ENVIRONMENT AUDIT – 2021

M. E. S. COLLEGE ERUMELY

KOTTAYAM, KERALA

EXECUTED BY

ATHUL ENERGY CONSULTANTS PVT LTD

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November 2021

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PREFACE

Every institution should be imparting knowledge about the campus environment and its surroundings through activities that follows the principles of sustainability and waste management. Hence an evaluation is needed to understand where it stands in the path to be an environment friendly, and in talent nurturing educational institution.

This Environment Audit was done with the aim to assess mainly on waste management of the campus. The college vision is "To become a centre par excellence of learning, where the best in humans is unveiled, based on human values, focused on life enhancement and constructive in adapting to the needs of the world". The mission of college is "to mould individuals into successful and vibrant professionals facilitating comprehensive and rounded formation, to function as effective and empathetic human beings, grounded with courage of conviction, personal integrity, professional ingenuity and social commitment "and it was we observed by us from the students' participation during the environmental audit.

This report is compiled by the BEE certified energy auditor and environment expert along with the project engineers who are experienced in the field of energy, environment and management. The student volunteers made a mammoth contribution with data collection and in preparing an initial skeleton for the report.

ACKNOWLEDGEMENTS

We express our sincere gratitude to the M.E.S Erumely Kottayam for giving us an opportunity to carry out the project of Environment Audit. We are extremely thankful to all the staffs for their support to carry out the studies and for input data, and measurements related to the project of Environment audit.

1	P. M Abdhul Salam	Chairman
2	Adv. Muhammed Najeeb	Secretary

Also congratulating our Environment audit team members for successfully completing the assignment in time and making their best efforts to add value.

The audit is conducted on 11 th November 2021 with the help of students and staffs of the M.E.S college Erumely

ENVIRONMENT AUDIT TEAM

1. **Mr. Santhosh A**
   Registered Energy Auditor of Bureau of Energy Efficiency (BEE – Govt. of India)
   Accredited Energy Auditor No – EA 7597

2. **Mr. K Krishnakumar** ISO 14001Environment management lead auditor

3. **Mr. Jaideep P P,** Project Engineer - ME, Energy Engineering.

ATHUL ENERGY CONSULTANTS PVT LTD THRISSUR 680 020

Yours faithfully

Managing Director
Athul Energy Consultants Pvt Ltd

ENVIRONMENT AUDIT SUMMARY

- College segregated the waste from college, canteen, and hostels and treated in a scientific manner.
- Separate storage provisions are done for metal and plastics in college.
- Vermi-compost plant is installed in the campus.

Suggestions for improvement

- Portable Bio gas plant of size 4 M3 to be installed for treating bio degradable food wastes generated from canteen and M.E.Ss in the ladies hostel.
- Two types of incinerators are to be provided in the college 1 for incinerating the stationary and other wastes generated from the college and another for incinerating sanitary napkins because it is considered as medical wastes.
- Internal inspection team to be formed which comprises of staff and students for internal auditing of the waste management in the campus
- Vermi-compost unit to be installed in the college for catering the waste generated from plant leafs
- Introduce 'refuse plastic' concept in college inventories. This will increase the awareness among students and staffs and will seep into their behaviour.
- Display the weight of segregated wastes that collected from the canteen, hostels and college in prominent locations which will be an eyeopener for all and it will help in reduce the waste generation.
- Monthly Records should be kept for segregated wastes which will give the administration to pinpoint the source and can take necessary steps to reduce it.

EXECUTIVE SUMMARY

In this section the whole of basic details of college along with summery of environmental related summery is also included in the table form

Table 1 EXECUTIVE SUMMARY

Sl. No:	Particulars	Details
1	Name of the College	M. E. S. College
2	Address	Erumely, Kottayam
		Kerala -686509
3	Contact Person	IQAC Coordinator : 9496802344
4	Contact Phone numbers & Fax	0494-2460336
		0494-2460635
5	Web site & E-mail ID	www.M.E.Serumelycollege.ac.in principal@M.E.Serumelycollege.ac.in
6	Type of Building	Educational Institution
7	Annual Working Days	210
8	No: of Shifts	Day Shift (One) (9AM - 4PM)
9	No: of students enrolled	1876
10	No: of teaching staff	78
11	No: of non-teaching staff	30
12	Total campus area	20.92 Acre
13	Total Built Up area M^2	87294.45
14	No of PG courses	16
15	No of U G courses	08
16	No of hostel students	62
17	Bio gas plant	Yes
18	Vermi compost	N0
19	Incinerators	Yes
20	Segregation of wastes	Done

