children in collaboration with other departments.

Van Mahotsava is an annual tree-planting festival of India celebrated at the onset of monsoon. This movement was initiated in 1950 by the then Union Minister for Agriculture and Food, K. M. Munshi. It became a monsoon campaign in the country since then. The campaign is celebrated by the State government, municipal bodies, city administration, village institutions, schools, colleges, scout and guide, joint forest management committees etc. as a symbolic gesture to celebrate reverence for planting saplings to cover the earth with green. Beside mass plantations, the festival plays an important role in creating awareness among all stakeholders, especially children for the conservation of forests and trees for their protective, economic and aesthetic values.

There are areas delineated in districts where plantations are grown during Van Mahotsav. Such areas provide a gradation of tree growth which is not only pleasant to the landscape but also an asset for the inhabitants as green lungs. Annually, areas are identified in cities and in educational institutions where healthy saplings obtained from nurseries are planted with fanfare. At the time of plantations with the commitment to nourish it is ensured that the saplings grow into trees. The nurseries are maintained by Research and Extension wing of the Forest and Horticulture Departments and plants are made available on demand at a nominal cost. Besides the government owned nurseries, the private entrepreneurs also raise saplings and sell it for a cost.



The celebrations in schools is a step forward to inculcate the habit of nourishing trees in children. Small seasonal plants and herbs are also planted due to lack of space in school compounds. Sometimes children are given plants to carry back home for plantation. The celebration involves short interaction on importance of plantations in human life and happiness that comes from planting a sapling. This provides them an opportunity to think positive towards conservation of nature and natural resources.

- II. **Wildlife Week:** To mark the celebration of conservation of wildlife world over, the Wildlife Week is celebrated during October 1-7 annually by the Forest Department. The celebrations are managed jointly by Forest and School Education Departments. The autumn period is also the best time for outdoor celebrations with a transition in weather from rainy to winter season. The Forest Department organizes nature visits, walks, awareness campaigns, debates, fancy dress, photography and essay competitions at district level. A penchant for conservation may be seen in the youngsters during the period, rejuvenating the air with a subtle message for conservation of wildlife.

Children come forward in great numbers and participate in all the events during the week. The event is marked by token prizes for excellence in the specific event to incentivise their performance and attachment to the cause of conservation of wildlife. The multiple ways are used to create awareness among the children so that their consciousness culminates into a kind of oath to commit themselves to conservation of wildlife. Special events are held for addressing specially-abled children and the ones from orphanage to encourage them for the conservation.

Programmes are also organized by NGOs, Regional Museum of Natural History, WWF, EPCO and several other agencies at their levels to mark Wildlife Week. School students participate in the activities with enthusiasm.

- III. **Van Mela:** M.P. State Minor Forest Produce Co-operative Federation, an entity of Madhya Pradesh Forest Department (MPFD) has been organizing herbal fairs for the last 15 years in the month of December. The aim of the fair is to increase the awareness about the quality and utility of herbal raw materials and processed products among the citizens. It also plays a vital role in extending the facilities for the publicity of ayurveda and traditional medicines. During the event, MPMFP distributes prize to young orators of schools. In addition, students from different schools participate in various cultural programmes. With such activities, students get exposure to various valuable forests produces that help increase their knowledge about wildlife.



3.3 Environmental Planning & Coordination Organization

The EPCO was established in 1981 by the Government of MP as an autonomous body to assist and advice the government on environmental issues. Its main thrust is on education, research and training on environment and related issues. It is a project oriented organisation working on several environmental issues supported by State and Central government, run by a team of multidisciplinary professionals.

EPCO co-ordinates the following activities in the State:-

- I. Eco Clubs (EC)
- II. National Environmental Awareness Campaign (NEAC)
- III. Publication of Annual Environment Calendar
- IV. World Environment Day celebrations, June 5
- V. Awareness camps organised in Biosphere Reserves
- VI. Partnership in Mowgli festival
- VII. Sensitization programmes in tribal areas
- VIII. Publication of State of Environment Report, MP

- I. **Eco Clubs:-** As a nodal agency for implementation of NGC scheme in the State, EPCO supervises, monitors, trains and disburses the funds in coordination with MoEF-Gol and other related agencies. Starting with hundred schools in each district with a token grant of ₹ 1,000 to each EC school, the grant is raised to ₹ 2,500 at present. The maximum number of EC is increased to 250 per district. The total number of EC in MP is 12,500, (250 EC X 50 districts) with a financial outlay of about ₹ 3.5 crore. There are about 6,00,000 student volunteers as member of EC. For organizing and implementing activities for ECs, EPCO co-ordinates with School Education and Tribal Welfare Departments. Centre for Environmental Education (CEE), the national resource agency for NGC also organizes a series of programmes with EPCO in coordination with ECs.

