



**NMSM
GOVERNMENT
COLLEGE KALPETTA**
NAAG ACCREDITED B+

INSTITUTIONAL DISTINCTIVENESS

Environmental Sustainability

- 1. Energy Conservation Practices**
- 2. Waste Management Programs**
 - a) Solid Waste Management**
 - b) E-Waste Management**
- 3. Bio-diversity Conservation**
 - a) Tree Plantation Drives**
 - b) Butterfly Garden, Bamboo Garden, Herbal Garden. Fruit Forest and Rock Garden**
 - c) Bio-diversity Register**
- 4. Environmental Awareness and Community Engagement**
 - a) Seminars and Workshops**
 - b) Student-led Initiatives**
 - c) Community Outreach Programmes**
- 5. Research and Academic Contributions**

THE AREA OF INSTITUTIONAL DISTINCTIVENESS IS ENVIRONMENTAL SUSTAINABILITY

NMSM Government College, Kalpetta, has long been recognized for its commitment to environmental sustainability, a cause that aligns with the institution's priority and thrust. The college, situated in Wayanad district of Kerala, operates in a region that is both ecologically sensitive and socially diverse.

NMSM Government College's leadership has emphasized environmental protection and sustainability in its vision and mission. This commitment is reflected in the college's academic and non-academic activities, where sustainability practices are integrated into the curriculum, infrastructure development, community outreach programs, and student initiatives.

The institution's Green Campus Initiative is a cornerstone of its sustainability agenda. This initiative promotes the idea that a college should not only impart academic knowledge but also foster environmental stewardship among its students, faculty, and staff. The key objectives of the Green Campus Initiative include, reducing the carbon footprint of the college, promoting sustainable energy use, encouraging waste management and recycling and enhancing the green cover on campus.

1. Energy Conservation Practices

The college has introduced several measures aimed at reducing energy consumption, primarily by relying on renewable energy sources. Solar panels installed on campus generate a significant portion of the college's electricity requirements, thereby reducing dependence on non-renewable energy. The institution also promotes energy-saving behaviors, such as switching off electrical devices when not in use and using energy-efficient lighting systems like LED bulbs.





Solar panels installed



36KW solar panels installed

Energy Audit



NMSM Government College
Kalpetta



ENERGY AUDIT

This is to certify that an “Energy Audit” for NMSM Government College Kalpetta was conducted on 09 March 2024 to assess energy costs, the availability and reliability of the energy supply, energy conservation technologies, and ways to reduce energy consumption. The activities and measures carried out by the college have been verified and found to be acceptable.

ANAS E
Certified Lead Auditor
(ISO 14001:2015)
Reg. No. 2106170721010121

Dr. SHAHIDA A T
Certified Lead Auditor
(ISO 14001:2015)
Reg. No. 2106210721010107

Dr. SABIQUE M K
Certified Lead Auditor
(ISO 14001:2015)
Reg. No. 2106210721010106



2. Waste Management Programs

Effective waste management is another area where NMSM Government College has shown outstanding performance. The college has implemented a comprehensive waste segregation and disposal system, focusing on reducing, reusing, and recycling waste generated on campus.

2.1. Solid Waste Management

Biodegradable waste, primarily generated from food waste in the college canteen, is composted within the campus, and the resulting compost is used to maintain the college's gardens. Non-biodegradable waste, including plastic, glass, and metal, is segregated and sent for recycling through local municipal bodies. The college also conducts regular waste management awareness programs to educate students and staff.

Bottle booths are arranged in various places of the campus to collect used plastic bottles.



Waste bins are placed in all floors of the campus buildings to collect waste. Separate bins are kept for bio degradable and non bio degradable wastes





Pits are made in the campus to decompose biodegradable wastes





Hostel Food Waste

The hostel food waste disposal system at NMSM Government College Kalpetta is part of the institution's commitment to sustainable waste management practices. The college has established a partnership with a local pig farm for the regular disposal of food waste generated by the hostel. This initiative ensures that the food waste is put to productive use rather than being discarded as landfill, contributing to both waste reduction and the local economy.

