## **BRIEF REPORT**

## ON

# **Solar Energy**

The college has been using solar energy since 2021. The use of solar energy has benefited the college in many ways. It has enabled the college to conserve energy and reduce the consumption of electrical energy. The use of solar energy has enabled the college to create eco-friendly environment in the campus. The installation of 10 kW<sub>P</sub> of solar power station in our college has enabled the institution to have regular power supply and to use alternate source of energy to contribute environmental sustainability. The use of solar energy has resulted in the reduction of electricity bill. Despite the huge amount of money required to be spent for the installation of the project, it can be saved through the reduction in the electricity bill.

To achieve this objective an awareness program on the significance of solar energy has been conducted for all the students and the staff members of the college. The awareness created among the staff and the students has helped to ensure the reduction of the consumption of electrical energy.



#### **Roof Top Solar PV Plant**





### Use of solar light in college campus



Use of solar light in college campus

## **BRIEF REPORT**

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## **BIO GAS PLANT**

Biogas is also called sewer gas, compost gas, swamp gas and gobar gas. Biogas is a naturally occurring and renewable source of energy, resulting from the breakdown of organic matter. Biogas can be used for electricity production. It is produced from plant and animal waste it is good fuel and can be used as a replacement for LPG or Natural gas and can generate electricity. Biogas production can reduce the pollution potential because it is generated from waste. Today's big problem of nature is pollution That's why keeping in it mind, in our college we have portable biogas plant for UG and PG students for study purpose and creating awareness about protecting the environment by using waste material for generation of biogas and thereby improving sanitary conditions in rural and urban areas.

#### Feed stock for biogas:

- Livestock manure
- Food processing waste
- Sewage sludge

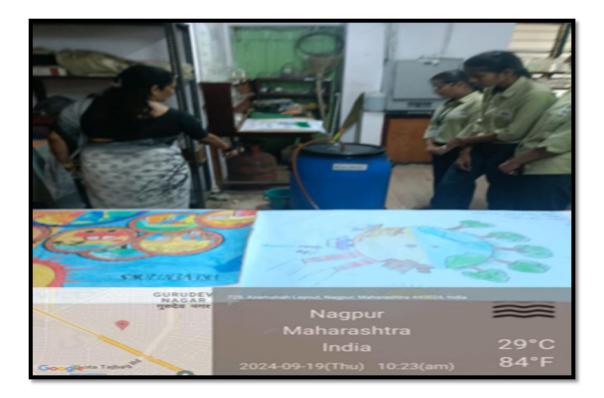
(1 kg cow dung produced  $-0.5 \text{ m}^3$  of biogas daily)

#### **Composition of Biogas:**

- Methane-50 -75%
- $CO_2 25 50\%$
- Nitrogen -2 8%
- Trace levels of H<sub>2</sub>S
- Volatile organic compound

#### **Benefits:**

- Reduction in green gas emission (GGE)
- Sustainable alternative energy source
- Ecofriendly and pollution free environment









### **Report on Solid Waste management**

- 1. Solid Waste Management
- 2. Liquid waste management
- 3. Waste recycling system
- 4. Hazardous chemical and radioactive waste management.

This report presents findings from a survey on **solid waste** generation at Sevadal Mahila Mahavidyalaya, focusing on waste composition and management.

Survey indicate that paper waste constitutes 72% of total waste generated. Plastic waste follows at 12.79%, with significant portion being soft plastics. Biodegradable waste accounts for 9.44%, including refuse from the food and nutrition department, canteen, and surrounding gardens. Glass waste remains minimal, representing 2.46% of the total.

During construction development, an additional 2.46% of waste emerged, primarily from construction materials.

Solid waste generated at the college is collected and placed in designated dustbins for storage and transportation to Nagpur Municipal Corporation (NMC). Routine collection by NMC vehicles alleviates solid waste burden on campus.

Liquid waste from laboratory taps flows into sewer lines which is utilized for gardening.

**Biodegradable waste** undergoes vermicomposting, transforming it into valuable manure, exemplifying *"wealth from waste"* and contributing to sustainability efforts by converting organic waste into usable compost.

Few chemicals used in the laboratory are **corrosive and hazardous**. These are diluted with a sufficient quantity of water before being disposed through pipe lines.

These waste management practices reflect a commitment to efficient waste disposal, promoting environmental sustainability.



1. Geo-Tag Photograph of the teams being given instructions by the mentor teacher



2. Geo-Tag Figure showing Storage, Segregation and transportation to NMC Vehicle collecting Solid waste

## 7.1.4. Water Conservation Facilities available in the Institution

### 1. Rain Water Management

Water scarcity is one of the growing concerns of the present times, the only solution for which is water conservation. Water conservation is implemented on different levels in the college from rain water harvesting, tree plantation to maintain the underground water levels to recycling the water for gardening purposes and many more. Rainwater harvesting is a conservation process used for many drives and for the future needs. The college has set-up the rain harvesting unit in different niches within the college campus, which has the total storage capacity of up to 2000 liters.