In the administrative support system, there is a State Level Committee under the Chairpersonship of Principal Secretary, Housing & Environment Department, with representation from School Education, Forest, Health and Tribal Welfare Departments, Pollution Control Board, NGOs, EPCO and CEE. This committee coordinates and monitors the progress of the NGC in the State. As per guidelines of Government of India, district level coordination committees were constituted in all the districts under the Chairperson of District Collector and the Chief Executive Officers (CEO) of Zilla Panchayats and Additional Director of School Education department in the district is ex-officio Vice Chairperson. The Committee guides and monitors activities of EC at district level. There are two Master Trainers (MT) in each district for coordination. These MTs act as a link between State Nodal Agency and concerned members of District Committee.

Training of teachers in charge of EC is organized by EPCO both at



State and district level. An annual State level refresher training for NGC Master Trainers and quiz masters is regularly organised by EPCO to train them to effectively coordinate the district level activities of EC.

II. **National Environmental Awareness Campaign:** The National Environment

Awareness Campaign (NEAC) is carried out by EPCO, which is the Regional Resource Agency (RRA) of NEAC for Madhya Pradesh since last two decades. In the NEAC programme during 2012-2013, 130 EC schools were selected out of total 1059 organisations by MoEF. These 130 EC schools were from 23 districts, Hoshangabad with highest number of selected schools (42) followed by Satna (12), Rewa (10), Bhopal(8), Morena (8) and Narsinghpur (7). With an advantage of co-ordinating both NGC and NEAC, it is possible for EPCO to organise activities for school children in a concerted way.



III. **Publication of Annual Environment Calendar:-** Annual environmental calendar is published by EPCO every December and given to schools for remembering the important dates regarding environment. These include World Wetland, Forestry, Earth, Environment, and related days on which children mark some celebration to recall the importance of environment.



IV. **World Environment Day:-** As a tribute to the first Conference on Human Environment held at Stockholm in 1972, fifth of June every year is celebrated worldwide. EPCO organises activities



with school children to mark the day. The celebrations are usually in collaboration with Regional Museum on Natural History, Bhopal as schools remain closed for summer vacations on the day. Usually camping activities are organised for school students to experience the proximity of nature.

V. **Awareness Camps organised for Biosphere Reserves :** The UNESCO Man and Biosphere Programme (MAB) was initiated in 1971 to award proposed areas in a country as a Biosphere Reserve (BR) to catalyze better understanding and provision of knowledge and skills to support sustainable relationships between people and the environment which conserves unique features of ecosystems, managed for protection and sustainability. There are 543 BRs in 105 countries of world including 16 in India. There are two Biosphere Reserves in MP. Viz., Pachmarhi (1999) and Amarkantak – Achanakmar (2005), which are recognized by United Nations Educational, Scientific and Cultural Organisation (UNESCO) for sustainable use of natural resources. Both the BRs are considered to be Genetic Express Highway linking two biological hotspots of India, viz. Eastern Himalayas and Western Ghats. EPCO is the nodal agency for implementation of its Management Action Plan (MAP), which includes environmental education and generating awareness. EPCO organises environmental awareness camps for schools falling in the area of these reserves. As the concept of Man and Biosphere evokes the treatment of man as a component of the biosphere, it is essential for children to realise the importance of environment. It helps them understand environment better.

VI. **Mowgli Festival:-** The role of EPCO in the festival is for building the capacity of the school teachers and organising activities with School Education Department. A detailed description of the event is outlined in 3.1.

VII. **Sensitisation in Tribal Area Schools:-** The tribal areas are located in the remote corners of the districts. A special effort for the outreach to involve them into the mainstream of awareness on environmental issues was by training the master trainers in tribal area schools. EPCO also organised

environmental orientation workshop for teachers of block level excellence schools, Harit Mitra award competition for teachers of tribal excellence schools, quiz competitions, lectures, presentations, educational tours, painting competitions etc.

