

Title of the Practice: Green Campus

The Objectives:

Green campus initiatives are becoming integral part of the modern-day education system and the institutions can act as pioneers in promoting these principles within society. Our college has initiated the green campus program in order to support a sustainable and climate-friendly environment. The main objectives for these initiatives were environmental awareness and education, the use of sustainable energy and energy efficient measures, comprehensive recycling and composting and green landscaping in the campus.

The Context:

Our main focus behind this Green campus program is to ensure the sustainability of sufficient water, materials and other resources for our future generation. But the main challenge is the proper translation of the education for sustainable development into practice so that it can be more effective. Any new development should consider and maintain the proper balance of economic, social and environmental conditions and the participation of all the staff members and students is very important. Our college has tried to implement this program by organization of conferences and training programs for students and staff and implementation of interdisciplinary research projects in the field of life science in collaboration with UBCHEA. More stress is being given on the proper infrastructure development so as to continue and maintain the green practices.

The Practice:

Our college has promoted variety of activities to help protect the environment and sustain its natural resources. Our college is smoke free and is also a partially plastic free campus. Our college has partially paperless office and e- library. The college has addressed its waste disposal problem by vermicomposting. The solid wastes generated from the college canteen are used in vermicomposting pits to generate compost which is used in college gardening purpose. Also, in the area of water conservation the laboratories have their runoff water attached to tanks. The stored water is used for erstwhile purpose. The e-waste generated in the college is managed by a company Hulladek. The liquid wastes are collected and recycled. The department of Microbiology make use of certain specialized bacterial isolates for treatment of dye wastewater produced during specimen staining. During rainy season we collect the roof rain water through filter fitted pipes in a reservoir and use it later during fire drill, washing the roads and gardening purpose. Currently the college has taken an initiative to construct rainwater harvesting structure at premises 3. The college has installed solar panels on the roofs which generates 900kW/month energy. The college has also installed LED facilities in the classroom, seminar room and examination room of the main campus and also in the Jubilee building. The campus harbours a

diverse amount of flora and fauna elements. About 100 plant species including medicinal plants are there in the campus. Mushroom cultivation and hardening of tissue culture plants are carried out in the polyhouse (maintained by Botany dept.). The college has undertaken many different projects and organized seminars on environmental related issues funded by UBCHEA from year 2012 onwards.

- a) Campus assessment of flora, fauna and microbial diversity (2012-14).
- b) Green campus – Audit assessment cum training for students (2016-17).
- c) Assessing the chemical and microbial content of drinking water and drain out water of a necessary school and college (2016-18).
- d) Awareness program on Global water crisis and conservation was organized by the college in collaboration with Pollution Control Board for school and college students on 10th January 2018.

Some minor research projects are also going on in various dept. on important environmental issues like bioremediation, phytoremediation, etc. The NSS unit of the college deserves a special mention for organizing regular campus cleaning campaigns, awareness program on emerging issues for environmental education. Fire management system has been established in the college by a company called Flash point. The roof water harvesting system which collects rainwater would provide water for fire management. The college has a special committee for monitoring green initiatives – Centre for Environmental Action (CEA). Also, the college has recently inaugurated the Nature Club for students.

Evidence of Success:

The data for campus audit project was basically collected by the undergraduate students of Botany, Microbiology and Zoology departments. This has developed a sense of responsibility in them and they get a better understanding of their role as advocates of environmental conservationists. Large number of participants from various school and colleges in different awareness programs organized by our college is really appreciable. The waste disposal management initiative taken by our college is yielding very good results. Around 2000kgs of manure is being produced annually by vermicomposting. Also, the solar energy generated (900kW/month) by the installed solar panels directly go to the grid and in long run can play an important role as a renewable energy source. By installing solar panel college saves from the monthly electricity bill.

Problems encountered and Resources required:

The main problem encountered in the Green campus initiative is development and maintenance of proper infrastructure for the green practices. The Green campus program should be considered as a necessity in every institution and separate funds should be allotted for this. Implementation of the green practices needs series of awareness programs to educate more people and train them

for it. Going green not only needs investment in terms of money but also a strong will from all the beneficiaries.