Green Initiatives
Policy Document
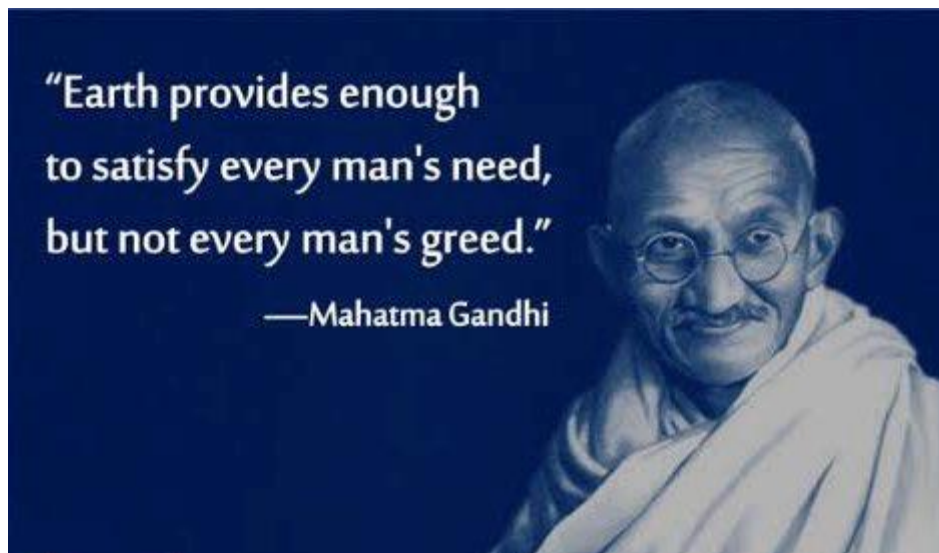
"Think Green, Live Green, Go Green"

GREEN CAMPUS INITIATIVES

NSS COLLEGE, PANDALAM, PATHANAMTHITTA DT., KERALA

"Earth provides enough to satisfy every man's need, but not every man's greed."

—Mahatma Gandhi

A Green Campus integrates environment-friendly practices with education to advance sustainability. This concept enables institutions to pioneer a new environmental ethos and develop innovative solutions to address environmental, social, and economic challenges.

Greening the campus involves addressing wasteful inefficiencies and adopting sustainable energy sources for daily operations. This approach encompasses proper waste disposal, procuring environment-friendly supplies, and implementing effective recycling programs. Institutions must develop and follow time-bound strategies for these green initiatives, integrating them into their planning and budgeting processes to achieve a clean and green campus.

In this regard, NSS College Pandalam, a prominent institution in Central Travancore, has developed and implemented innovative strategies to promote a greener and cleaner campus. This

initiative has been a collaborative effort involving students, faculty, staff, and the Local Self-Government Department (LSGD). The steps towards achieving a greener campus are categorised as follows:

I. Energy Conservation and Sustainability Initiatives:

"Save Energy" is the motto of everyday operations in each institute.

- The institution has installed 3KW solar panels providing evening lighting and energy savings. Plans are underway to install more panels on the roof to meet increasing energy demands. These steps will save money and make the institute self-sustainable. All CFL and conventional light sources, such as bulbs, tube lights, halogen, and mercury street/campus lights, have been phased out and replaced with LEDs and fluorescent bulbs.

1) **Energy-Efficient Practices:**

- The institute ensures the purchase of only energy-star-compliant computers and equipment. If energy star options are unavailable, the most energy-efficient models on the market are purchased. Power management features on computers and monitors are activated to enter a low power "sleep" mode when not in use. Staff are instructed to turn off monitors when leaving their desks. Power management features are also activated on laser printers.
- Strict instructions are given to students to turn off unnecessary lights in conference rooms, classrooms, and lecture halls when not in use, to use daylight instead. In addition, we have instructed to avoid decorative lighting during public functions and to use fans only when necessary. Appliances not plugged into power strips (like TVs, refrigerators, ACs, tea/coffee pots, printers, etc.) should be unplugged. These measures are part of our broader commitment to energy conservation and environmental sustainability.

2) **Energy Audit:**

- An energy audit is conducted periodically to assess the progress of energy-saving initiatives.

II. Water Management / Rainwater Harvesting:

To reduce water usage and improve waste management on campus, the following measures have been implemented:

III. Water Conservation:

1) **Low Water Flow Toilets**:
- Installed in various departments to reduce water consumption.
2) **Rainwater Harvesting**:
- Separate pits have been made in different locations of the campus to recharge the wells and address water shortages during the summer season. Roof water is collected in perculation tanks and used in wash areas and also for gardening.

IV. Waste Management:

1) Biogas Plant:

- A biogas plant (1000. Ltr) has been installed on campus to treat the kitchen waste from the canteen. This plant produces methane gas, which is used for two hours daily for cooking, effectively managing biodegradable waste.

