



## BEST PRACTICE II

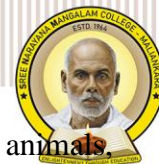


**Title of the Practice:** **SAAKALYA**

**A GREEN INITIATIVE OF S.N.M COLLEGE, MALIANKARA TO SAVEOUR  
EARTH & PROTECT ENVIRONMENT**

### **The Context:**

The survival and well-being of all living beings in this world are intricately tied to the environment. Each individual's contribution, no matter how small, can have a profound impact on future generations. As the present generation, it is our responsibility to safeguard and preserve the nature for the sake of those who will come after us. We must ensure that the coming generations inherit a good and healthy environment, just as we have been fortunate to enjoy. The growing concern for environmental protection is evident on a global scale, as we have come to understand the

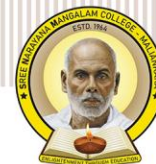


irreversible and harmful effects of environmental degradation on all life forms, including animals, humans and plants. In this context, sustainability has become an increasingly relevant concept, and Higher Education Institutions have a vital role to play in fostering a sustainable ecosystem through their efforts to promote environmental protection activities. By actively engaging in initiatives like tree-planting drives, waste reduction campaign and eco-friendly practices, these institutions can instill a sense of responsibility and awareness in students, shaping them into environmentally conscious citizens who can lead the way towards a greener and more sustainable future.

**SAAKALYA, a green initiative by S.N.M College**, stands as a powerful endeavor to preserve our planet and protect the environment through education, research, community partnerships, and various other means. This program provides a special opportunity to integrate sustainable practices into the college community, inspiring and preparing students, faculties and visitors to make a positive difference in the world. The college firmly believes in its "moral responsibility" to promote sustainable practices, recognizing that it plays a crucial role in shaping the next generation of young adults who will carry the torch for environmental stewardship in the future. As environmental issues become increasingly complex and deeply rooted in our world, students armed with knowledge about their surroundings and the challenges they will face in the coming years become invaluable assets to society. Through SAAKALYA, S.N.M College not only strives to reinforce environmentally-friendly practices within the campus but also ensures that its students are well-educated about sustainability topics and empowered to take meaningful actions to protect the environment for a greener and more sustainable future.

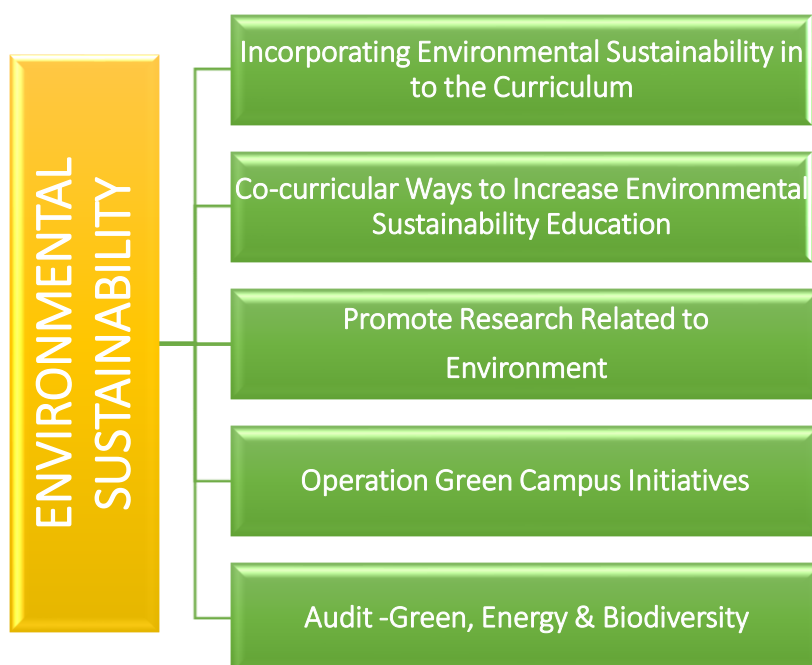
## Objectives :

- To help the students in realizing the inter-relationship between man and environment.
- To develop a sense of awareness among the students about importance of environment and its issues.
- To help the students in realizing the importance of taking proper steps to solve environmental problems.
- To create an environmentally friendly, sustainable campus.
- To spread the notion of environmentally friendly lifestyle to the surrounding community and wherever applicable.
- To enlighten them about the changes in the environment in the last decade and the consequences of their present actions.