Under this arrangement, the pig farm collects leftover food from the hostel on a regular basis, using it as feed for the pigs. This collaboration benefits both parties: the hostel is able to manage food waste effectively, and the pig farm gains a cost-effective source of food for its livestock.

The system also serves as an example of how food waste can be managed in an eco-friendly manner, aligning with the college's green initiatives and sustainability goals.

2.2. E-Waste Management

In the era of digitalization, electronic waste management is critical. The college has partnered with certified e-waste recyclers to ensure that discarded electronic devices like computers, printers, and mobile phones are disposed of responsibly.



E-Waste Management Report

3. Biodiversity Conservation

Given its location in the biodiversity-rich Wayanad district, NMSM Government College has taken proactive steps to conserve and enhance local biodiversity. The institution runs several programs aimed at preserving the rich flora and fauna of the region. These initiatives include:

3.1. Tree Plantation Drives

The college regularly organizes tree plantation drives in and around its campus, engaging students, faculty, and local communities in these efforts. The aim is to increase green cover, enhance air quality, and provide habitat for local wildlife.



Super Photo
SHOT ON RAVOZ
AI TRIPLE CAMERA





3.2. Butterfly Garden, Bamboo Garden, Herbal Garden. Fruit Forest and Rock Garden

The institution has developed a butterfly garden, a herbal garden, Bamboo Garden, Fruit Forest and a Rock Garden on campus, all of which serve as educational tools for students while contributing to biodiversity conservation.

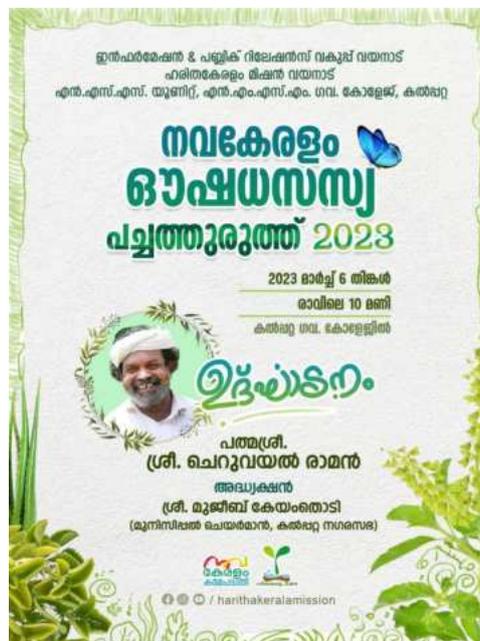
Butterfly Garden

This garden offers students the opportunity to observe butterfly behavior, life cycles, and ecological interactions, making it a hands-on learning environment. This is designed to attract various species of butterflies, some of which are endemic to the Western Ghats, and serves as a learning laboratory for students in biology and environmental studies.



Herbal Garden

To cultivate medicinal plants, many of which are traditionally used in Ayurveda, thus connecting students with the local cultural heritage of Wayanad and offering an educational resource in traditional medicine. The herbal garden contains medicinal plants, many of which are traditionally used in Ayurveda, offering both an educational resource and a connection to the local cultural heritage of Wayanad.



As part of the NSS unit activities at NMSM Government College Kalpetta, under the guidance and inauguration by **Padma Shri Cheruvayal Raman**, a special initiative was undertaken to establish a herbal garden called Asokavanam. This

initiative was aligned with the Navakeralam Oushadhasasyapachathuruth 2023 program and focused on cultivating medicinal plants.

The establishment of Asokavanam not only promotes the growth of indigenous medicinal plants but also serves as a learning platform for students, encouraging sustainable farming practices and the conservation of traditional agricultural knowledge. NSS volunteers actively participated in setting up the garden, further emphasizing their role in fostering environmental stewardship and community engagement on campus.