- VIII. **Publication of State of Environment Report for M.P.:** A State of Environment Report for M.P. is published by EPCO, highlighting the features specific to environment. It reports on status of environmental components on the basis of key indicators designed for assessment of environment.

3.4 Ecotourism Development Board

The MP Ecotourism Development Board was constituted with a mission to achieve sustainable forest management through ecotourism. A day-long outdoor camping programme for 50 students of classes IX and XI in every district is launched to apprise them about the rich flora and fauna of their district every year. The district Eco-club coordinators are trained in outdoor nature walks and adventure sports. The nature walks are designed and facilitated by the local forest department and adventure sports are organised by the district wing of the Sports and Youth Welfare Directorate.

The intention was to discover a small patch of wilderness in every district where a day-long nature oriented activities like observing the ecosystem components and its functions bird watching wildlife viewing boating other activities can be organised.

The idea is to make every child feel proud about the district in terms of presence of nature at their doorsteps. This experience is one-of-a-kind for the children and evoked a strong conservation ethics for them.



A multi-institutional approach for the day-long programme organisation including Forest Department for local transport and meals, EPCO with NGC component, School Education Department and Directorate for Public Instructions for nominating and providing children for the programme, Sports and Youth Welfare Directorate for adventure activities and Bhopal Bird, an NGO based at Bhopal for interpreting ecosystem and bird watching worked successfully for the programme. The experience gained by the children was shared with their friends, neighbours, family and others who come in their contact. Annually this programme is repeated with a few changes and it had a ripple effect over time.

3.5 State Biodiversity Board

Situated on the genetic highway connecting the Western Ghats and the North East, two of the biodiversity hotspots in the country, the central Indian State of Madhya Pradesh is one of the richest repositories of biological diversity. The State houses a diversity of ecosystems including plateaus, ravines, ridges, valleys, riparian areas and flat plains. With four major forest types, nine National Parks and 25 Wildlife Sanctuaries, the Tiger State houses one of the richest faunal and floral diversity. Biodiversity being a people centric subject, creating biodiversity awareness to trigger off actions by a range of stakeholders is high on Board's Agenda. These awareness programmes use an array of methods ranging from Meetings, Workshops, Yatras, Radio and Television talk etc. The awareness creation for children is organised by the following activities:



- Mowgli Bal Utsav by designing activities and publications with CEE

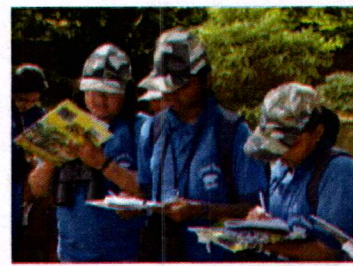
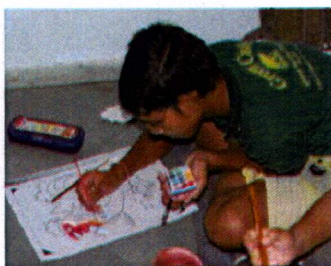
- International Biodiversity Day (22 May)
- Biodiversity awareness Workshop for different Stakeholders
- Quarterly Newsletter on Biodiversity
- Documentary film on biodiversity
- Participation in exhibition, fairs etc.
- Dissemination of information through publication

3.6 Regional Museum of Natural History

Museum of Natural History under MoEF is mandated to create environmental awareness and promote conservation education in the country. There are four Regional Museums of National History (RMNH) established in India. RMNH, Bhopal coordinates with State agencies with an objective to organise special activities to enrich school curriculum in biology, particularly on environment aspects. It also develops appropriate material within the region to promote EE and develops appropriate educational programme for different groups to create environmental awareness.

The RMNH, Bhopal is successfully addressing the outreach programme like capacity building on trees which is a blend of in-house and outreach activities intended to identify the trees and impart knowledge about ecological importance and the ecosystem services rendered by trees. A field guide is published as resource material for school children. Activities like quiz, painting, debate, photography and essay are annually organised by RMNH and token prizes are awarded for good performance.

Training and orientation towards environmental conservation are organised for school teachers and capacity building software and hardware are provided to strengthen teaching aids in schools. It also



celebrates International Museum Day and programmes for school children in collaboration with other museums in Bhopal.