- To support the Swach Bharath Movement in the country.
- To inculcate the culture of making Our Environment green and clean

## The Practice:



## I Incorporating Sustainability into the Curriculum

**University Syllabus** of UG and PG programmes integrate sustainability into the curriculum by incorporating concepts “across the curriculum” and infusing them in all courses. All the UG programmes have one compulsory course connected to environment. Also, UG and PG programmes of Botany and Zoology departments deals with environmental related courses.

### [Integration of Environment Sustainability into the Curriculum - Syllabus](#)

The **MOOC course on Organic Farming** provided by the affiliated university with a well-defined syllabus and online learning resources enables students to develop interest in organic mode of agricultural practices. This MOOC course is compulsory for all undergraduate students.

Sl No	Name of the Course	Syllabus
1	MOOC-OrganicFarming	<a href="#">View</a>

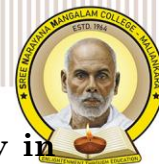


The college offers a diverse range of **Eight Certificate Courses** specifically focused on environmental studies and sustainability.

Sl No	Course Code	Name of the Course	Syllabus
1	SNMCC16	Fundamentals of Organic Farming	<a href="#">View</a>
2	SNMCC08	Solar- LED Product Making	<a href="#">View</a>
3	SNMCC17	Energy Management and Energy Auditing	<a href="#">View</a>
4	SNMCC25	Health and Hygiene	<a href="#">View</a>
5	SNMCC11	Health Impact of Chemicals	<a href="#">View</a>
6	SNMCC30	Commercial Plant Production Techniques	<a href="#">View</a>
7	SNMCC29	Advanced Polymer Science	<a href="#">View</a>
8	SNMCC13	Artificial Propagation of Garden and Fruit plants	<a href="#">View</a>

Final year UG and PG students have to complete a project to fulfil the requirement set by the university. Students are encouraged by the mentors to take up environment related project works. Students get an in-depth understanding of various serious issues which are plaguing our environment. They are encouraged to find solutions to these with the limited time and resources available to them. Students become more considerate about the issues around them which help in creating conscious citizens who can play a pivotal role in Environment protection. These are some of the **Projects** undertaken by our students from different departments related to Environment and Sustainability into the Curriculum.

[Integration of Environmental Sustainability into the Curriculum- Project](#)



## II Co-Curricular Ways to Increase Environmental Sustainability in Education

Ample Co-curricular opportunities are provided to the students of our institution to create environmental education among students. Celebrating national and international environment related days are done regularly by various departments individually or jointly with different clubs' function in the college to create awareness among the students. As part of commemorating such day's various competitions are conducted for students so that they refer about the importance of these celebration and are thereby encouraging awareness and action for protection of environment. Seminars and awareness classes are also conducted regularly for the student community. Resource persons who are actively working with environmental are part of these program so the students get knowledge from people with firsthand experience and are inspired to work towards protecting nature.

### [Co-Curricular Ways to Increase Environmental Sustainability](#)

## III. Research

The research works carried out by faculty and students at institutions that allows them to gain a better understanding of specific environmental, economic, and social concepts that relate to today's sustainability challenges. These studies are performed by researchers from a variety of departments, including humanities, sciences, commerce, and management. According to Bhowmik, Research can expand current knowledge about sustainability issues and contribute toward the development of strategies to mitigate these problems. The increase of interdisciplinary work and strong faculty and student engagement will help to mitigating environment related issues and promote sustainability research. The faculty encourages and support students to undertake projects and dissertations on environment and sustainability. 12 research scholars of the college are pursuing Ph.D and 4 Ph. D produced in environmental concerned topics All these indicate that research activities related to environment are promoted and carried out in the campus as part of SAAKALYA.