ENVIRONMENT AUDIT SUMMARY

- College segregated the waste from college, canteen, and hostels and treated in a scientific manner.
- Separate storage provisions are done for metal and plastics, LED bulbs in college.
- Electrical incinerators are installed in the ladies toilets and comfort stations.
- Lot of social committed program M.E.S are conducted by students with the strong support of management for public.
- Incinerators installed in the college for incinerating the stationary and other wastages generated.
- Well maintained toilets are for students (Separate blocks are also provided for girls and boys)
- Green protocol is maintained by the college for its functions and also it is imparted in the mindset of students and staff.
- Overall cleanliness of the college is good

Suggestions for improvement

- Recommended to install bio gas plant of size 3M3 in the college along with ladies hostel
- Vermi-compost or compost plant to be installed in the college for treating plant leafs and other compostable wastes.
- Sighed an agreement with external agencies who is having approval from Kerala state pollution control board or Suchithwa mission for collecting and processing E waste.
- Internal inspection team to be formed which comprises of staff and students for internal auditing of the waste management in the campus
- Introduce 'refuse plastic' concept in college inventories. This will increase the awareness among students and staffs and will seep into their behaviour
- Display the weight of segregated wastes that collected from the canteen, hostels and college in prominent locations which will be an eye-opener for all and it will help in reduce the waste generation.

Monthly Records should be kept for segregated wastes which will gave an indication regarding the waste.

ABOUT M.E.S COLLEGE ERUMELY

M.E.S College, Erumely is the first unaided Arts and Science College affiliated to Mahatma Gandhi University, established in 1995. The college obtains minority status with effect from September 2012. The college situated on the side of Eranakulam- Pampa National Highway, 4Km away from Erumely. The serene atmosphere, sylvan surrounding and nourishing unpolluted air will ever provide quite a conducive environment for learning. The college belongs to a network of education institutes founded and operated by Muslim Educational Society. In founding the college, the founders had in their minds the glorious tasks of dispelling darkness and spreading the true wisdom all around irrespective of caste, creed, language and religion. The college had made every effort to be compassionate and sensitive to the marginalised and the people needy

The College offers seven UG Programs such as Computer Applications (BCA – model III), B.Sc. Electronics, Business Administration (BBA – Model III), B.Com. Computer Application (Model II), B.Com. Finance &Taxation (Model II), B.Com. Marketing (Model II) B.Com Office Management & Secretarial Practice (Model III) and eight Post Graduate programs such as M.Sc. Computer Science, M.Sc. Electronics, M.Com Finance & Taxation, M.Com Marketing & International Business, M Com Management & Information Technology, Master of Social Work (M.S.W), M.A Economics, M.A. English Language and Literature. Through the academic community consisting of faculty, staff and students the college create, integrate, and disseminate knowledge, and foster in the students critical thinking and other intellectual skills along with the attitudes and abilities that enable them to live as educated, tolerant, and empowered leaders disseminating values to the society

Vision

M.E.S College Erumely strives at providing accessible and affordable quality education for pursuing truth and knowledge to re imagine young minds for having a committed, selfless, ethical life along with a motive of great excellence in higher education

Mission

- Producing socially committed intellectually empowered, ethically sensitive change-makers through excellence who would be dedicated to working for the common good of society.
- Creating a space for individuals from various Socio-economic identities especially for the less fortunate in order to fulfil their aspirations to have Serving as a catalyst for fulfilling dreams of the academic community to achieve the most suitable careers and committed life.
  Affordable quality education

