



Since 1947

PSG College of Arts & Science Coimbatore – 641 014

Best Practice – 1

1. Title of the practice

Co-existence in Existence through Green Initiatives

2. Objectives of the practice

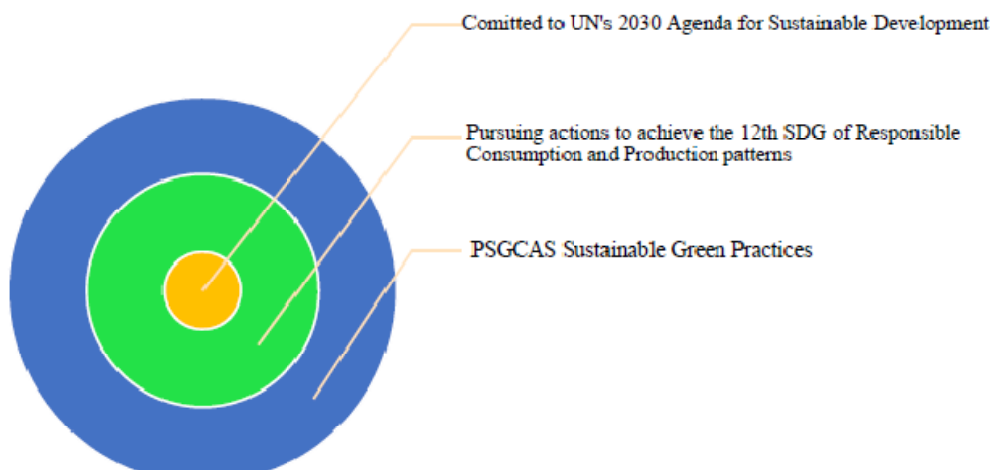
Committed to the values of green thinking and social responsibility, PSGCAS has taken significant initiatives to promote sustainable and eco-friendly practices in the campus by developing viable solutions to environmental, social and economic needs of mankind. With efficient energy and water management systems, biodiversity and waste disposal practices, the college aims at

- I. Optimizing green energy usage (Solar, Wind and Biogas)
- II. Implementing efficient liquid and solid waste management process
- III. Promoting water conservation and maintain biodiversity

3. The Context

Committed to the 12th Goal of SDG of ensuring **Responsible Consumption and Production Practices**, PSGCAS values and undertakes all productive practices for responsible consumption and production by

- Increasing resource efficiency,
- Promoting sustainable lifestyles through transition towards low-carbon and green economies
- Pursuing the values of green thinking and social responsibility



Contributing to other Sustainable Development Goals

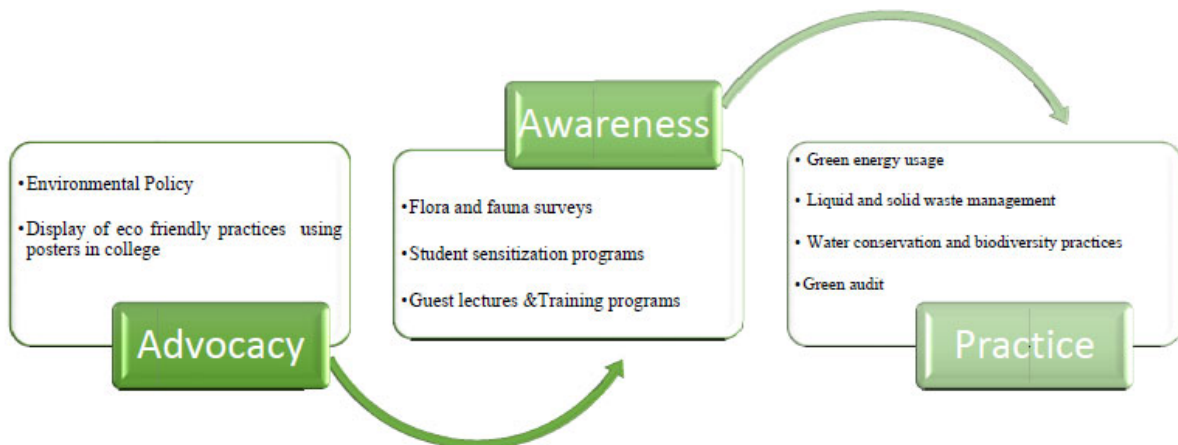
By striving to achieve 12th SDG of United Nations (UN), PSGCAS also contributes to achieving other sustainable goals of UN