### [Research Awardees and Research Scholars](#)



## IV Operations – Green Policy

**Operations** means everyday services college provide in order to continue functioning properly. Some of these actions include building construction and management, on-campus transportation, waste disposal, energy and water procurement, food system etc. College always focusses on how it can integrate environmentally, economically, and socially beneficial practices into their everyday tasks. The strategies or policies adopted by the college for environmental sustainability in the campus are follows,

### 1. Restricted Entry of Automobiles:

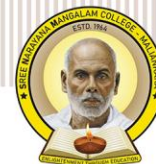
- To reduce emissions, the college encourages staff and students to use public transportation, bicycles.
- All vehicles of college staff/ faculty members and students are mandated to carry a valid Pollution Under Control (PUC) certificate before entering in college campus.
- Restricted entry of automobiles and its use inside the campus
- Promoted the use of bicycles or battery powered vehicles in the campus

### 2. Pedestrian-friendly pathways:

- The Institution has Pedestrian Friendly Pathways for the safe and easy movement of Staff & Students in the campus.

### 3. Ban on Single Use Plastics

- The college has been aimed to achieving a plastic-free campus.
- For maintain our achieving plastic free campus provides dustbins and signboards.
- In the college campus there is separate waste bins to collect plastic waste and food waste.
- Food waste collected and used in biogas plant to produce energy for cooking in the canteen.
- Students of S.N.M college, especially members of **Haritha Karma Sena** ensure green protocol in the campus and outside the campus.



#### **4. Green Campus**

- S.N.M college is a beautiful green campus. working to become more green institution by planting more trees both within and outside the campus.
- College has botanical garden, rare plants, medicinal plants, as well as fruit plants and trees to enrich its beauty and reduce the carbon footprint
- Students and staff actively organized and participate in a tree-planting Campaign on and off campus

#### **5. Energy Saving**

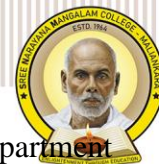
- College infrastructure is planned to get more natural sunlight to the classrooms.
- Create the habit of switching off lights and fans in classrooms and departments when not in use.
- Our college promotes the use of digital initiatives and e-learning and reduces use of hard copies. For conveying notices to teachers and students WhatsApp groups have been created.
- Students' assignments are encouraged to written in both side of the A 4 sheet to reduce paper consumption
- Promoted the use of LED light instead of fluorescent light.
- The college purchase only energy star rating instrument which saving the energy.

#### **6. Noise pollution**

- Certain areas like library, reading room are declared as Silence zone and noise pollution is kept to minimum on college campus.
- Various display boards have been placed in the library and other places for awareness to maintain silence in the college.
- The use of vehicle horns is also restricted in the campus.

#### **7. Biodiversity**

- Display of environment protection banners, posters like save water, save energy at prominent places, waste disposal bins for wet and dry are some of the initiatives taken.



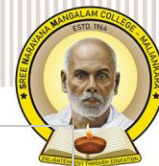
- **Vermicomposting** is practiced in the campus under the supervision of department of Zoology and Botany.
- **Biogas Plant:** The organic waste material collected from the college campus, is used in the biogas plant to produce renewable biogas energy. This energy is used in the canteen for cooking.
- One Rain water Harvesting (RWH) unit of 10000 L water capacity has been implemented successfully.
- As part of the floral diversity study of the campus, a total of 129 plants were collected and identified. 40 members of Gamopetalae, 43 members of Polypetalae, 17 members of Monochlamydae and 29 members of Monocotyledonae are present in our campus.
- As part of the study of Diversity of spiders in the College, total of 20 species belonging to 9 families of spiders Collected and identified. the family Arancidae and Sparassidae is the most dominant family represented by 4 Species. Salticidae family represented 3 species Thomisidae, Pholicidae, Lycosidae family represented 2 species. The remaining family such as Desidae, Hersillidae, Pisauridae were represented with only one species each.

