

# Unnat Bharat Abhiyan

Don Bosco College of Engineering  
Academic year 2019-2020

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## OVERVIEW

- Unnat Bharat Abhiyan is inspired by the vision of transformational change in rural development processes by leveraging knowledge institutions to help build the architecture of an Inclusive India.
- The Mission of Unnat Bharat Abhiyan is to enable higher educational institutions to work with the people of rural India in identifying development challenges and evolving appropriate solutions for accelerating sustainable growth. It also aims to create a virtuous cycle between society and an inclusive academic system by providing knowledge and practices for emerging professions and to upgrade the capabilities of both the public and the private sectors in responding to the development needs of rural India.

## GOALS

- To build an understanding of the development agenda within institutes of Higher Education and an institutional capacity and training relevant to national needs, especially those of rural India.
- To re-emphasize the need for field work, stake-holder interactions and design for societal objectives as the basis of higher education.
- To provide rural India and regional agencies with access to the professional resources of the institutes of higher education, especially those that have acquired academic excellence in the field of science, engineering and technology, and management.
- To improve development outcomes as a consequence of this research. To develop new professions and new processes to sustain and absorb the outcomes of research.
- To foster a new dialogue within the larger community on science, society and the environment and to develop a sense of dignity and collective destiny.

## HISTORY

The conceptualization of Unnat Bharat Abhiyan started with the initiative of a group of dedicated faculty members of Indian Institute of Technology (IIT) Delhi working for long in the area of rural development and appropriate technology. The concept was nurtured through wide consultation with the representatives of a number of technical institutions, Rural Technology Action Group (RuTAG) coordinators, voluntary organizations and government agencies, actively involved in rural development work, during a National workshop held at IIT Delhi in September, 2014.

## MEMBERS



Dr.Gaurang Patkar,UBA Coordinator



Members-UBA

# UBA ACTIVITIES

## Elocution competition on Waste Management

Unnat Bharat Abhiyan (UBA) team of Don Bosco College of Engineering, Fatorda, organized Elocution competition on “Waste Management” for the students of Balli Government High School on February 22, 2020. This event was followed by “Ek Bharat Shreshtha Bharat” programme which focuses on celebrating the Unity in Diversity of the Nation and to maintain and strengthen the fabric of traditionally existing emotional bonds between the people of the Country. This was showcased by a wonderful dance performance by the students of Balli School. Prof. Gaurang Patkar, Coordinator UBA along with his team members Prof. Sweta Morajkar, Prof. Yeshudas Muttu and Prof. Saurabh Raikar took this initiative to create awareness about waste management. A total of 11 students participated in this competition which was held in the school premises. There were two categories of participation-Std V to VII (Junior category) and Std VIII to IX (Senior category). The competition was judged by Prof. Saurabh Raikar, Asst. Professor Mechanical Engineering Department, DBCE. Students took part with great enthusiasm and it was indeed a treat to hear them come out with their unique points. The winners of the competition were given attractive prizes.

Overall, it was a very enlightening and learning experience for the students. Prof. Gaurang Patkar thanked the Headmistress of Government School Balli, Mrs. Sharada Dessai for giving UBA Team, an opportunity to conduct the event.



## BIODIVERSITY EDUCATION WALK

DBCE organised a full day Biodiversity Education Walk in the Western Ghats at Mhadei Research Center for the students of Govt High School , Quepem

Unnat Bharat Abhiyan- DBCE organised a full day Biodiversity Education Walk in the Western Ghats at Mhadei Research Center for the students of Govt High School , Quepem on 3rd august 2019.

The aim behind conducting this trail in the western ghats was only to show and educate this school children the richness in our biodiversity , explore the forest , learn about our ecosystems , educate them on different types of animal species found or spotted in that area and experience the nature in a different way.



## **River Water Resource Management and Flood Control Using GIS**

BE Students of Civil Engineering department Jyoti Kumari, Kohima Dessai, Zwegal Wynne Cardozo, Blacinta Pereira, Rhea Fernandes along with guides Asst Prof Annapurna Sakhardande & Asst Prof Sanford Mascarenhas suggested remedies in order to control the flood problem in the Paroda Village. Solution to this problem is mainly involved with identifying areas for detaining water nearer to the affected region of Village Paroda and at a lower elevation. Topography and nature of soil was well understood and used to obtain contours, settlements, river, streams and roads. Using the map, the critical areas and the potential relief areas were identified.

This project commenced after the students visited village Paroda and after few confrontations with the villagers the problem of flooding & waterlogging was identified. The field visits confirmed the problem and also opened opportunities for probable sites for construction of detention structures. Methods for harvesting water in the area and recharging the ground water along with detention structures to store the water during excessive downpour have been proposed. Sites & materials were so selected that they are economical and environment friendly compared to most other alternatives that will offer a sustainable solution to the long pending menace in the region.

## **Development of Drainage Infrastructure in Xeldem Village using GIS**

Drainage is most essential while considering road design. A good drainage ensures that water from the surface, as well as subsurface, is taken care of. This reduces the maintenance and increases the lifespan of roads. However, due to uneven geometry, poor maintenance and inadequate discharge, water tends to overflow and causes various problems like surface cracking, mud pumping and pothole formation. Xeldem is a village in Quepem Taluka in the state of Goa. This village has been facing multiple hazards in the form of water-logged roads, landslides, soil erosion and poor water quality issues because of the inadequate and poor drainage system to drain out the storm water. Many a times drains are constructed in an incorrect way because of negligible understanding about the need of safe drainage of both surface and sub-surface flow, hence there is a requirement of holistic planning and concept of total design is necessary for design of a sustainable drainage system.

Students selected ward no.3 which is named Davodxet-Taki as critical area as it is a mountainous region having little to no drainage hence during the peak monsoon seasons, storm water rushes and seeps down the mountain slope water-logging the road in turn flooding it. This project was undertaken by students Swaraj Dessai, Manoj Kerkar, Rhea Sardesai, Vikas Sathe, Dipesh Saval along with guides Asst Prof Annapurna Sakhardande & Asst Prof Sanford Mascarenhas of Civil Engineering Department.

## PLANTATION DRIVE

In order to sensitize students towards the need to preserve our environment and ecology, a plantation drive was organized by Unnat Bharat Abhiyan (UBA) team of Don Bosco College of Engineering, Fatorda (DBCE) for the students and villagers of Balli Government High School on 8th July, 2019. The main motto behind having this drive was to provide insights and importance of medicinal plants. UBA coordinator Prof. Gaurang Patkar along with the team members Prof. Satyesh Kakodkar, Prof. Yeshudas Muttu, Prof. Saurabh Raiker and Prof. Sweta Morajkar took this great initiative under UBA to highlight the need of medicinal plants. Vidyadatta Naik, the headmaster of Government High School, Balli, welcomed the UBA team.

A group of 40 students planted more than thirty medicinal saplings namely neem, bayo and many more. Students became acquainted with the common names of medicinal saplings. Prof. Gaurang Patkar, UBA Coordinator distributed seeds to faculty members of the school.

The drive was huge success empowering students with knowledge of environment and medicinal plants and also enhancing their social skills. UBA team thanked Mr. Vidyadatta Naik for giving an opportunity to organize the drive.