Both winter and summer nature camps are organised in one of the National Parks or Biosphere Reserves of the State. About 50 school children nominated by the school education department consisting of winners of several competition prizes from RMNH annually avail this unique opportunity of a fortnight visit to receive the message for environmental conservation. Besides giving a firsthand experience of wilderness components, its factors and ecosystem functions, the children get to diversify their knowledge about nature.

3.7 National Afforestation Eco-development Board (NAEB) Regional Centre- Indian Institute of Forest Management, Bhopal

The Indian Institute of Forest Management (IIFM) is a sectoral management institute, which constantly endeavours to evolve knowledge useful for the managers in the area of Forest, Environment and Natural Resources Management. It disseminates such knowledge in ways that promote its application by individuals and organisations. IIFM has been established with the objectives: Inculcate an appreciation in those selected for training, that conservation is of overriding importance in the management of living natural resources and that the primary role of forests is the vital ecological and environmental purpose they serve.

There are seven regional centres across the country of NAEB and one of those is situated at IIFM, Bhopal. RCNAEB is responsible for promoting tree planting, ecological restoration, environment awareness and eco-development activities in the region, with special attention to the degraded forest areas and lands adjoining the forest areas, national parks, sanctuaries etc. The main objective of this centre is to create general awareness and help foster a peoples' movement for promoting afforestation, sustainable environment and eco-development with the assistance of voluntary agencies, non-government organisations, Panchayati Raj institutions, and others and promote participatory and

sustainable management of degraded forest areas and adjoining lands. The Indian Institute of Forest Management under the umbrella of RCNAEB, Bhopal is organising "Catch the young for environment" programme for various school going children of the State towards greening the education and strengthening environment education in school education system. Environment is necessary in all school children's as it leads to the responsible use and protection of the natural environment through conservation and sustainable practices. In this context various one day training programme were organised in various districts of Madhya Pradesh particularly focusing on young school going children's. In this programme various activities like-cycle rally, quiz, rangoli, debate, lectures by eminent peoples on environment conservation issues were organised. Besides this, guest lectures from eminent scientists were also organised on World Forestry Day, World Environment days etc. Largely the objective of such events is to aware school children's about natural resource management, environment management non timber forest products and medicinal plant conservation and global environment change etc.

IIFM also organise wild life week during first week of October every year for school children. These students get aware about the importance of environment and forest resources including wild life through painting competitions and other activities. A wild life based film show expose students to different aspect of wild life and increases their knowledge.

3.8 Regional Science Centre Bhopal (RSCB)

Regional Science centre, located at Bhopal organise various events and activities ever year. Some of major activities includes: World Earth Day celebration, World No Tobacco Day, World Environment Day, World Population Day, Wild Life Week, World Water Day etc. The basic aim to celebrate these events is to make all aware of present environment concerns and health related problems prevalent among the society. These activities are primarily conducted for school children in collaboration with different organisations.

Some of the highlights of these events are given below:

- I. **World Earth Day:-** A painting contest for school students was held at RSCB in three categories viz: Primary School (upto Std. V) & Middle School (Class VI to VIII) on theme "Save Planet Earth" and for High School (Class IX to XII) on theme "Green Cities". 207 students from 22 schools of Bhopal took part in the event. The painting Contest was followed by a Popular Science Lecture on theme "Sustainable Future" for the students
- II. **World No Tobacco Day:-** RSCB, Bhopal in collaboration with Jawaharlal Nehru Cancer Hospital & Research Centre (JNCHRC), Bhopal organised a poster exhibition on theme "Ill effects of Tobacco" on the eve of "World No Tobacco Day" on 29th May which was followed by a Popular Science Lecture on theme "Ill Effects of Tobacco" delivered by eminent scientist. Several students attended this event.
- III. **World Environment Day:-** RSCB in collaboration with Environmental Planning & Coordination Organisation (EPCO), Bhopal has commemorated World Environment Day by organising various activities during the month of June. Drawing contest was organised for school children. The theme of the events was "Nature" that was attended by several students. Film show on theme 'Chilka Lake', an exhibition on Medicinal Plants and a quiz on flora and fauna were also organised to make students aware about the ecosystem services and forest resources.
- IV. **Wild Life Week Celebration:-** RSCB in collaboration with M.P. State Biodiversity Board, Bhopal organised Wild Life Week during the month of October each year. A Film Festival based on Wild Life was organised for students of different schools, besides other activities like painting contest, open house quiz on Wild Life & significance of Biodiversity and lecture on conservation of Biodiversity.
- V. **World Water Day:-** RSCB in collaboration with Indian Science Congress Association, Bhopal Chapter organised "World Water Day" on 22nd March. As a part of this programme, a Panel Discussion by renowned scientists in the field, educationists, environmentalist etc was organised on this year's theme "Water & Sustainable Development" for school going students.