## 8. Green Initiatives

### MoUs and Collaborations in related to Green Initiatives

Sl No	Organisation
1	M S Swaminathan Research Foundation
2	Advanced Centre for Atmospheric Radar Research (ACCAR)CUSAT, Ernakulam
3	Department of Zoology with Kerala University of Fisheries and Ocean Studies (KUFOS)
4	ICAR-Central Institute of Fisheries Technology (CIFT)
5	Department of Physics with Kerala University of Fisheries and Ocean Studies (KUFOS)
6	Department of Chemistry with Kerala University of Fisheries and Ocean





	Studies (KUFOS)
7	Aspire Greens
8	Green Land Eco Industries
9	Department of Zoology & PVT Merit Bio Labs
10	Department of Botany & PVT Merit Bio Labs
11	Department of Chemistry & PVT Merit Bio Labs
12	Department of Physics & PVT Merit Bio Labs
13	Paravur Block Panchayath
14	Vadakkekkara Grama Panchayath
15	District Suchithwa Mission

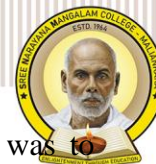
## V Community Engagements

Community partnership or engagement deals with how college interfere in the community and society to develop awareness and to create consciousness about environmental issues and the need for its protection. College conduct number of extension activities in nearby communities include hosting lectures or events on sustainability topics, collaborating with decision makers and other key stakeholder. through NSS, NCC, Boomithrasena Club and Village adoption programmes. Also, by participating in these programmes, a sense of responsibility towards environment develops in students.

### [Community Engagements](#)

## VI Auditing

Auditing helps to track the progress in meeting the sustainability goals and compare our practices with others. These assessments also provide with the opportunity to share our best practices with key administrators, external partners, and other community members. Analysing the systems can help to plan where we have to go next and what the best steps could be for achieving the goals. In the academic year 2022-2023, college IQAC initiated green and energy auditing with external agency BSCIC Certifications Pvt. Ltd. &work, 1st Floor. 5B/15A, Crown



Plaza Mall, Faridabad 121 007, Haryana, India. The objective of the Green Audit was to determine conformance to the Environment, Energy, waste management requirements as per International Standards on ISO 14001:2015. The auditing was concluded as "The Institute has already done work on Green Technology and committed to save the environment and resources". It is recommended for the certification with scope "Improving Environmental Practices through More Efficient use of Resources and Reduction of Waste"

[Green Audit Report](#)

[Energy Audit Report](#)

[Biodiversity Audit Report](#)

## Evidence of Success

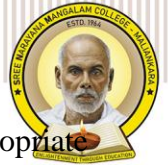
- **Plastic-Free Campus:** The use of signboards and display boards has contributed to making the campus almost plastic-free
- **Minimal Waste Generation:** The college's efforts to minimize waste generation and reduce plastic usage are positive signs of sustainability success.
- **Eco-friendly Practices:** Practices like refilling printer cartridges and recycling paper waste showcase a commitment to eco-friendly practices.
- **Community Engagements:** It indicates that the program extends its impact beyond the campus boundaries, making nearby communities aware of environmental issues

## Problems Encountered and Resources Required

- Weather-related challenges affecting outdoor initiatives.
- Lack of sufficient time to conduct activities due to the semester system.
- Limited funding and budget constraints
- Lack of local collaborations with environmental organizations.

## Conclusion

SAAKALYA is an important step in creating awareness about environmental sustainability to the students and community and also promote environmental protection activities. College is in



the beginning stage of the programme so it is not able to cover all the measures in an appropriate way. But college has got a special opportunity to not only integrate green practices into their communities, but also contribute positively to their local and regional economy and the lives of nearby populations. S.N.M college Maliankara understand its responsibility for preparing students to live in the world as productive members of society who can contribute positively to the world. Environmental crises grow more complex every day, economic and social systems around the world are struggling, it is even more important for college to embrace sustainability, both because of the ability of the college to create and inspire change and because of the commitment in sending its students into the world to make a difference.