Contribution to SDG Goals

PSG CAS Sustainable Practices	Contribution to SDG Goals
	Goal 3 - Good health and well being
	Goal 6 - Clean water and sanitation
	Goal 7 - Affordable and clean energy
	Goal 11- Sustainable cities and communities
	Goal 13 - Climate action
	Goal 15 - Life on land

4. The Practice

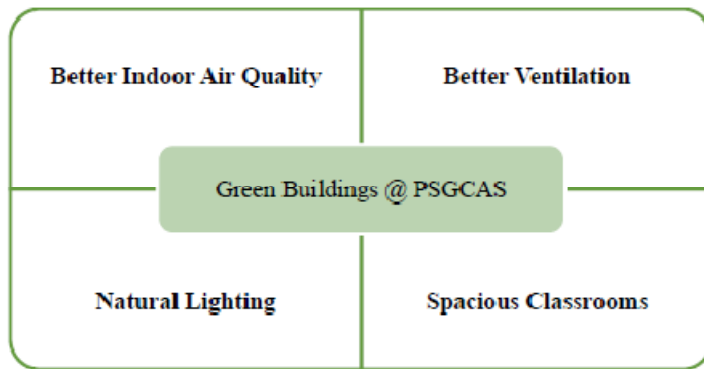
With the idea of a mutual coexistence in the natural ecosystem, PSGCAS follows a holistic practice towards implementing the concept of sustainability by following the principles of advocacy, awareness and practice.



Comprehensively focusing on all the areas of environmental management, the practices of PSGCAS can be broadly classified under the following categories:

I. To achieve 100% green energy usage

▪ Green buildings in the campus



- 24 Hours continuous ambient **air quality monitoring station** of Government of Tamil Nadu, is stationed in the PSGCAS campus to monitor the air quality of this locality. The station records key parameters like PM₁₀, PM_{2.5}, SO₂, NO₂, NH₃, O₃, CO, Benzene, Toluene, and Xylene every 15 minutes.
- The campus maintains **five battery powered vehicles** apart from the battery operated floor cleaning machines.
- The college has **banned the usage of plastic** in order to sustain and elevate the green environment in the campus.
- The college has **restricted entry of automobiles** into the campus and provides a separate parking space for students and faculty members at the entrance itself.
- The institution had installed **power efficient equipment** (Energy saving fans and Bulbs) and **sensor based energy conservation devices** to reduce power consumption
- Optimal **use of solar energy** by installation of solar powered panels in the college (**200kW**) which is used for solar powered electricity generation, water heating (capacity **63250 liters/day**) and steam cooking (**290Kg steam/day**) in kitchens.
- **Judicious use of wind energy and biogas:** On an average **64%** of the energy requirement is fulfilled by the wind energy, generated through the wind mills set up by the PSG Trust
- With the **use of Bio-gas plant**, **eight tons** of Biogas is generated from food and vegetable wastes

II. Efficient liquid and solid waste management process

- Well managed sewage treatment plant with a capacity of **5.5 lakh** liters per day
- Kitchen waste & food waste generated is used for biogas production
- Recyclable solid wastes and e- wastes sold to authorize vendors.

III. Effectively conserve water and maintain biodiversity

- Rainwater harvesting and charging pits set up at **eight** different places in the campus ensures efficient rainwater harvesting
- Herbal garden and green belt enriches the quality of air, and health of the stakeholders at campus.

5. Evidence of Success

Green Energy Usage

- Extensive usage of Solar, Wind and Biogas energy curtails 1754.54 tonnes of green house gas emissions with a financial savings of Rs 14,040,079 per annum.

