



# BEST PRACTICE 1: INCULCATING AND NURTURING ENVIRONMENTAL CONSCIOUSNESS

## GOAL

Our college sincerely believes that a standard way of supporting mindfulness around sustainability and judicious use of environmental resources is to establish a culture of consciousness that results in constant awareness about the right usage and also encourages the preservation of these valuable resources. Environmental sensitivity and alertness can definitely create a better sense of respect and value towards nature in general and scarce and valuable resources in particular. This includes providing education on responsible waste disposal through clear signage on designated waste stations to help students and other stakeholders distinguish between what items belong in recycling, compost, and in the trash bin.



### CONTEXT

As young learners and future nation-builders, the students need to be trained and instilled with a sense of responsibility and commitment towards environmental protection and prevention from its exploitation. The worldwide endeavour to ensure man's sensible interaction with the biophysical environment has to be carried forward by today's youth enabling them to build a better planet for future generations to live. Keeping the above, the college regularly organizes activities directed towards curricular transactions reinforcing formal with consciousness, commitment, and involved action in order to make the learning process active, inclusive, and environment-oriented.









:Plastic Awareness Drive in association with the Department of Environmental Studies on 5th November 2019.







As a part of the sub-event of the Great Backyard Bird Count India, a 'Campus Bird Count was organized on 17th February 2020 in collaboration with Meghna Joshi from the Bird Count India and E-Bird India.



- Plogging Event in association with the Department of Environmental Studies on 8th November 2019.
- Field trip to Yamuna Biodiversity Park on 25th September 2019 under the guidance of the senior Scientists of YBP who apprised the students about Local Biodiversity and its importance in Delhi.
- Field trip to Aravali Biodiversity Park, Delhi under the guidance of Senior Scientist, ABP focusing on ecological restoration of degraded soils (mine area).
- Field trip to Neel Hauz Biodiversity Park, Delhi on 5th March 2020 under the guidance of a Senior Scientist, focusing on Local Biodiversity and its importance in Delhi.
- Poster/Slogan making competition on "Plastic is a curse to sustainable development" in association with the Department of Environmental Studies on 6th November 2019.



















- A webinar on May 1, 2020, on "Benefits of Digital Administration in Lockdown", to highlight the importance of paperless offices to save trees.
- o Inhouse Projects to students on environmental issues. Like "pradushan mein parali ki bhumika" and "degradation of Environment"
- ° Virtual presentation on waste management policies in Delhi
- o More medicinal plants added to Herbal Garden
- Publishing Special edition of 'SAMBHAV' magazine, covering various environmental issues.

## Infrastructural Initiatives in 2019-20

Liquid waste treatment Plant Purchase from approved by GB and proposal submitted to CPWD for an estimate

Installation of 100 Kv electricity-generating rooftop solar approved by GB

Installation of STP in a college approved by GB

### EVIDENCE OF SUCCESS

College campus has a very systematic waste collection and segregation process.

The plastic waste collected is regularly removed from the campus.

Composting and usage of manure for the maintenance of plants.

Ban on single-use plastic items as per the mandate of the GOI.

#### To ensure carbon neutrality

- Environment-friendly tree plantation
- segregation of degradable and nondegradable waste and their disposal through an external agency or on the campus in an eco-friendly manner



## CHALLENGES





LACK OF ADEQUATE ENVIRONMENTAL AWARENESS AT THE SCHOOL LEVEL

FUND AND SPACE CRUNCH



## BEST PRACTICE-2: PROMOTION OF RESEARCH CULTURE IN COLLEGE

## Goal

To act as a platform and forum for research and scholarship

Enhance the scientific and research standards of the faculty members

To provide academically challenging, intellectually inspiring, and research-oriented culture

Build the capacity of staff involved in research through investments in initiatives that promote research competency, leadership and academic integrity

Enhance and enable access to world-class research infrastructure

Promote research collaborations through internal processes and policies

## Context



- Research Culture is an environment that fosters and enhances student-faculty experience, creates symbiotic and amiable atmosphere to nurture pioneers, scientists and engineers for sustained research development and growth of an institution.
- ° An important aspect of research culture is an organization's approach to research integrity the formal and informal ethics, standards, protocols and policies researchers follow in their environment.
- ° Research needs nurturing and support and the college through its faculty is actively engaged in providing direction to pursue research activities besides teaching.

## The practice

- The college has taken several steps to strengthen its research initiatives with appropriate research policy, research infrastructure and hiring and training of human resources in a timely manner
- The Research and IPR Cell of the college motivates and guides faculty for writing research proposals to get extramural funding besides forwarding proposals for research to the research bodies. It gives updated information to the faculty about various research funding agencies and ministries across disciplines.



