# **Environmental Consciousness and Sustainability and Divyangjan Friendly Initiatives**

#### 7.1.2 The Institution Facilities and Initiatives

#### 1. ALTERNATIVE SOURCES OF ENERGY

- A. BIO GAS
- B. SOLAR ENERGY

#### **BIOGAS**

Biogas is generated through six plants constructed on the premises of the institution. Both cattle dung and urine are connected to these biogas plants through a canal system. After permutation the biogas generated is connected to the kitchen through a tube and utilized by stoves specially designed for the purpose.

As far as the lighting system is concerned, the biogas supplies are connected to a diesel unit which generates power to the tune of 200 units per day resulting in huge savings on the energy bill.

Besides, the institution also saves on an average, four 18.2 kg LPG cylinders per day on cooking. Apart from this, the slurry available after permutation of cattle dung is being used as an organic fertilizer

In our college we use solar panels for 1. Power Generation 2. Solar Water Heater 3. Solar Dryer 4. Solar Street Lighting System.

GPS Map Camera Payakaraopeta, Andhra Pradesh, India 9HC9+5QP, Payakaraopeta, Andhra Pradesh 531126, India Lat 17.370064° Long 82.568943° oogle

**Bio-Gas Plant** 

09/01/23 03:28 PM GMT +05:30



Solar plates installed on the rooftop



From the power grid solar power is also stored in this power house

#### SRI PRAKASH SOLAR WATER HEATER

The general consensus is that climate change is occurring and that carbon emissions are a major contributing factor. A solar water heater uses the renewable energy of the sun to warm up our SRI PRAKASH water. If you can use solar energy to heat up water, that's less fossil fuel or natural gas being used and released into the atmosphere from traditional electric or gas water heaters. That means you'll be helping save the environment in addition to lowering your gas or electric bill.



#### SRI PRAKASH SOLAR DRYER

Solar dryers are used to eliminate the moisture content from crops, vegetables, and fruits. The solar dryer consists of a box made up of easily available and cheap material. The top surface of the dryer is covered by transparent single and double-layered sheets. The inside surface is colored black to absorb the incoming solar radiation. Since the box is insulated, the inside temperature of the box is raised. The air is ventilated through the small holes at the top of the box. As the inside air gets warm, it rises by the natural circulation process and removes the moisture from the fruits, vegetables, and the crops placed in trays inside the box. To fill the vacuum, fresh air comes in by a forced draught process and the process continues.



#### **SOLAR STREET LIGHT SYSTEM**

Solar streets lights are an effective outdoor lighting to illuminate in the streets of our college at night times. Solar street lights are powered by solar panels and turned on and off automatically by sensing the night fall and the daylight.





**Certificate of Implementation of Energy Saving Practices** 

# 2. <u>MANAGEMENT OF VARIOUS TYPES OF DEGRADABLE AND NON - DEGRADABLE WASTE</u>

In our college degradable waste is used to prepare vermi compost. Vermi composting is a unique process that occurs in earthworm's gut to convert organic wastes into organic fertilizer.

Vermicompost can enhance soil fertility physically, chemically and biologically. Physically, vermicompost-treated soil has better aeration, porosity, bulk density and water retention. Chemical properties such as pH, electrical conductivity and organic matter content are also improved for better crop yield.

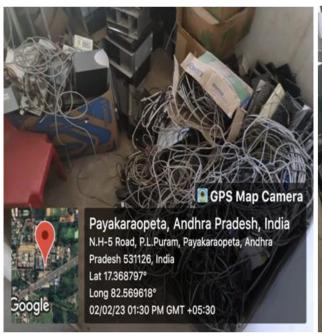




**Certificate of Providing Educational Services** 

#### **NON-DEGRADABLE WASTE**

Non -degradable E- waste generated in our campus is given to authorized dealers who purchase the scrap to reuse components. Apart from this the electronic and electrical instruments under repair are given to students during the lab sessions to dismantle for application orientation learning.