Bamboo Garden

To highlight the ecological and economic significance of bamboo species, which are integral to both environmental conservation and local craftsmanship in Wayanad. The Bamboo Garden allows students to learn about sustainable materials and their applications, fostering an understanding of resource management and environmental sustainability.





The Bamboo Garden at NMSM Government College Kalpetta is an integral part of the campus's environmental conservation efforts. It not only serves as a visual and ecological asset but also as a living laboratory for students and researchers to explore the diverse applications of bamboo, such as in sustainable architecture, soil conservation, and carbon sequestration.

Through this initiative, the college reinforces its commitment to maintaining a green campus and promoting eco-consciousness among students and the local community.

This garden houses various species of bamboo that play a significant role in combating soil erosion, maintaining groundwater levels, and acting as a natural air purifier by absorbing carbon dioxide more effectively than many other plants.

The garden offers a serene space for students, faculty, and visitors to unwind, engage in discussions, and observe the interactions between flora and fauna in a balanced ecosystem. It also symbolizes the college's commitment to incorporating green practices into its educational and institutional policies, fostering a culture of environmental stewardship among the community.





Fruit Forest

To create a sustainable environment where fruit-bearing trees can thrive, contributing to both food security and biodiversity conservation. The fruit forest plays a critical role in the local ecosystem by providing food for wildlife while also serving as an educational resource for students to learn about the cultivation and ecological importance of fruit trees.

The Fruit Forest at NMSM Government College Kalpetta is a vibrant collection of fruit-bearing trees, designed not only to enhance the campus's greenery but also to serve as a valuable resource for education and environmental sustainability. This lush forest features a variety of fruit trees, including jackfruit, mango, fig, rose apple, guava, and several other native species. These trees provide a habitat for local wildlife especially monkeys while contributing to the college's eco-friendly initiatives.



Rock Garden

The Rock Garden at NMSM Government College Kalpetta not only preserves a variety of rocks but also serves as a space for discussions, making it a multipurpose area on campus. It allows for both educational and informal gatherings, providing a serene environment where students and faculty can engage in conversations related to environmental studies, sustainability, and more. This garden contributes to the institution's efforts in promoting conservation while also fostering academic and social interaction.



3.3. Biodiversity Register

The Biodiversity Register of NMSM Government College Kalpetta serves as a comprehensive documentation of the college's rich and diverse natural resources. It details the various species of flora and fauna found on the campus, highlighting the institution's commitment to environmental sustainability and biodiversity conservation.



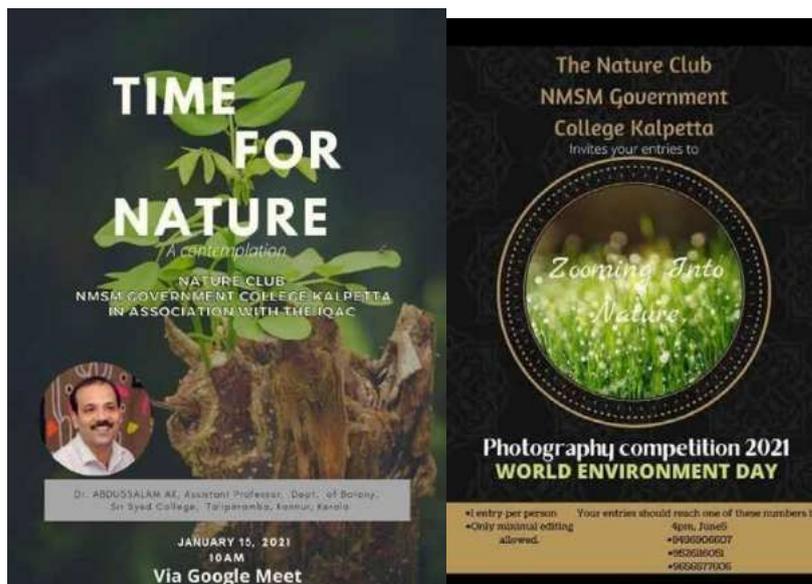
This register not only identifies and catalogues the species present but also provides insight into the ecological significance of the campus environment, offering a platform for future research and awareness initiatives in preserving local biodiversity.