Water Conservation and Biodiversity

- With effective rain water harvesting system, 71.68 Million liters of rain water is harvested per annum
- A rich biodiverse campus with 3456 trees (generating more than 600 tonnes of O₂ per annum) housing 200 species of fauna
- A well maintained semi-natural pond, green house, herbal, mulberry and rose garden by students.

Liquid and Solid Waste Management

- Usage of recycled water (with drip system and sprinklers) for watering the garden plants.
- Efficient water conservation by using treated water (27, 000 liters) for toilet flushing in the campus.
- Solid degradable waste transformed into compost and used as manure for gardens.

Rewards and Recognitions

- **Ranked 2nd** amongst the cleanest Higher Educational Institutions at National level **Swachh Campus Ranking 2018**, by Ministry of Human Resource Development, Government of India.
- **Ranked 3rd** amongst the cleanest Higher Educational Institutions at National level **Swachh Campus Ranking 2019**, by Ministry of Human Resource Development, Government of India.
- **Green Institutional Mentor Award** - Mahatma Gandhi National Council of Rural Education (MGNCRE), Ministry of Human Resource Development in Government of India recognition as one of the Exemplary Performers in campus water and sanitation management.

6. Problems encountered and resources required

- Advocating smart transportation
- Continuous dependence on nonconventional energy
- Conversion of existing buildings to green buildings
- Coordinating with NGO's and environmental groups for sustainable projects
- Storage of excess non conventional energy

Resources required

- Support from Ministry of Environment and Energy
- Support from UN to achieve SGD targets by 2030

Best Practice -2

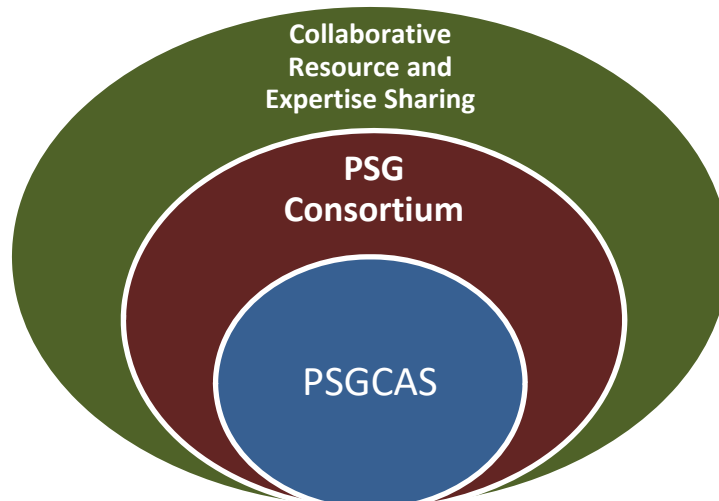
1. Title of the practice

Harnessing Quality Ecosystem of PSGCAS through PSG Consortium

2. Objectives of the practice

PSGCAS always believes in collaborative sharing and influencing stakeholders in the PSG consortium to maintain a dynamic institutional climate for sustainable development. The objectives of the collaborative working are

1. Create a culture of knowledge sharing
2. Collaborative resource planning for effective utilization of resources
3. Improve operational efficiency through mutual support and assistance
4. Increase stakeholder benefits.



3. The Context

To accomplish the noble thoughts of the founder Shri P.S. Govindaswamy Naidu “*Let there be charity, so that others can share my family’s prosperity*” PSG & Sons’ Charities Trust was formed in **1926**, with a mission to offer quality world class education to all. For over nine decades now, with over **30 Institutions in different domains** like Education, Technology, Research, Healthcare, Industry, Social Service etc, all the PSG institutions offer a nurturing and supportive environment for collaborative working to ensure a wholesome development of its stakeholders.

In the context of better utilization and sharing of expert knowledge and resources among PSG institutions, PSGCAS collaborates with other institutions in the PSG group in all possible areas of growth and development for achieving and translating greater impacts.