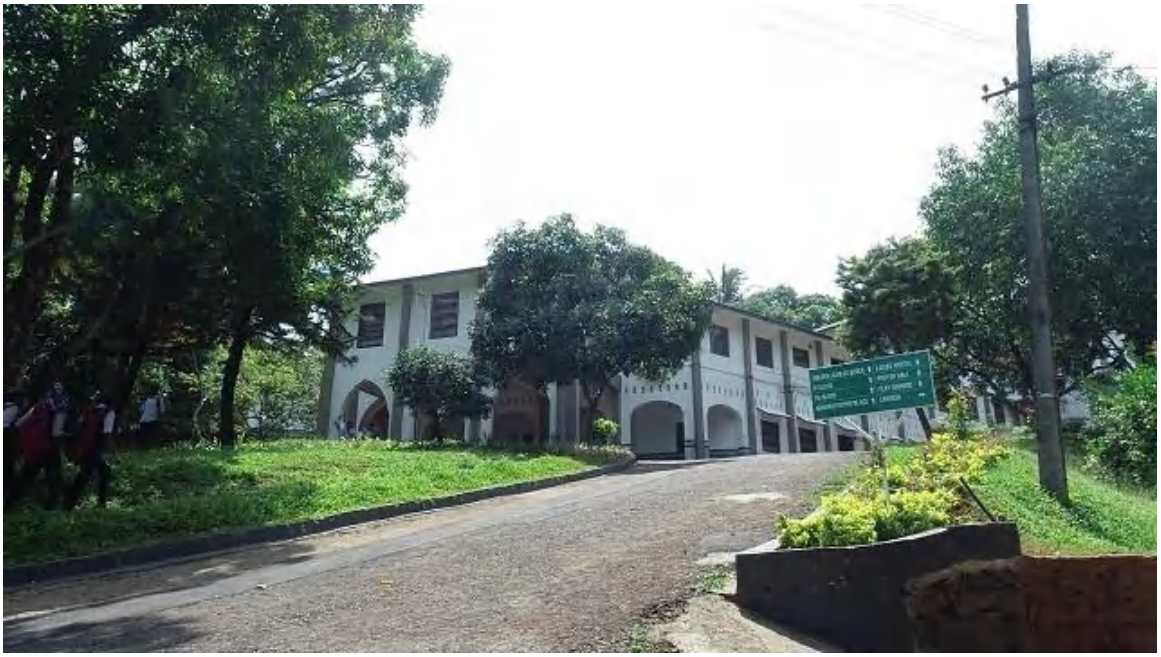
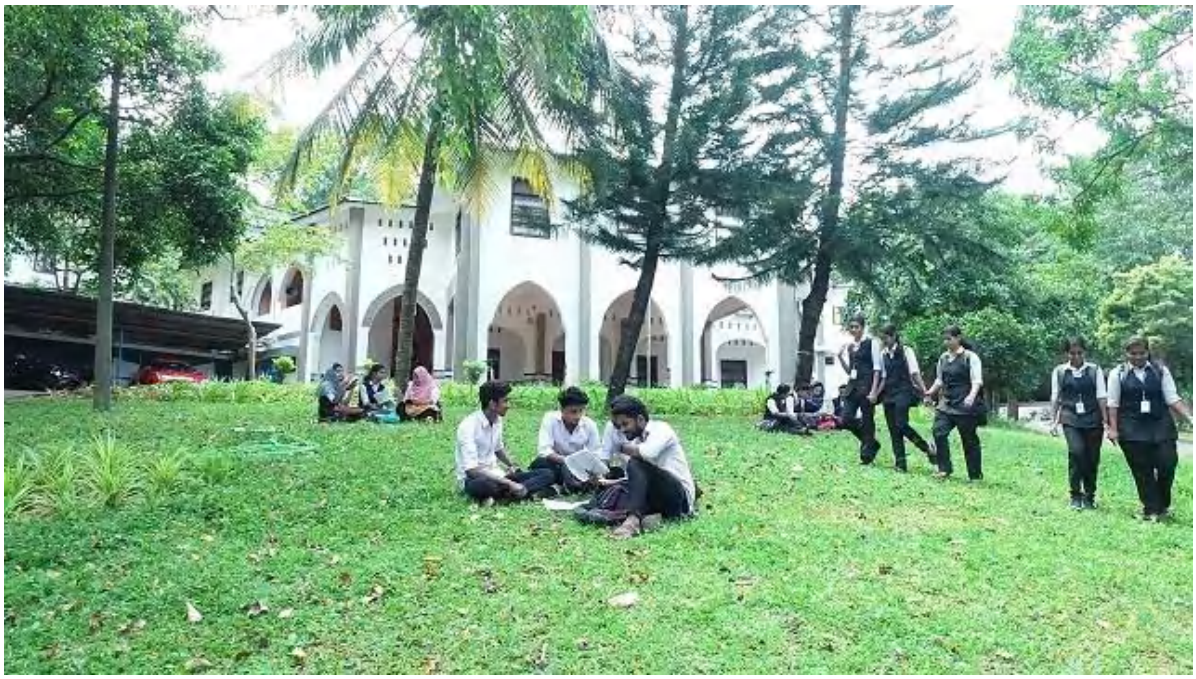