4. Environmental Awareness and Community Engagement



NMSM Government College is actively involved in promoting environmental awareness beyond its campus. The institution believes that its role extends to the community, and hence, it organizes regular environmental education programs aimed at both students and the local population.



4.1. Seminars and Workshops on Environmental Sustainability

The college hosts seminars, workshops, and conferences on pressing environmental issues such as climate change, sustainable agriculture, and water conservation. These events feature experts from the field and are designed to engage students, faculty, and members of the local community in meaningful discussions on sustainability.

NMSM Government College Kalpetta has actively taken steps to raise awareness on waste management among its students, faculty, and the local community. The college conducts regular workshops, seminars, and campaigns focused on educating participants about the importance of proper waste segregation, recycling, and the reduction of single-use plastics. These initiatives aim to instill sustainable waste management practices both on campus and in the wider community.

Through practical demonstrations and the installation of waste bins for segregating biodegradable and non-biodegradable waste, the college ensures that participants understand the process of waste disposal and the environmental consequences of poor waste management. The college also collaborates with local government bodies and environmental organizations to organize clean-up drives, e-waste collection campaigns, and composting workshops, encouraging a hands-on approach to waste management

Webinar Series
UNEA 5.2 and Solid Waste Management Rule 2016 of India and EPR
Nature Club and NSS, in association with the IQAC, NMSM Government College Kalpetta

13th February
10:00AM Onwards

Speaker:
Rajasree Vasudevan
Founder
Kadambari
Thrissur



On 13th February 2022, the Nature Club and NSS of the college organised a session titled UNEA5.2 and Solid Waste Management Rule 2016 of India and EPR, in association with the IQAC. The keynote speaker was Ms. Rajasree Vasudevan, founder of Kadambari, Thrissur. Kadambari is an NGO that works in the field of sustainability. Our students and faculty were enthusiastic audiences to this session.

[Register Now](#)



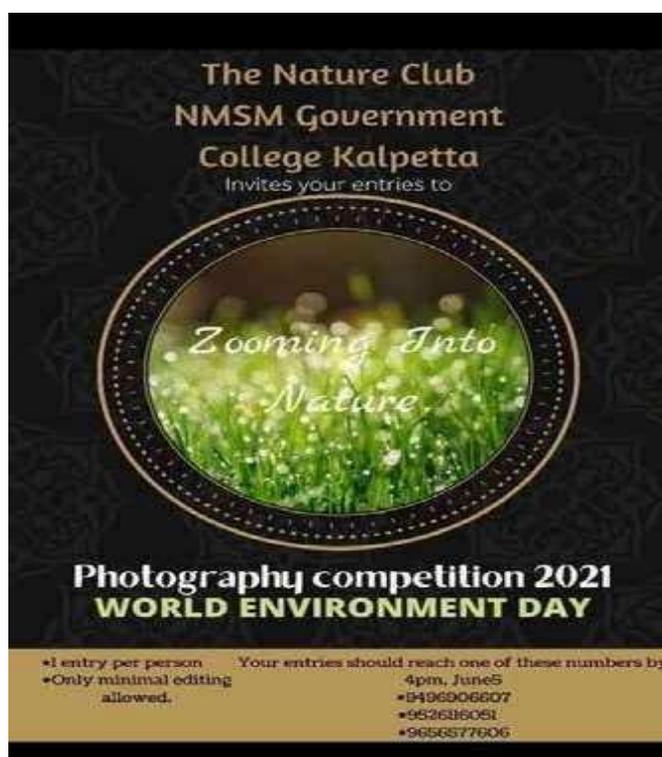
Awareness on waste management conducted by the college



The Nature Club (Bhoomithrasena) of NMSM Government College Kalpetta organized a photography competition titled "Zooming Into Nature" as part of the celebrations for World Environment Day 2021. The competition was aimed at encouraging students to capture the beauty of nature through their lenses, promoting environmental awareness and appreciation for biodiversity.

