



# Biodiversity Conservation Education for Sustainable Development : Biodiversity of Uttar Pradesh on Wheels

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## Introduction

It has been agreed globally now that the path of sustainable development is deeply connected to biodiversity in several ways. Biodiversity forms the critical foundation for the human well being and sustainable development. To take necessary steps to conserve the biodiversity and for maintaining life support system, it is important to have participation of people. The Aichi Biodiversity Target 1 sets an agenda that by 2020, at the latest, people are made aware of the values of biodiversity and the steps they can take to conserve and use it sustainably. Taking this background, the Convention on Biological Diversity (CBD) has set education on top priority in the Strategic Plan for Biodiversity 2011-2020 which is also declared as United Nations Decade on Biodiversity (UNDB 2011-2020).

While several efforts are being taken at global and national level by various UN organizations, Governments and Non-governmental organizations. Apart from focused initiative, biodiversity has been acknowledged in the overall sustainable development agenda. With the end of United Nations Decade of Education for Sustainable Development in 2015, the United Nations Post-2015 Development Agenda for the period of 2015-2030 has been set for achieving Sustainable Development Goals. These goals recognizes the relevance of biodiversity for the achievement of sustainable development.

In Uttar Pradesh, the State government has recognized the role of education and communication in promoting awareness and understanding about conservation of biodiversity. In year 2014,

Uttar Pradesh State Biodiversity Board, University of Lucknow and Centre for Environment Education joined hands as part of Regional Centers of Expertise (RCE) of Education for Sustainable Development to initiate a mobile exhibition on unique biodiversity of the State. The RCE is an initiative of United Nations University- Institute of Advanced Studies which promotes networking among key institution for promoting ESD efforts in the region.

As part of the initiative, with the technical and financial support from Uttar Pradesh State Biodiversity Board (UPSBB) and University of Lucknow, Centre for Environment Education (CEE) developed this mobile exhibition bus named 'Prakriti'. The aim of the mobile exhibition was to reach out to children, youth, general public for raising awareness about rich biodiversity of the State. This bus focussed on sensitizing visitors on the immediate environment, biodiversity and cultural heritage. Through this exhibition positive action for sustainability in the form of Hand print actions were promoted where children, teachers, youth and general public were guided to work on biodiversity conservation initiatives at local level.

## Exhibition on Prakriti Bus

To develop this exhibition, CEE researched the scientific reports, publications, research papers, etc. to validate the information about the State's biodiversity. Inputs from various experts, officials, researchers and professionals working in the field of biodiversity were also taken to develop the content of the bus. As this exhibition was meant for children and general public, it was very





**Prakriti Bus:** Mobile Exhibition on Biodiversity of UP

important to develop the content in easy to understand language and making it more pictorial. The outer panels of the bus were used to showcase various ecosystems and key features found in the State including forest, grassland, rivers, wetlands, urban and rural biodiversity. These panels attract people to come close to bus and make them curious what's their inside the bus.

This state-of-art exhibition showcases biodiversity through 29 panels which gives a glimpse of UP's rich biodiversity and unique features. The informative panels and exhibits in the bus and related on the spot activities are designed in Hindi language and is aimed to effectively communicate the nature and biodiversity conservation education amongst different age groups of the society. The panels in the bus covers information about eco zones of Uttar Pradesh, unique feature of agriculture, livestock, horticulture; river, wetlands, forest and grassland ecosystem and theirs inhabitants; key species featuring are Vultures and Ganges river dolphin. Back panel of the bus showcases state symbols of the State.

It is mobile, open to all, and free bus visit service intended to benefit school students, teachers, youth, and community members in the urban and rural areas of Uttar Pradesh. The mobile bus runs on Compressed Natural Gas (CNG), which also helps to create awareness and motivation to use CNG, a clean fuel. Based on CNG availability, the bus in its pilot phase has been planned to go to 6-7 districts around Lucknow.



Back panel of bus talking about state symbol

To transact information with visitors, there is a team of 2 communicators who travel with the bus. The team has been trained on various aspects of how and what information will be provided to audience. Interactive games and educational activities were designed for students which are conducted during the visit of the bus. The team contacts key district officials from Forest and Education Department for planning and preparation of the visits to schools, institutions, and community locations.