Figure 1 M.E.S MAIN ENTRANCE GATE



ABOUT ENVIRONMENT AUDIT

The ICC defines Environmental Auditing as: **"A management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing with the aim of safeguarding the environment and natural resources in its operations/projects."**

A clean and healthy environment aids effective learning and provides a conducive learning environment. There are various efforts around the world to address environmental education issues. Environmental conditions may be monitored from angles that are relevant to Indian requirements, without stress on legal issues or compliance. This innovative scheme is user friendly and totally voluntary. The environmental awareness helps the institution to set environmental examples for the community and to educate young learners.

Here we can mainly divided this report waste management initiatives and installations of systems such as bio gas plant, vermicompost , incinerator and collection and segregation of waste in the campus etc. and students initiates in waste management as a social cause.

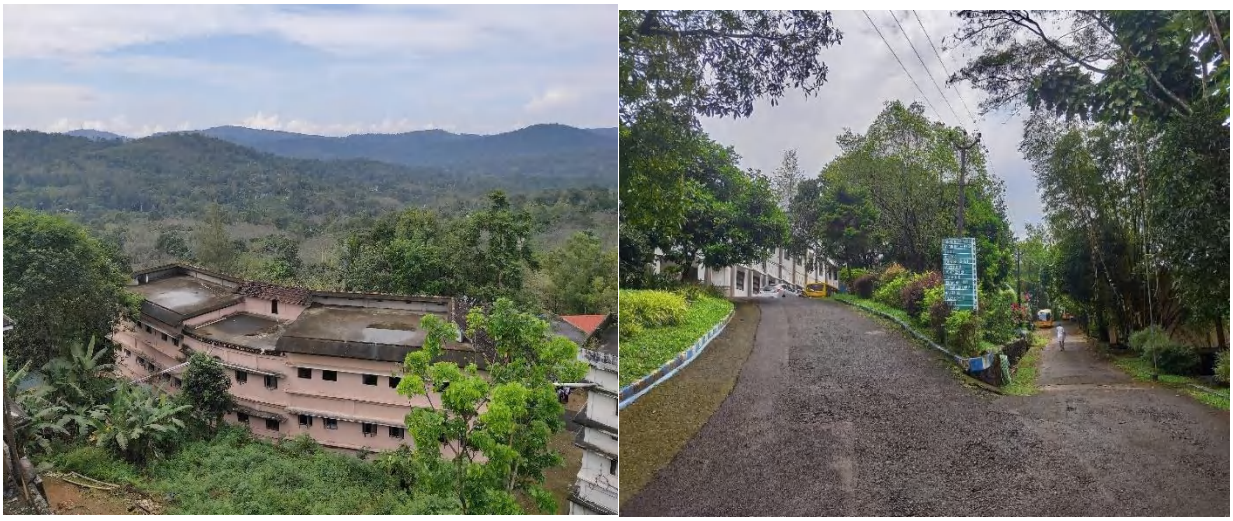


Figure 2 M.E.S CAMPUS

ENVIRONMENT POLICY OF COLLEGE

An environmental policy to regulate resource use or reduce pollution to promote human welfare and protect natural systems. Environmental policy offers an opportunity to take the lead in rethinking environmental culture and developing new paradigms for solving problems that are local, natural and global in nature. It can address correct disposal and handling of waste materials, purchase of environmentally friendly supplies and effective recycling programs. Environmental policy deals with promoting awareness of environmentally sound practices. That leads to sustainable development.

OBJECTIVES

- To ensure efficient use of environmental resources among students in the sense of reduction in their use per unit of economic output.
- To create an awareness about Sustainability about the environment.
- To conduct various program M.E.S and activities in order to spread awareness on scarcity of resources among Students.
- To practice judicious use of environmental resources.