## **SOLID WASTE MANAGEMENT**

Each and every class of our college is maintaining dustbins. The waste which is collected from the classes is dumped into large dustbins for recycling.



#### 3. WATER CONSERVATION (RAIN WATER HARVESTING)

SPACES Degree College is committed for Rainwater harvesting by collecting and storing rainwater for future use. This is an age-old technique that has been used in various parts of the world for centuries. The basic idea behind rainwater harvesting is to capture rainwater that falls on roofs, pavements, and other surfaces, and store it for later use.

Rainwater harvesting has numerous benefits, both for individuals and communities. For individuals, it provides an independent source of water for a variety of purposes, including irrigation, washing, and even drinking. By collecting rainwater, individuals can reduce their reliance on municipal water sources, which can be expensive and sub-Regenerate response times of drought

For communities, rainwater harvesting can provide a sustainable source of water, particularly in areas where water resources are limited or unreliable. It can also help to reduce the strain on municipal water systems, which can be overburdened during peak usage periods.

There are various methods of rainwater harvesting, ranging from simple to complex. The most common method is rooftop harvesting, which involves collecting rainwater from the roofs of buildings and storing it in tanks or other containers. Other methods include surface runoff harvesting, which involves collecting rainwater from paved surfaces, and subsurface harvesting, which involves collecting rainwater from underground sources.

In order to implement rainwater harvesting effectively, it is important to consider factors such as rainfall patterns, water usage needs, and storage capacity. In addition, appropriate filtration and treatment measures should be put in place to ensure that the collected rainwater is safe for use.

Overall, rainwater harvesting is a simple and effective way to conserve water resources and provide a sustainable source of water for individuals and communities. By adopting this practice, we can help to ensure a more sustainable and secure water for ourselves and future generations.





RAIN WATER HARVESTING AREA

#### 4. GREEN CAMPUS INITIATIVES

SPACES Degree college uses pure drinking water by using a Reverse Osmosis (RO) water treatment plant installed and is running successfully. Sprinkler irrigation is used in gardens to prevent water wastage. LED bulbs are used for Energy Efficient Lighting System. Rooftop solar panels are commissioned. Sewage Treatment Plant (STP) is constructed and the treated water is used for gardening. Rain water harvesting system is installed in every building in order to harness natural rain water.

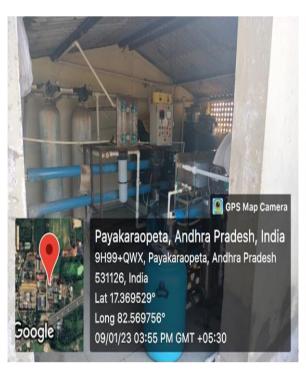


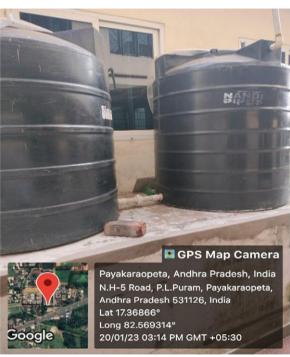


Certificate of Implementation of Greenery and Environmental Promotion Activities

#### A. SRI PRAKASH RO Drinking Water Plant

Sri Prakash has its own mineral water plant in the campus. The entire campus is supplied with the mineral water from the plant. Carbon pieces and other materials are used to purify the water. At a time 6000 liters of water is sent for purification. We get 1500 liters of purified water. The remaining 4500 liters of water is waste water which is sent to the crops in the fields.





e-mail: info@sriprakash.org

# **B.** Green Practices

- i. Plastic free campus.
- ii. Green landscaping with trees and plants.
- iii. Restricted entry of automobiles.
- iv. Pedestrian friendly pathways.