2) Waste Separation:

- Waste generated on campus is separated into biodegradable and non-biodegradable categories. Biodegradable waste is placed in a large pit on campus. Non-biodegradable waste is collected in separate bins located in various corners of the campus and removed by municipal staff on a weekly basis.

Implementing these measures has helped conserve water and manage waste effectively, contributing to a more sustainable campus environment.

V. Promoting reusable pen and Utensil culture:

1) **Reusable Pens and Bags**:
- Students are encouraged to use reusable pens and cotton bags.
- Incentives are given to students who regularly use reusable pens in each class.
- A pen box is placed on campus to collect plastic ballpoint pens, which were previously discarded by students.

- **Reusable Utensils for Public Functions**:
- For public functions involving staff and students, steel and terracotta vessels are used.
- This practice has significantly reduced the amount of waste generated after each event and eliminated the pollution caused by burning disposable utensils.
- These initiatives promote sustainability and help in reducing waste and environmental pollution on campus.

VI. Khadi Day Initiative:

- The State Government has declared Wednesday as "Khadi Day" to raise awareness about khadi and its products and to promote an environment-friendly culture. As a part of this, our teachers wear khadi clothes in every Wednesday.

1) **Institutional Practice**:
- The institution observes Khadi Day every Wednesday.
- Students and teachers are instructed to wear Khadi clothing on this day.

This initiative helps inculcate an appreciation for sustainable practices and supports the use of eco-friendly products within the community.

VII. Development of a Sacred Grove:

1) **Sacred Grove Area:**

- An area of 10 cents in a corner of the campus is preserved undisturbed for the development of a natural forest.
- This sacred grove safeguards a variety of endemic plants native to Kerala.

2) **Educational Experience:**

- The Department of Botany takes students to this grove to observe different stages of plant succession in the evolving forest.
- Students familiarize themselves with plant communities and gain insights into plant succession stages, which are part of their syllabus.
- This initiative enhances understanding of ecological processes and supports the preservation of local plant species.

3) **Campus Cleaning Drive**
Every year one one-week campus cleaning drive is initiated by all the departments commemorating Gandhi Jayanthi. During this week students and teachers work hand in hand cleaning both the campus and the vicinities of the institution and hence termed as "Sevana Vara".

VII. Green Auditing for Trees and and Digitization of Flora:

1) **Tree Digitization and QR Codes:**

- In 2018, a green auditing was carried out, all trees on the campus were digitalized, and QR codes were affixed to each tree.
- Scanning the QR code provides information about the tree's name, family, and other details.
- A webpage titled "Botany Digital Garden" was created on the institution's website, allowing users to locate and identify trees on campus and determine if they are endangered, endemic, or vulnerable.

2) **Tree Planting Initiatives:**

- Special measures are taken to plant new saplings during environmental-related programs.
- On the eve of the 75 years of independence the college planted 75 saplings in the campus in association with the Forest Department, Govt. of Kerala.
- These initiatives aim to help reduce the carbon footprint and enhance the campus's green cover.

This approach promotes environmental awareness and supports the conservation and growth of campus greenery.

VIII. Study of Century-Old Heritage Trees

- **Project Overview:**
- At the request of the Municipality, the Department of Botany and Zoology jointly studied three very old, protected tree ecosystems in the town.
- The focus was on the flora and fauna associated with these ancient trees.

- **Outcome:**
- A comprehensive report detailing the findings was submitted to the Municipality.
- This study was conducted as an extension activity of the College and is part of a broader green initiative.

This project highlights the importance of preserving heritage trees and contributes valuable ecological insights to the local municipality.

IX. Digital Library / E-Learning Centre:

1) **Digital Study Resources**:
- Each Department has developed digital study resources to promote the use of digital reading materials and minimize reliance on printed materials.
- Home assignments and study materials are distributed via email and Google Classroom to reduce paper usage.
- Students are encouraged to engage in online reading and e-learning, enhancing resource accessibility and reducing paper consumption.
- Faculty members create e-study materials and share them through personal websites, the college website, and social media platforms.

- **Official Communication**:
- Faculty official communication is conducted via email and college digital forums for efficient information sharing.

X. Total Ban on Flex Printing on Campus:

1) **Flex Printing Ban**:
- The campus has implemented a total ban on flex printing materials for seminars, exhibitions, and publicity.
- Brochures and other publicity materials are created digitally to reduce pollution.
- If necessary, banners are made from cotton cloth to further minimize environmental impact.

These measures support sustainable practices and contribute to the reduction of environmental pollution.

All these practices are integral to our campus operations. We aim to further enhance our green protocols by collaborating with local self-government bodies and extending our awareness efforts to the broader community. As an institution that serves as a guiding light, we are committed to leading by example. To support these initiatives, separate task groups have been formed to develop and implement decisions and policies.