Participants were allowed to submit one entry per person, with only minimal editing permitted to maintain the authenticity of the photographs. Entries were collected by June 5, 2021, at 4 PM, coinciding with World Environment Day. The competition sought to inspire students to engage with nature creatively while reflecting on the significance of environmental conservation.

This initiative by the Nature Club aligns with the college's broader mission of promoting sustainability and environmental consciousness among students. Through activities like this, NMSM Government College continues to foster a deeper connection between students and the natural world, encouraging them to become advocates for preserving the environment.





Environmental awareness programmes conducted by NCC of the college

The Meri Maati Mera Desh campaign, organized by the NCC unit of NMSM Government College Kalpetta in collaboration with the 5K BN NCC Wayanad and the Lead Bank Wayanad, focused on celebrating and honoring the connection between citizens and their land. As part of the Amrit Kalash Yatra, participants took the Panch Pran Pledge, symbolizing their commitment to the nation by holding a fistful of soil or an earthen diya. The event was conducted as part of the Azadi Ka Amrit Mahotsav initiative, commemorating India's 75th year of independence.

NCC actively participated in the Clean Kerala Clean campaign, aligning with the Swachh Bharat Abhiyan initiative. This program involved a series of cleanliness drives and activities aimed at raising awareness about the importance of maintaining a clean and hygienic environment.

Cadets from the NCC unit engaged in cleaning various areas, emphasizing the need for collective responsibility in waste management and environmental conservation. The event highlighted the message "Ek Kadam Swachhata Ki Ore" (One step towards cleanliness), encouraging not only

the college community but also the general public to take proactive steps in keeping their surroundings clean.



Environmental awareness programmes conducted by NSS of the college

The NSS unit of NMSM Government College Kalpetta conducted a Quiz Competition as part of their initiative "Thalir (Environmental Week Celebrations)". The competition aimed to engage students in an interactive and educational experience, focusing on topics related to the environment, sustainability, and related social issues.

The winners of the competition were:

- 1st Place: Safwana Sherin, 2nd Year B.Com
- 2nd Place: Kishnendu K, 3rd Year MCJ (Master of Communication and Journalism)
- 3rd Place: Devatheertha, 2nd Year History

This event was a part of the larger goal to raise environmental awareness among students and to encourage them to become active participants in discussions on environmental conservation. The quiz not only tested their knowledge but also aimed to inspire a deeper understanding of environmental issues.

4.2. Student-Led Initiatives

The college has a dedicated Eco Club/Nature club(Boomithrasena) along with NSS and NCC , run by students and supported by faculty advisors, which organizes a variety of environmental campaigns and activities. These include clean-up drives, awareness rallies, and environmental film screenings.



On 17th February 2022, the NSS unit of NMSM Government College Kalpetta conducted a community cleaning drive under the initiative NSS COVID Warriors Kerala in collaboration with the Wayanad District administration. The drive was aimed at maintaining public hygiene and cleanliness in the local area amidst the ongoing challenges of the pandemic.