THE ENVIRONMENTAL POLICY IN CAMPUS

- M.E.S College Erumely designed an environmental policy to prevent or reduce harmful effects of human activities on ecosystems.
- Our College has Green Campus is a place where environmental friendly practices and education combine to promote sustainable and eco-friendly practices in the campus.
- The Institution has a Sustainable Development Strategy. It will conducted the activities through the agencies like Bhumitra sena , Nature Club and NSS units
- The College has some green project ideas for college students that may evolve students to concrete actions toward the protection of an ecology. It can be something like tree planting, street cleaning or any other environment-themed campaigns.
- The effective way to make the community more environmentally sustainable is creating communication between students and management. Every student may have his fresh ideas of going green, and it'd be good and if the management could encourage them and help to realize.

WASTE MANAGEMENT

Waste is generally termed as 'a resource at the wrong place'. The college authorities are aware of the possible methods and have installed waste management measures like biogas systems. The waste clearance measures associated with different types of wastes are briefly given below. In this college normally three types of wastes are generated and we can divide the same as,

1. Bio degradable
2. Non bio degradable and
3. E-waste

1. BIODEGRADABLE WASTES

Biodegradable waste includes any organic matter in waste which can be broken down into carbon dioxide, water, methane or simple organic molecules by micro-organisms and other living things by composting, aerobic digestion, anaerobic digestion or similar processes also includes some inorganic materials which can be decomposed by bacteria. These materials are non-toxic to the environment and mainly include the natural substances like Plants and animals waste, even the dead plants and animals, fruits, paper, vegetables, etc. get convert into the simpler units, which further get into the soil and are used as manures, biogas, fertilizers, compost, etc.

The biodegradable wastes are mainly from the college canteen and pushed it to the Biogas plant. The bio-slurry is used as manure to the plantation.

I. BIO GAS PLANT

Biogas is the mixture of gases produced by the breakdown of organic matter in the absence of oxygen (anaerobically), primarily consisting of methane and carbon dioxide. Biogas is a renewable energy source Biogas is produced by anaerobic digestion with methanogen or anaerobic organisms, which digest material inside a closed system, or fermentation of biodegradable materials. This closed system is called an anaerobic digester, biodigester or a bioreactor.

Biogas is a renewable, as well as a clean, source of energy. Gas generated through bio digestion is non-polluting; it actually reduces greenhouse emissions. No combustion takes place in the process, meaning there is zero emission of greenhouse gasses to the atmosphere; therefore, using gas from waste as a form of energy is actually a great way to combat global warming. Another biogas advantage is that, unlike other types of renewable energies, the process is natural, not requiring energy for the generation process. In addition, the raw materials used in the production of biogas are renewable.

Bio gas plant reduces soil and water pollution. Consequently, yet another advantage of biogas is that biogas generation may improve water quality. Moreover, anaerobic digestion deactivates pathogens and parasites; thus, it's also quite effective in reducing the incidence of waterborne diseases.

Bio gas generation produces organic fertiliser. The by-product of the biogas generation process is enriched organic (digestate), which is a perfect supplement to, or substitute for, chemical fertilizers. The fertilizer discharge from the digester can accelerate plant growth and resilience to diseases, whereas commercial fertilizers contain chemicals that have toxic effects and can cause food poisoning, among other things.

The biogas plant converts food wastes into methane gas and usable bio fertilizers which will used for plants. The methane gas from the biogas plant is used in the canteen for cooking purpose and for heating drinking water hot water. Approximately 100 kg of LPG /month is saved by using biogas plant from 3 M^3 plant. The bio maneuver from the biogas plant is used for gardening, agriculture and for trees. This biowaste is also act as best bio insecticide and thus the college avoided the usage environmentally toxic precipices for environment. Here college is using fixed dome permanent structure biogas plant of size 3 M^3 for treating bio waste. The slurry coming from the plant is collected in drums and reused after diluting with water for agriculture and for gardens. The methane gas is used in the canteen for hot water generation which is used for drinking and tea making.

II. VERMI-COMPOST

It is the product of the decomposition process using various species of worms, usually red wigglers, white worms, and other earthworms, to create a mixture of decomposing vegetable or food waste, bedding materials, and vermin cast. Vermicompost contains water-soluble nutrients and is an excellent, nutrient-rich organic fertilizer and soil conditioner.[3] It is used in farming and small scale sustainable, organic farming.

