

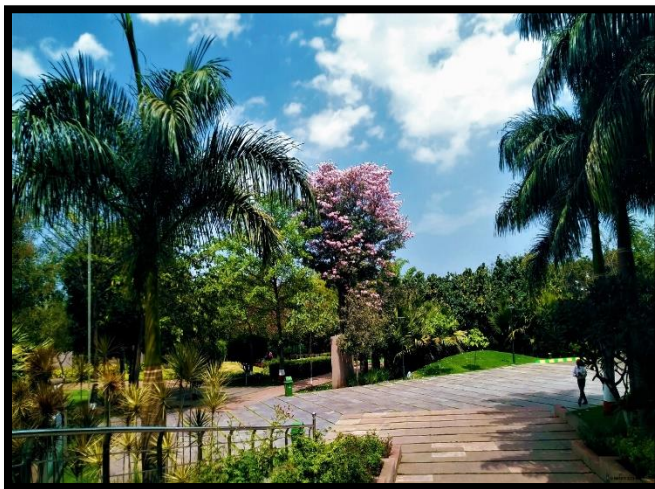
**Title of the practice:** Conserve biodiversity: It's the greatest treasure we have

**Objective:**

Dr. Vithalrao Vikhe Patil Foundation's Medical College & Hospital has emerged not only as an excellent center in Medical Education, Training & Research activities at National level and Health Care Services but also a good example for conservation of biodiversity. Plants and animals have an equal right to live and exist on our planet. The production of oxygen, reduction of carbon dioxide, maintaining the water cycle and controlling soil, water and air pollution are some important services of plants. Therefore, preservation of biological resources is essential for the wellbeing and the long term survival of mankind. Keeping these values as our basic principle we have tried to preserve biodiversity in our campus at its utmost.

**Context:**

Biological diversity, most commonly used in its contracted form, biodiversity, is the term used to describe the variety of life on earth, including animals, plants and microbial species. Biodiversity not only refers to the multitude of species on earth, it also consists of the specific genetic variations and traits within species and the assemblage of these species within ecosystems that characterize agricultural and other landscapes such as forests, wetlands, grasslands, deserts, lakes and rivers. Each ecosystem comprises living beings that interact with one another and with the air, water and soil around them. These multiple interconnections within and between ecosystems form the web of life; of which humans are an integral part and upon which they depend for their very survival.



Recent studies showed about 25% of the species will undergo extinction rapidly due to human population growth, short term economic development, industrialization, urbanization and changes in land use pattern. We consider a broad range of pathways through which biodiversity may provide health and well-being benefit to people such as psychological, physiological, regulation of the transmission and prevalence of some infectious diseases, provision of food and good nutrition, clean air and water, the provision of traditional and modern medicines and the impact of some pharmaceuticals on the environment.

All species, including humans, require a range of basic resources to keep them alive and healthy. Humans need oxygen to breathe, water to drink, food to eat and shelter from the weather. The living things on our planet provide many of these things for us, so their conservation is vital if we are to survive.

### **Practice:**

The college campus sprawling over 33 acre and consists of some old trees along with shrubs, herbs, climbers and few exotic flora. Most of the trees are naturally grown and some of the trees, shrubs and palms are planted obviously to control pollution and for the beautification of the campus. Biodiversity provides a variety of environmental services from its species that are essential at the global, regional and local level. The production of oxygen, reduction of carbon dioxide, maintaining the water cycle and controlling soil, water and air pollution are some important services of plants. Therefore, preservation of biological resources is essential for the wellbeing and the long term survival of mankind. We have preserved many of such trees in our campus.



Some part of the campus is covered with rich wild herbal flora which includes medicinal plants such as neem, babool, etc. The amphitheater area is planted with various flowering plants. We have created a beautiful Flower garden to attract various insects. Obviously this dense green flora is associated with some local fauna mostly beautiful and colorful butterflies, beetles, bees, ants and caterpillars. Quite often varieties of migrating birds like cranes, hornbills are landing in the campus in late rainy season and gives extra beautification to the campus. On the other hand, varieties of birds like wood pecker, owls, sparrows, pigeons, parrots, cuckoos, larks, common mynas etc. are regularly visiting for searching food. Also animals like monkeys, dogs, cats, rats are usually seen. Crabs and frogs are seen in rainy seasons especially around small ponds which get filled with rainwater. Snakes, pythons are occasional visitors which are informed to Local Sarpamitra and are rescued safely.