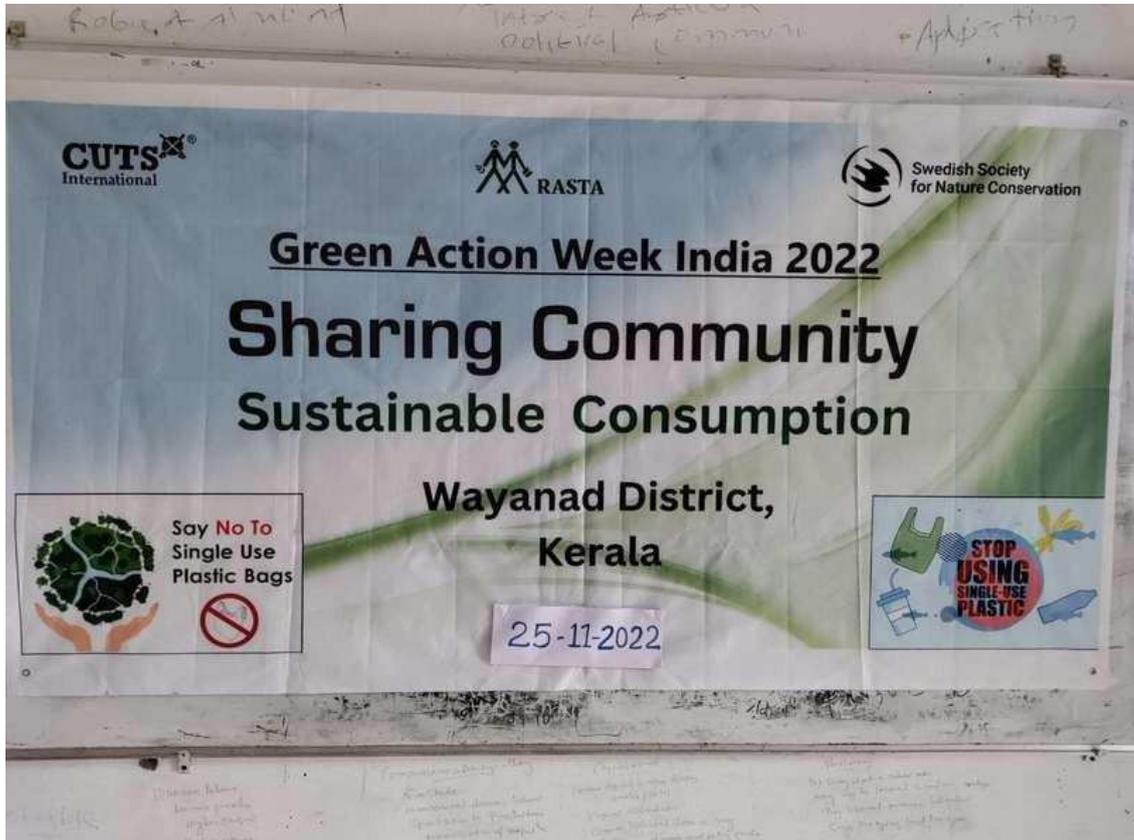
Volunteers actively participated in cleaning public spaces, removing waste, and spreading awareness about the importance of cleanliness, especially in the context of preventing the spread of diseases. This initiative was part of a broader effort to support community health and safety, emphasizing the role of cleanliness in combating the COVID-19 pandemic.

An online mobile photography competition was organized for the students of NMSM Government College on 24th January 2023, with the theme 'Water', in commemoration of World Water Day. The competition saw an impressive turnout, showcasing students' creativity and their perspective on the significance of water.

The first prize was awarded to Fathimathu Sana K of First B.Com, while Nandhana Baburaj of Second Economics secured second place. Both winners were honored with cash prizes as a token of appreciation for their participation and excellence in photography. This event aimed to raise awareness about water conservation and its vital role in sustaining life, while also fostering students' engagement with environmental issues through artistic expression.

The Green Action Week Programme

The Green Action Week Programme at NMSM Government College Kalpetta was organized as part of the global initiative to promote sustainable living and environmental consciousness. This week-long program focused on fostering awareness and taking practical steps toward green practices both on campus and in the local community.



4.3. Community Outreach Programs

The institution's community outreach programs extend its environmental efforts to the surrounding rural areas. These programs include workshops for farmers on sustainable agricultural practices, water conservation projects, and afforestation drives

in nearby degraded forest areas. By involving the local community in these initiatives, the college is contributing to the environmental and social well-being of the Wayanad region.