#### **i. PLASTIC FREE CAMPUS**

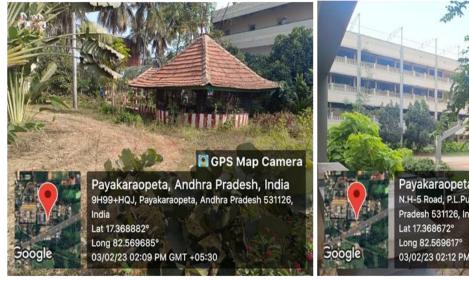
On the occasion of world environment day, a program was organized by NSS regarding a ban on the use of plastic.

Students participated in a rally and removed the plastic in the campus as part of Swachh Bharat Abhiyan.



#### ii. GREEN LANDSCAPING WITH TREES AND PLANTS

Landscaping with Trees and Plants Within the campus, the institution maintains a clean and green environment. By establishing a distinct estate maintenance wing, the Institution ensures the preservation of the environment. It maintains the lawn and plantations by employing gardeners and sweepers. Our institution is more concerned with keeping a green campus and being environment friendly, which ensures that pure oxygen is available throughout the building. The campus has been made greener by the addition of more trees, providing a pleasant environment for students to learn in and faculty members to work in.

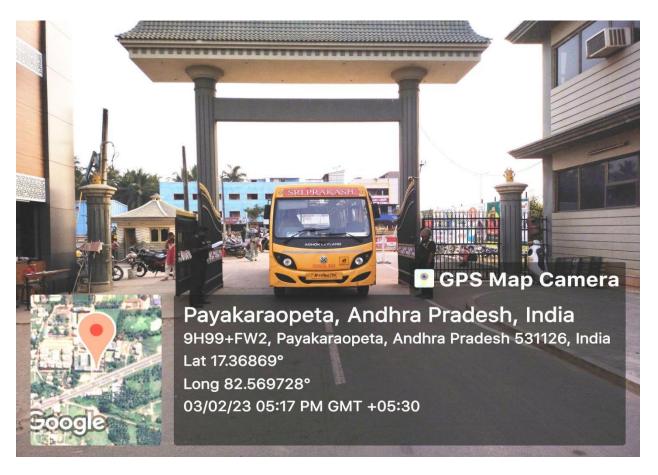




e-mail: info@sriprakash.org

## iii. RESTRICTED ENTRY OF AUTOMOBILES

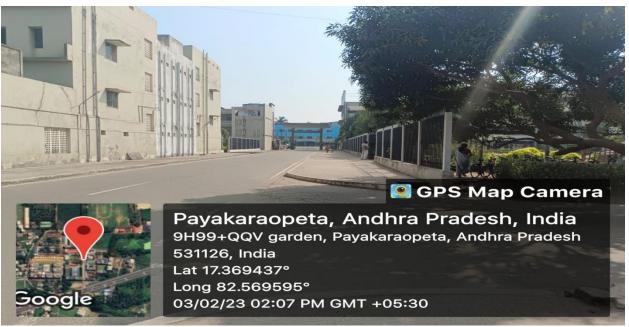
Our college does not allow people to enter the campus premises on all the vehicles. Only the fraternity of college can enter with their vehicles. In the college campus restricted automobiles can enter and most of them park in the parking area. Our staff and students use bicycles inside the campus to avoid the toxic fuel gas. It helps the students to maintain their health and to stay fit.



#### iv. PEDESTRIAN FRIENDLY PATHWAYS

Our college is connected through buses from different places. Special walkways are arranged for the students to avoid disturbances and help to maintain safety for the students.





## 5. DISABLED -FRIENDLY, BARRIER FREE ENVIRONMENT:

SPACES Degree college provides a barrier free environment where people with disabilities can move about freely, and use the facilities within the built environment. The environment supports the independent functioning of individuals so that they can participate without assistance in everyday activities within the campus.

#### **RAMP:**

Ramp is built in addition to staircases in the B block area. The ramp is carefully designed to be used by the disabled people.