4. The Practice

Knowledge sharing:

The effective sharing of physical and intellectual resources among the PSG Institutions benefits PSGCAS in the following ways

PSG CAS	Collaborated Institutions	PSG	Nature of Activity undertaken
Microbiology - UG and PG Students	PSG Institute of Medical Sciences & Research		Internship
Biochemistry UG Students	PSG Institute of Medical Sciences & Research		On the job training
Science students	PSG Institute of Medical Sciences & Research		Animal ethical clearance
PSGCAS Students	PSGG KanyaGurukulam School		Extension activity
Clinical Nutrition - UG and PG Students	PSG Institute of Medical Sciences & Research		Hospital posting and internship
Nutrition&Dietetics- UG and PG Students	PSG Hospitals		Internship in the Dietary department
Physics – Research scholars	PSG College of Technology		Research in Physics laboratory
Environmental Science -PG Students	PSG Institute of Technology and Applied Research PSG College of Technology PSG Hospitals		Visit to waste water treatment plant

Empowering Academic leadership

To transform vision to outcomes and plan the future strategic initiatives for progressive development, the **Strategic Initiative Forum** organizes meetings for all the Administrators and Heads of the PSG institutions.

To empower senior faculty members and academic administrators to prepare for leadership roles in a higher institution, **Certificate in Managing Higher Education Teams (CIMHET)** a one year program is organized by PSG CARE. Senior faculties from PSGCAS attend the program along with faculties from other PSG institutions.

Research Support

Research advisor and Academic Advisor of PSG institutions share their expertise for the benefit of PSGCAS.

Promoting Faculty Excellence

PSG Center for Academic Research and Excellence (PSG CARE) founded in October 2015 operates with a mission of promoting teaching excellence in all the institutions under the

Trust. PSGCAS in association with PSGCARE regularly organizes faculty development programs on a wide range of contemporary topics including

- Outcome-Based Education
- Design Thinking,
- Impact of Computer Assisted Intelligent Tutoring System
- Online Moodle Administration Training
- E-waste Management
- Data Analytics etc.

Technology

PSG Software Technologies have designed an exclusive software **LAUDEA** for the student and faculty information system, admission, online attendance, exam and event management system etc for PSGCAS.

Hospital

PSG Hospital runs a Health Centre in PSGCAS campus, with full-time nursing assistant and visiting doctor for the benefit of students of PSGCAS.

Energy Sharing

Efficient energy and water management system at PSGCAS is achieved through the wind mills established by the PSG Trust, and the common sharing of the water resources among the Institutions.

5. Evidence of Success

PSGCAS shares its resources and expertise to the consortium in the following ways

Supporting the needy:

Students from PSG *ManavarIllam* and PSGG KanyaGurukulam School are given preference in PSGCAS admissions.

PSGCAS – As Mentor

As a potential “mentor Institution”, PSGCAS has mentored PSG College of Nursing and PSG Institute of Technology and Applied Research, through UGC-PARAMARSH scheme to help them acquire NAAC accreditation.

Quality product sharing

The Food Processing Centre of PSGCAS supplies quality food products to other PSG institutions.

Knowledge Sharing of PSGCAS to PSG Consortium:

Student Expertise Sharing

Program	Nature of Sharing	Institution benefitted
B.Voc (Hospitality Management)	Outdoor catering	PSG Institute of Management, PSG College of Technology
Nutrition & Dietetics	Nutrition and Diet counseling	PSG Hospitals & PSG Rural Health Centre
Visual Communication & Electronic Media	Photo /Video Shoot and Short film making	PSG Institute of Medical Sciences & Research, PSG College of Technology
Carnatic Music	Music Training for <i>Kadambari</i> (Music festival)	All PSG Institutions

Faculty Expertise Sharing

Program	Nature of Sharing	Institution benefitted
Statistics	Knowledge Expertise	PSG College of Pharmacy
English		PSG Institute of Technology and Applied Research
Psychology		PSG College of Physiotherapy
MCom (International Business)		PSG Institute of Advanced Studies
Microbiology, Biochemistry		PSG Institute of Medical Sciences & Research, PSG College of Technology
Microbiology, Biochemistry	Collaborative Research	PSG College of Technology

Problems encountered and resources required:

- Quicker updation in the process
- Time constraint in collaborative projects
- Inclusion of diverse perspectives
- Allocation of resources
- Expanding the operative framework