The "Green Initiative - Planting Saplings" was a social outreach program organized by NMSM Government College's NCC unit in collaboration with Krishi Bhavan. The program aimed to promote environmental sustainability and contribute to the greening of the local community.

As part of the environmental day celebrations, each NCC cadet was tasked with planting saplings in their homes and neighboring homes. This initiative encouraged individual action and promoted the importance of tree planting in combating climate change and improving environmental quality.



The "Swachh Bharat Abhiyan" (Clean India Mission) was a social outreach program organized by NMSM Government College's NCC unit in collaboration with the Department of Health, Wayanad District on 28/01/2022 at the Padapuram Alternative School. NCC cadets actively participated in various sanitation and cleanliness activities, including:

- **Cleaning and disinfection:** Thorough cleaning and disinfection of school premises, classrooms, and common areas.

ബി.എസ്.എസ്. യൂണിറ്റ്
NMSM GOVT COLLEGE KALPETTA
SOCIAL SERVICE ACTIVITIES

The NMSM NCC Unit visited Padappara Alternative School as part of community service and cleaned up there. The event was led by Lt. Dr. Bishwar Prakash (NCC).



- **Waste management:** Proper collection and segregation of waste, promoting recycling and reducing pollution.
- **Awareness campaigns:** Conducting awareness sessions among students and staff about the importance of cleanliness, hygiene, and environmental conservation.

5. Research and Academic Contributions

The institution encourages interdisciplinary research in areas related to environmental science, climate change, and conservation biology. Faculty members and students collaborate on projects that focus on sustainable practices, environmental policy, and the impact of human activities on the ecosystem.

Courses

NMSM Government College Kalpetta offers a range of courses that integrate environmental aspects and emphasize the importance of environmental sustainability. These courses aim to create awareness and equip students with knowledge related to environmental issues and sustainable practices. The following are the key courses that focus on environmental topics:

- **Environmental Chemistry** – This course explores the chemical processes occurring in the environment and their impact on ecosystems, pollution control, and sustainable development.
- **Environmental Economics** – It focuses on the economic dimensions of environmental issues, including the analysis of environmental policies, resource management, and sustainable development economics.

- Environmental Studies – A comprehensive course that covers a wide range of topics such as biodiversity, natural resources, pollution, and global environmental challenges, with an emphasis on sustainability practices.
- Development Communication – This course highlights the role of communication in promoting sustainable development, raising awareness, and influencing behavior related to environmental conservation across various programs.

The college has established partnerships with various research institutions and governmental bodies to facilitate research and to apply its findings in real-world contexts, particularly in addressing environmental challenges unique to the Wayanad region.

Impact and Future Directions

The Green Campus Initiative has significantly reduced the institution's carbon footprint, and the waste management programs have made the campus a model of environmental responsibility. The biodiversity conservation efforts have enhanced local green cover, while the community outreach programs have promoted sustainable practices in the wider Wayanad area.

Looking forward, the institution plans to expand its sustainability initiatives by:

Enhancing renewable energy use, with a goal of becoming a fully solar-powered campus.

Expanding its research efforts in climate change adaptation, especially in agriculture, which is vital to the economy of Wayanad.

Strengthening collaborations with national and international environmental organizations to broaden the scope of its impact.

NMSM Government College, Kalpetta, has made remarkable strides in promoting environmental sustainability, which is a distinctive priority for the institution. Through its comprehensive efforts in energy conservation, waste management, biodiversity conservation, and community engagement, the college has set a benchmark for how educational institutions can contribute to a sustainable future. These initiatives not only benefit the college and its students but also serve as a model for the larger Wayanad community and beyond.



[Handwritten Signature]
 PRINCIPAL
 NMSM GOVT. COLLEGE
 KALPETTA