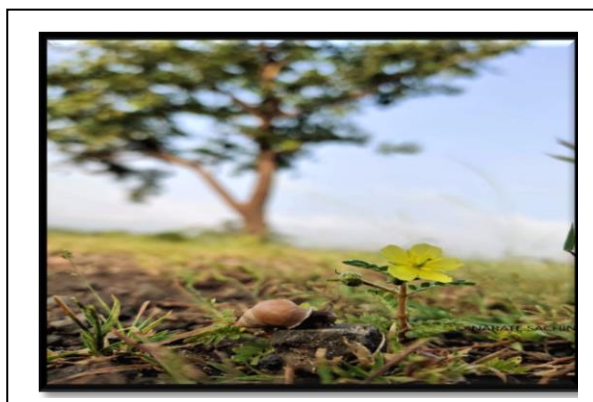


To maintain all the greenery, consistent supply of water is necessary for which we have implemented basic irrigation system in form of (a) drip irrigation and (b) sprinkler irrigation. The supply of water is from **sewage treatment plant (STP)** which is built for the purpose of purification of sewage water from all over the campus infrastructure. Storage of rainy water is done in excavated lakes and natural bunds. This is also helpful in replenishing ground water levels, positively influence water quality of downstream water courses, and preserve the biodiversity and habitat of the area.





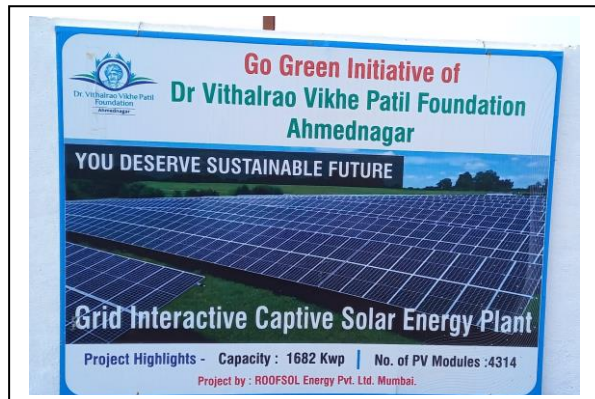
With improvisation, we have preserved the natural structure of our campus like hills, some old trees, and herbs. There are some small lakes which are being taken care of as they are used as a source of drinking water by animals and birds. On the other hand, advanced equipments are used for trimming of trees and grass lawns, which gives extra beautification and healthy atmosphere to the campus.



To check the pollution and provide healthy environment in campus area, we have implemented -

- 1) No use of plastic in the campus

- 2) Promotion of battery operated vehicles within the campus
- 3) Use of public transportation modalities
- 4) Restricted vehicle entry in campus
- 5) One of the major initiatives taken by the Institution towards maintaining the green campus is establishing a solar panel station in large field of area which is proving to be very helpful in providing a large portion of need of electricity for our campus.



### **Evidence of success:**

As we say, 'Cleanliness is next to Godliness', campus is kept clean on daily basis. The waste matter management is done properly by segregation and collection of waste in dedicated dustbins, collection of waste by vehicles of Municipal Corporation and proper disposal of waste. Making campus aesthetic for every living being here, on daily basis is one of our prioritized goals. We have always been trying to improve the environment of campus in every aspect and we are ready cross any bridge when we will come to it!

### **Problems encountered**

- Planting new trees and introducing flower garden requires regular maintenance and a separate budget allocation
- In summer period, supply of water to all plants becomes a challenge
- Shredding of leaves on roads makes it necessary to clean on daily basis
- Encounter with various types of venomous and non-venomous snakes is an issue of concern