## The practice

- •Under "College Research Grant" scheme, seed money of Rs. 30,000 to 50,000 is awarded to a select students and faculty team proposals for preliminary data collection to get extramural funding.
- In-house internships offered to students in on-going research projects (ICMR,NMHS)
- Small research projects given to students under Star College scheme of DBT, Ministry of Science and Technology



## The practice

 The college provides Funding to Faculty for Research attending Conference/Seminar/courses

o National and international Conferences are organised

 Students are also motivated to attend the conferences/seminars

## Evidence of Success:

A total amount of Rs 2, 85,000/- disbursed for

seven in-house research projects sanctioned to students (30) and faculty (11) under which students were trained.



S. No.	Title	Faculty Mentor	Student Awardees	Budget/catego ry
1	Isolation and screening of plastic degrading bacteria from soils collected from different landfill sites of Delhi		Poorvi Saini, Ananya Garewall , Neha Verma, Surbhi Singh	45000
2	Activity of different kind of biosorbents and biodegraders for primary treatment of waste water produced from laboratories		Mohd. Fardeen Husain Shahanshah, Bhawana Sharma, Himanshu, Saloni Jain	50000
3	Combating Methicillin resistant Staphylococcus aureus (MRSA): A drug repurposing approach	Dr. Vandana Gupta	Anurag Singh, Simran Preet Kaur, Himanshu	50000
4	Screening of in vitro antimicrobial activity of Indian Plants against ESKAPE Pathogens	Dr. Nidhi S Chandra	Pragya, Priya Bhatia, Abhilash George, D. Anvitha	50000
5	Study of dropout rate among undergraduate students (UG) coming from marginal social groups: A case study of Delhi University (selected colleges)	Vikas Kumar, Mr. Vinay		30000
6	An epidemiological study of mental health of College students in Delhi	Dr. Salome John Dr. Rita Jain	Sahil Raina, Raajvi Khurana, Siddharth Sharma, Harsh Singhal	30000
7	Awareness among the students for Green campus: a case study of selected colleges in Delhi University		Pratibha Yadav, Utkarsh Yadav, Neelam, Aman	30000

## Evidence of Success:

4 Research Projects of Faculty approved for Funding



S.NO	Title of Research Project	Amount of Funding	Funding Agency
1.	Enhancement of Livelihood Opportunities through Sustainable Development using Multifaceted Support Plans for Village Cluster around Patiya in Takula Block, Almora District, Uttarakhand" (Dr Seema Gupta, Dr Rakesh Kumar, Dr Mukta Mazumdar, Dr Rajesh Sachdev, Dr Prabhas Pandey)	1,99 crores	National Mission on Himalayan studies (NMHS) by MOEF&CC, Government of India
1.	Alterations in oral microbiome of Betel nut chewing opulation of North Eastern India and its Correlation with Oral Cancers: Prospecting Microbial Consortium for Therapeutic Effect(Dr Prerna Diwan and Dr R K Gupta)	35 lacs	ICMR, Government of India
3	Communicating the science behind the phenomenon of antibiotic resistance to promote social awareness (Dr Prerna Diwan and Dr R K Gupta)	5 lacs	ICSSR, Government of India
4	A study of Socio-economic and cultural impact of the left-wing Extremism(LWE) in Bastar, Chhattisgarh (Dr Prerna Malhotra)	8 lacs	ICSSR, Government of India



Solar fencing an experiment for mitigation of Human Wildlife Conflict



#### **Mushroom Training**



#### Farming before and after

















## Evidence of Success:

- College has been granted Star College Status and funding under DBT Scheme, Ministry of Science and Technology for various activities in the Department of Microbiology for a period of 3 years. (Coordinator: Dr Prerna Diwan)
- 4 Research Proposals submitted under Stride call of UGC in 2019- 20 and 2 submitted to ICSSR. The result is awaited
- To adhere to professional ethics and academic integrity, an Institutional Academic Integrity Panel has been constituted. Using Urkund software, the panel has so far checked 51 documents for plagiarism/similarity percentage of any document (research papers, book chapters, articles, etc.).



## Evidence of Success:

- Faculty publication-36 research articles,15 books /chapters
- 4 Faculty members serving as
   Editor/Member of Editorial Board
   of academic research journals





• Lack of reference point to integrating research and education in the curriculum.



• Inability of the students to comprehend linkages between education and research in early learning experiences.



• Space and resource crunch for staff and students to pursue wet lab research