3.9 Centre for Environment and Education, Bhopal chapter

Centre for Environment and Education's (CEE's) work in Madhya Pradesh, started with an interpretation facility at Kanha National Park in the late 80s, recently it has grown to include diverse programmes. An interesting project 'Satar Patar Seekhein Sikhayen' facilitated children to learn about their own biodiversity of rich Seoni district and documenting their community knowledge about these resources. CEE is its Resource Agency in Madhya Pradesh. Some activities undertaken by Madhya Pradesh State Office (MPSO) under this are teachers' training, celebration of environment days, networking, etc. As per the directive of Ministry of Environment and Forests, NGC (MoEF), this programme is being implemented in 50 districts of the State and 250 Eco-Clubs have been established in each district. CEE Madhya Pradesh State office, Bhopal observes the Environmental day through a week-long-programme starting from April 18-22, 2012. Van Mahotsav programme is also organised by CEE MP with ASI at Hoshangabad.

3.10 World Wide Fund for Nature

WWF India, MP and Chhattisgarh State office is actively involved in EE focused on nature conservation. WWF is engaged in carrying out activities related to environment with school children as main target group. WWF is a key resource agency for organising annual



winter nature camps regularly for school children and teachers of areas near Pachmarhi and Amarkantak-Achanakmar Biosphere Reserves of MP in collaboration with other organisations like Forest and School Education Departments, EPCO, EDB and RMNH. An extensive training and direct exposure to nature is imparted by organising nature camps with the participation of about 750 school children and 300 teachers.

WWF also organises Young Climate Savers Programme (YCS) in which teachers are trained in technical workshops building their capacity and creating awareness. The teachers are given school action projects in



moving from “Knowing” to “Doing”. The programme has benefitted about 30,000 school children besides sensitising around one lakh people about effective management of electronic waste.

It organises EE on Biodiversity & Wildlife Conservation around National Parks like Kanha, Satpura and Pench for students selected under the project. The programme focus is on creation of awareness to sensitise them about the uniqueness and importance of National Parks as water repository, ecosystem services and educate them on sustainable use of natural resources thus creating a force of young guardians for the forests.

WWF has been observing Earth Hour on World Earth Day every year since 2010 by switching off lights for one hour from 8:30 PM to 9:30 PM as a symbolic gesture to spread the message of saving earth by saving energy. This is observed at mass scale with involvement of all the citizens for whom messages are sent through school children. It also publishes books, posters, pamphlets and handouts of topical interest for distribution.

3.11 Bhopal Birds

Bhopal Birds is a non government organization (NGO) with a group of naturalists. It organises bird watching and nature camps to generate awareness towards nature conservation. During the past eight years i.e. 2006 to 2013 around 20,000 students have benefited from these camps. With support from Forest and School Education Departments, EPCO, EDB

and WWF for outdoor camping and nature interpretation activities, this small organisation is helpful in creating curiosity among children in nature interpretation.

The organisation publishes brochures and booklets related to nature interpretation and bird watching. The Bhopal Birds provides inputs to different

government and non-government agencies about nature camps and bird watching in and around



national parks, sanctuaries, places of natural and ecotourism significance.

The synergy of collaboration with other organisations multiplies the effect of delivery in the content and enriched impact for school children to receive the concept.

3.12 Aravali Foundation for Education

Aravali Foundation for Education (AFE) is an organisation dedicated to creating a civil society that is conscious of the problem of (and possible solutions to) the steady degradation of earth's unique ability to provide various forms of life with a livable habitat.

Since 2005, AFE, New Delhi is continuously organising Vacation Programme on Natural Resources (VPNR) at Bhopal. This is a unique initiative of AFE, New Delhi and the Ministry of Environment and Forests, Government of India. This programme offers four week residential programme to regular Class XI students of schools in the identified region. This programme attracts and enrolls bright students



with leadership abilities for a focused and innovatively designed programme without their attention being distracted by the rigours of academic calendars. Vacation Programmes help participants to identify closely with each other often helping in forming long term associations to address issues of common concern in the field of Natural Resource Management.