### The Journey

The bus started its journey from 2 August 2014 where Prof. Abhishek Misra, State Minister, Vocational Education and Skill Development, Uttar Pradesh launched the bus for starting its journey. The bus started its move from Lucknow then covering Barabanki, Kannauj, Unnao, Hardoi districts. The Prakriti bus has travelled to more than 200 schools and over 120 villages in these



Formal launch ceremony of Bus by Prof. Abhishek Misra



districts covering distance of over 6000 kilometers. Till now more than 90,000 visitors have visited the bus where major group of visitors is children. In each district, bus is welcomed by key district officials with a formal ceremony and through newspaper information about the bus is disseminated.

When this colorful bus reaches to school, students surround this bus with lot of curiosity. The communicators travelling with bus takes the group through the bus panels explaining various aspects of biodiversity. Children ask questions to communicators to identify plants and animals. Interactive games on panel help children to relate what they have learn. Teachers and students get very keen on this new kind of education and get motivated to take down notes of what they have learnt from the bus. One can see children and community members relating information shown on the bus with their local environment in terms of variety of crops, turtles found in their own ponds, myths about some of the animals, importance of insects in their life etc.

Each school is given a save biodiversity oath cum certificate stating that Prakriti Bus has visited to their school campus and the school is making commitment for taking action. This is displayed in a common space in the school for everyone to see. During the visit of the bus in a school, the number of children observing the exhibition varies from 100 to 1000 in a day. After the students have made their visit, educational games and open quiz focused on exhibition is conducted by communicators to gauge the level of under-

standing of students. Winner students of the quiz are given prizes and are encouraged to share information about biodiversity with their family and friends.

The concepts and information dealt through the exhibition are generally not covered in the school curriculum. Thus this opportunity of bus visit becomes very relevant for teachers to connect it to the local environment which also creates interest among students. Principal and teachers of the school give their feedback based on the reaction and responses received from students.

A set of educational material is provided to school during the visit including display posters, brochure on the bus, booklet, etc. These publications help schools to have reference of the discussion happened during visit of the bus. Schools of the district are invited to common location for a various kinds of competitions on the theme of save biodiversity. Students express themselves through drawing, poem, slogans and songs where winning entries are awarded with prize. Looking at overwhelming response to the bus, a campaign has been initiated with the bus to invite schools to map biodiversity of their school campus. In the campaign schools are motivated to document plant and animal diversity of their campus. Schools have started sharing their reports with details and lot of creativity.

During the school visit in the village, community members are also invited to visit the bus. After school hours, they visit the bus and interact with communicators. While planning visits, apart from schools various opportunities such as community fairs, events etc. were utilized to get general masses to visit the bus. On request bus also visits to scientific institutions, national / state/district level programmes where people from varied background visit the bus. Every day pictures of the visit of bus are available on facebook at <https://www.facebook.com/pages/UP-State-Biodiversity-Board/319887088176807>



Communicator explaining panel to students

## Impact and Way Forward

As per vision of strategic plan of CBD it has been stated that by 2050 biodiversity is valued,





Students closely observing

conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people. It has been also agreed that public access to information about the state of biodiversity and ecosystems can contribute to better policies and better management. Thus the biodiversity education exhibition initiative of Uttar Pradesh State Government matches the overall global agenda which also being discussed for the finalization of Sustainable Development Goals (SDGs) for biodiversity conservation. This particular effort is to reach out to masses especially students who are our future and sensitizing them to value the ecosystem services provided by biodiversity and its important role in human well being.

The bus has become a very effective tool of biodiversity education for the audience it caters.

## References

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The remarks made by students, teachers, community members, officials are very encouraging. Being a mobile exhibition it has a wide access to the areas where students and community have not seen such display of information. Several rural school students who generally cannot afford to visit any museum, zoo or exhibition, through this bus have got this opportunity to see this exhibition and get to know about their own state's biodiversity. The visit of the bus to school is not only a 4-5 hour interaction or information dissemination, it leaves the school with hand print action to be taken up in their own school campus. Students are encouraged to document their own school campus biodiversity and also initiate action projects such as arranging bird nests and feeders, plant indigenous plants, create biodiversity corner etc.

The bus was initiated on pilot basis to see the effectiveness of this strategy which not only creates awareness but also builds an understanding on the importance of the biodiversity in our life. Looking at overwhelming response to the bus, this exhibition is receiving request from different districts. Due to limitation of CNG fuel availability, it has been discussed to bring new bus along with this one to reach out to more and more locations with the message of biodiversity conservation education. The biodiversity exhibition on wheel as 'Prakriti Bus' has long way to go to connect and motivate more and more people in the pursuit of knowing and valuing our own biodiversity and taking action for sustainable development.