The conserved rain water serves as a secondary source of water. The college adapted rain water harvesting method roof-top harvesting units and surface run-off rainwater harvesting. The rainwater that flows off in the college areas are collected and stored to recharge the groundwater level. Harvested rain water is filtered through several layers of mesh or strainer fixed across the inlet to the storage system and is cleaned on a regular basis. The rain water set-up units satiate the requirements of water for the college garden and recharge ground water.



Rain water harvesting pipe



Rain water management



SEVADAL MAHILA MAHAVIDYALAYANAAC RE-REACCREDITED WITH 'A' GRADE

Place for Higher Learning & Research (Research Academy) Sakkardara Square, Umrer Road, Nagpur-440024

## Report

## on

## Divyangian-friendly, barrier free environment

- 1. Built environment with ramps/lifts for easy access to class room
- 2. Divyangian-friendly wash rooms
- 3. Signage including tactile path, lights, display boards and signposts

## Academic Session: 2023-2024



SEVADAL MAHILA MAHAVIDYALAYANAAC RE-REACCREDITED WITH 'A' GRADE

Place for Higher Learning & Research (Research Academy)

Sakkardara Square, Umrer Road, Nagpur-440024

### **Report of Disable-Friendly Barrier Free Environment 2023-24**

The college has slopping path for wheel chair accessibility with easy way. The college has also rest (Sick) room and separate wash room for disable students. The institute provides inclusive education to disabled students by providing:

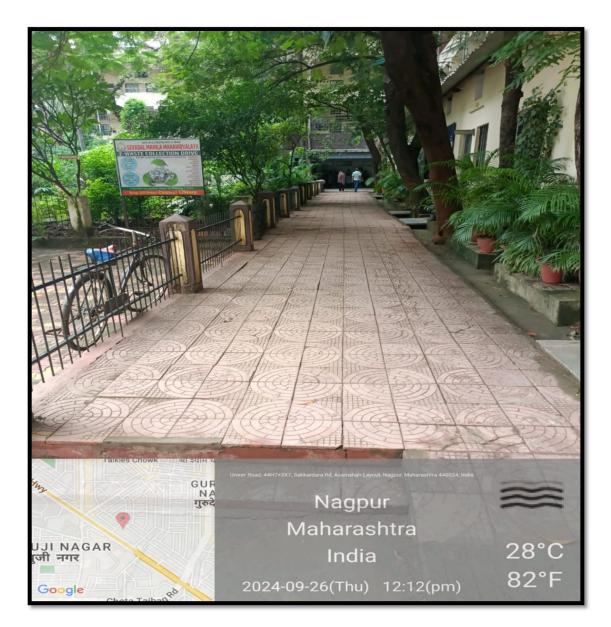
### Services for accommodations:

- Provide extra time in examination to disable students
- Provide special seating arrangement for handicapped students
- Writer making available for disable students

College has created disable friendly barrier free environment by providing hurdle free infrastructure, assistance to get their problems, solution on that and promote inclusive education. By providing disable friendly environment the institute is contributing to equality in society.

### List of Disable-Friendly Barrier Free facilities in the institute:

Sr.	Facilities
No.	
1.	Slopping path
2.	Rest room
3.	Separate wash room
4.	Manual assistance
5.	Wheel chair



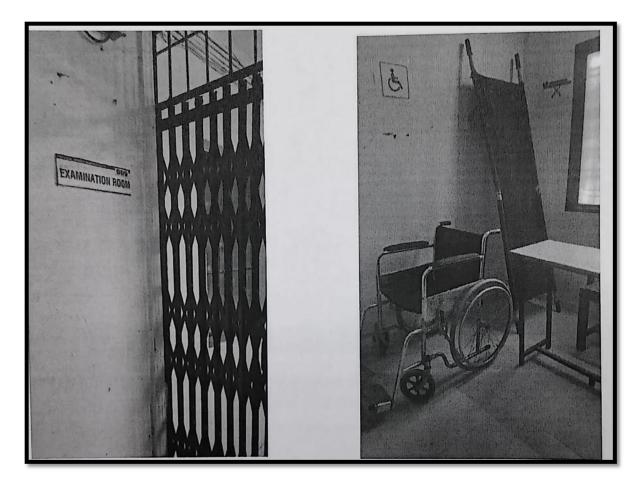
**Slopping path** 



**Rest room** 



Arrangement in the reading room on the ground floor for the disabled students with general student



Examination room on the ground floor, wheel chair and stretcher for disable students



Arrangement of the wheel chair in the examination room on the ground floor for the disabled students along with the general students

## <u>Geo tagged photos:Signage including Tactile path, Lights, Display</u> <u>boards and Signposts</u>