CHAPTER 4: ISSUES AND RECOMMENDATION

Raising awareness amongst children about environmental issues has become a necessity today. This is an accepted fact that children are the best ambassadors for any message desirable for a social change.

- 4.1 Affectivity:-** The way this concept is institutionalised in the State of M.P., the other States may follow the suit. The kind of convergence and synergy in resources can definitely bring great effects to the cause.
- 4.2 Sustainability:-** It is essential that the institutions knit the programme in their annual plans as a regular activity. The financial provision in budgetary allocations of the institutions is mandatory for providing life to the programme annually. It is proposed to make this programme as one of the recurring schemes.
- 4.3 Way Ahead: -** The popularity and success of the programme to make children aware about environmental issues has attracted the attention of people in the State. This State-of-art may be replicated in other States also to make the impact deeper.
- 4.4 Motivation and participation:-** Environmental education will not only develop necessary skills and expertise to address the challenges, it also promotes the children's well being and attitudes, motivation through participation. It is high time to address various components of environmental education so that awareness and sensitivity to the environment and environmental challenges among the children can be increased.
- 4.5 Orienting education and increasing environmental awareness towards sustainable development:-** Formal and informal environmental education should be recognised as a process by which children and future generation can promote sustainable development and improve the capacity to address environmental issues. Environmental education needs to be incorporated as an essential part of learning.

CHAPTER 5: CONCLUSION

The environmental degradation has been recognised as common problem by the world community. India is emerging as a leader of developing countries due to its national and international environmental initiatives. M. P. is a pioneer State in the country in environment policy initiatives and institutional arrangements. The current scenario of school level formal and informal environmental education in the State is positive and multiple agencies are pouring knowledge and resources in it. A stronger thrust to facilitate convergence, synergy, uniformity and continuity of programmes and players is still desirable. The structured programmes and well defined role of different stakeholders needs to be addressed specially in the informal education sector. Pooling of technical and financial resources and proper coordination among different players may help carve out a structured input. The coordinated approach for human resource development may be useful to have uniformity in standard of design and delivery of programmes and activities.

Education is a primary tool in the critical endeavour of attaining a sustainable future of our society. Environmental literacy enables the children to develop their understanding to the change that they live. It teaches the ecological concepts and develops the ecologically sound decisions with respect to environmental issues.

Education institutions help mobilise resources and provide a source of information and focal points for present needs at national and international level to tackle environmental issues and climate change. These bodies play a key role to facilitate new generation to assess their needs and address the nature of change. In order to do so, education institutions should have environmental activity work plans for their students and ensure their involvement in local and regional activities.

Promotion of non-formal education activities in association with government and non-government organisations will help in achieving the global environmental education aims and facilitate the environmental concerns among the students.

However there is a need to strengthen existing education bodies or establish new ones to recognise various environmental services provided by natural resources and ecosystem information and should coordinate activities with other partners or relevant agencies. These bodies should improve its outreach in rural areas and make aware the rural children about the environmental concerns. The impact of such activities would enhance critical thinking, problem solving and effective making skills and will teach children to weigh various sides of environmental issues to make informed and responsible decisions.



BIBLIOGRAPHY

1. www.envfor.nic.in/division/ National- Green –Corps- NGC
2. www.envfor.nic.in/division/national-environmental-awareness-campaign-neac
3. Annual Report (2008-2009) of MP National Green Corps (NGC) scheme : status and glimpse of Activities
4. www.academia.edu Environment Education in the School Curricula / Education for change, Volume 17. (Accessed on 14-06-2013)
5. Central Board of Secondary Education(CBSE), Delhi : Circular No.08/2005 dated 1st February, 2005
6. www.cbse.nic.in
7. MP Board of Secondary Education पर्यावरण शिक्षा और आपदा प्रबंधन छद्मत्व द्वारा प्रस्तुत पाठ्यक्रम (हाईस्कूल स्तर) मासिमंभो-454-विद्योचित-01 / 09 / 2007-10,000
8. www.iifm.ac.in
9. <http://envfor.nic.in/naeb/welcome.html>
10. <http://aravalifoundation.in/Vacation%20Program%20on%20Natural%20Resources.html>
11. <http://www.ceeindia.org/cee/madhyapradesh.html>
12. A brief note received through email from Mr. Probol Roy, Regional Coordinator, Regional Science Center, Bhopal.