

# Maratha Vidya Prasarak Samaj's G.M.D. Arts, B.W. Commerce and Science College, Sinnar, Tal. Sinnar

# **Best Practice: 1**

1. Title: Clean Campus and Green Campus and Save the Environment

# 2. Objectives:

- To plant and preserve trees
- To inculcate the sense of environmental awareness among the stakeholders
- To fulfill the motto of the college- 'Green College, Clean College'
- To make the campus clean and plastic free

**3.** Context: This College is situated in rural, drought prone and industrial area, where the insufficient availability of water and increased pollution level are observed. Being established in 1969, the college is deeply concerned about the conservation of ecology and the environment. Environment has become a global concern in these days. Carbon emission is a lethal global threat. Global warming leads to the abrupt climate change. We have been profoundly affected by the abrupt and destructive hailstorms due to volatile weather conditions. Consequently, there is a drastic change on the monsoon pattern. The agrarian distress has been increased due to the climate change. Thus, the college has initiated several activities to save the environment and climate. The campus is enriched with floral diversity.

# 4. The Practice:

Every year, the college undertakes Tree Plantation drive. Hence, the four *vanas* (Gardens) are developed on the campus namely *Vrundavan, Nakshatravan, Rashivan and Saraswativan,* Medicinal Plants Garden, Botanical Garden. We have planted varieties of tree from local as well as exotic plants. There are boards displaying the botanical and local names of the planted trees in the garden. A well irrigated system is developed to supply water to the plants and the trees. Through the Rain Water Harvesting System, the water is collected in the natural pond that is created in the campus and the water is supplied to the trees in the campus.

There is a water tank in the campus. The water from the rain is stored in large well. The water is carried through underground pipeline to the tank. Same water is utilised for the trees and utility purpose.

A Vermi-compost unit is set up with 10 beds and 200 Kg capacity. The purpose of this unit is to generate organic fertilizer and provide it to the existing plants in the campus. The shaded leaves of the trees and wet and dry garbage are dumped in the Vermi-compost unit to process

into organic fertiliser. Despite being arid and rocky type of soil, the college campus is largely covered with dense vegetation.

The college has installed two Solar Energy Plants. One is 15.3 KWh off grid and other is 7.5 KWh on grid which conserve the conventional energy resources and hence saves the cost of electricity. It is clean, renewable and non-polluted form of energy. Green and Energy Audits are undertaken time to time through internal and external agency.

During the various activity programs like Seminars, Conferences Workshops, Meetings, Farewell Ceremonies, Induction, Inaugural Ceremony and various activities conducted for student support services, it is our practice to write blackboard with chalk instead of plastic flex board.

The plastic water bottle is mostly avoided during these programs. The dignitaries are felicitated by offering books instead of plastic wrapped bouquets and flowers.

**5. Evidence of Success:** We have planted 1090 plants during the last 05 years and the total number of trees in the campus is 2090. It has helped to transform the college campus into green ambience. Apart from this, the volunteers of NSS, NCC and Rover Ranger have planted around 650 trees off the campus. The volunteers have spread around 3000 seed balls on the hills like *Dhagya Dongar* and *Duberegad* in the last two years. The college has established *'Nisarg Mandal'* (Nature Club). The Principal Dr. P. V. Rasal has been honored with *'Nisarg Ratna Puraskar'* by *Nisarga Mitra Samiti*, Dhule. He has also been honored with *'Vice-President Award'* by the Government of India for his contribution in planting trees as a part of social services through Rover Ranger Unit.

The entire Campus is plastic free. Polythene bags are banned in the campus. CFL Bulbs and LED lights are installed. The average power generation per day is 45 KWh Units. The average power consumption from grid (MSEDCL) is 120 KWh per day. The college solar system generates 37.5% of the electricity consumed by the college per day. Approximately,

42.3 Kg carbon dioxide (CO<sub>2</sub>) generation is avoided per day. There is an automobile restricted area on the campus. The College uses five star rating branded electric equipments for energy saving. Most of the students and staff members commute by using public transport services. We observed 'No Vehicle Day' on the 1<sup>st</sup> day of every month. The staff members use 'Car Pool' to commute the college.

## 6. Problems Encountered and Resources Required:

### **Problems Encountered**

- Unavailability of funds
- The Government representatives, local NGOs are reluctant to help
- Due to low ground water level during summer season, that is why we have to depend upon the annual rain fall.
- NET meter issues occurred after the installation of solar energy panel.
- Difficult to make awareness about complete ban on plastic among the students as they as used to it.

## **Resources Required**

- Necessary to raise fund
- The permanent availability of water
- Active participation of NGOs and Government Authorities
- Alternative source of plastic Use of traditional means
- Needs to be appreciated

## **Glimpses of the Evidences:**

#### 1. Vrindavan Vana



#### 2. Rashi Vana

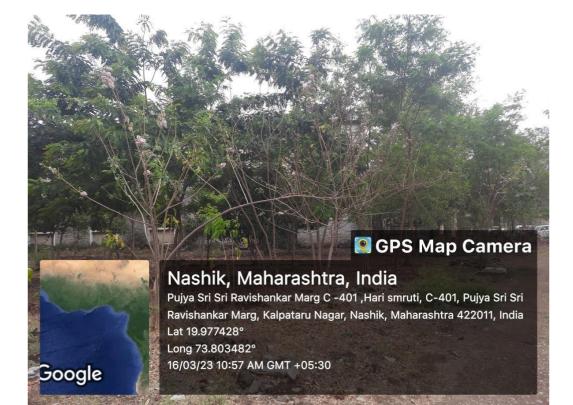


#### 3. Nakshatra Vana



#### 4. Saraswati Vana











| Sr. No.            | Month   | Energy<br>Generated<br>kWh | Energy<br>Consumed<br>by college<br>kWh | CO2 credit in Kg             |
|--------------------|---------|----------------------------|-----------------------------------------|------------------------------|
| 1                  | June    | 109                        | 2904                                    | 91.778                       |
| 2                  | July    | 400                        | 3561                                    | 336.8                        |
| 3                  | August  | 36474                      | 0                                       | 30711.108                    |
| 4                  | Sept    | 1337                       | 8986                                    | 1125.754                     |
| 5                  | October | 760                        | 2242                                    | 639.92                       |
| 6                  | Nov     | 1414                       | 1560                                    | 1190.588                     |
| 7                  | Dec     | 1373                       | 1424                                    | 1156.066                     |
| 8                  | Jan     | 1684                       | 2002                                    | 1417.928                     |
| 9                  | Feb     | 1790                       | 2533                                    | 1507.18                      |
| 10                 | March   | 2009                       | 4342                                    | 1691.578                     |
| 11                 | April   | 1994                       | 3834                                    | 1678.948                     |
| 12                 | May     | 1904                       | 3834                                    | 1603.168                     |
| <b>Total Units</b> |         | 51248                      | 37222                                   | Avg. CO2 Credit = 43150.82kg |

# **Solar Power Generation Monthly for 2022-23**

Jum CO-ORDINATOR IQAC G.M.D. Arts, B.W. Commerce And Science College, Sinnar



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