The major source of raw material for vermi-compost is the leaves in the college campus and also the wastes generated which are not fed into biogas such as Chicken bones etc. The vermi-compost plants installed near to the scrap yard in the college campus

Benefits of Vermi-compost

a. For Soil

- Improves soil aeration
- Enriches soil with micro-organisms (adding enzymes such as phosphatase and cellulose)
- Microbial activity in worm castings is 10 to 20 times higher than in the soil and organic matter that the worm ingests
- Attracts deep-burrowing earthworms already present in the soil
- Improves water holding capacity

b. For Plant growth

- Enhances germination, plant growth, and crop yield.
- Improves root growth, Enriches soil with micro-organisms, adding plant hormones such as auxins and gibberellin acid.

c. For Economic

- Biowastes conversion reduces waste dumping in landfills.
- Elimination of biowastes from the waste stream reduces contamination of other recyclables collected in a single bin (a common problem in communities practicing is single-stream recycling)
- Creates low-skill jobs at local level.
- Low capital investment and relatively simple technologies make vermicomposting practical for less-developed agricultural regions.

d. For Environmental

- Helps to close the "metabolic gap" through recycling waste on-site.
- Large systems often use temperature control and mechanized harvesting, however other equipment is relatively simple and does not wear out quickly
- Production reduces greenhouse gas emissions such as methane and nitric oxide (produced in landfills or incinerators when not composted).

2. NON-BIODEGRADABLE WASTE

Materials that remain for a long time in the environment, without getting decompose by any natural agents, also causing harm to the environment are called non-biodegradable substances. These materials are metals, plastics, bottles, glass, poly bags, chemicals, batteries, etc. But as these are readily available, convenient to use, and are of low cost, the non-biodegradable substances are more often used. But instead of returning to the environment, they become solid waste which cannot be broken down and become hazardous to the health and the environment. Hence are regarded as toxic, pollution causing and are not considered as eco-friendly.

Many measures are taken these days, concerning the use of non-biodegradable materials. The **three 'R'** concept which says **Reduce-Recycle -Reuse** is in trend, which explains the use of the non-biodegradable materials. As we already discuss that these substances do not decompose, or dissolve easily so can be recycled and reuse. And one can help in reducing this waste by instead of throwing the plastics and poly bags in the garbage; it can be put in the recycling bags to use again.

Non-recyclable wastes are collected and burned once in a month using incinerator places inside the campus itself. The recyclable wastes are sorted out into categories and supplied it to the collecting units.

Recommendation

We recommend to install vermin-compost or compost plant in its campus for treating plant leafs and compostable wastes generated in the college campus.

I. INCINERATOR

The objective of waste incineration, in common with most waste treatments, is to treat waste to reduce its volume and hazard, whilst capturing (and thus concentrating) or destroying potentially harmful substances. Incineration processes can also provide a means to enable recovery of the energy, mineral and/or chemical content from waste. Basically, waste incineration is the oxidation of the combustible materials contained in the waste. Waste is generally a highly heterogeneous material, consisting essentially of organic substances, minerals, metals and water. During incineration, flue-gases are created that will contain most of the available fuel energy as heat. The organic substances in the waste will burn when they have reached the necessary ignition temperature and come into contact with oxygen. The actual combustion process takes place in the gas phase in fractions of seconds and simultaneously releases energy. Where the calorific value of the waste and oxygen supply is enough, this can lead to a thermal chain reaction and self-supporting combustion, i.e. there is no need for the addition of other fuels.

The incinerator is used for incinerating non-biodegradable waste such as paper, plastic, sanitary napkins etc. The ash generated are as for manoeuvre after mixing with cow dung for plants. The ash generated from plastic will be treated separately.

The ash generated from canteen were wood is used as a fuel is used as manoeuvre for plants. The college campus promoting biodegradable packaging and reducing the consumption of plastic to a large extent.

Incinerator installed in the college for treating bio non degradable wastes such as stationary, paper etc. generated in the college

3. ELECTRONIC WASTE

Electronic waste or e-waste describes discarded electrical or electronic devices. E-waste or electronic waste is created when an electronic product is discarded after the end of its useful life. The rapid expansion of technology and the consumption driven society results in the creation of a very large amount of e-waste in every minute. Used electronics which are destined for refurbishment, reuse, resale, salvage recycling through material recovery, or disposal are also considered e-waste. Informal processing of e-waste in developing countries can lead to adverse human health effects and environment pollution. Certain components of some electronic products contain materials that render them hazardous, depending on their condition and density. At present college segregated the electronic waste in a separate cordoned area.

Recommendation

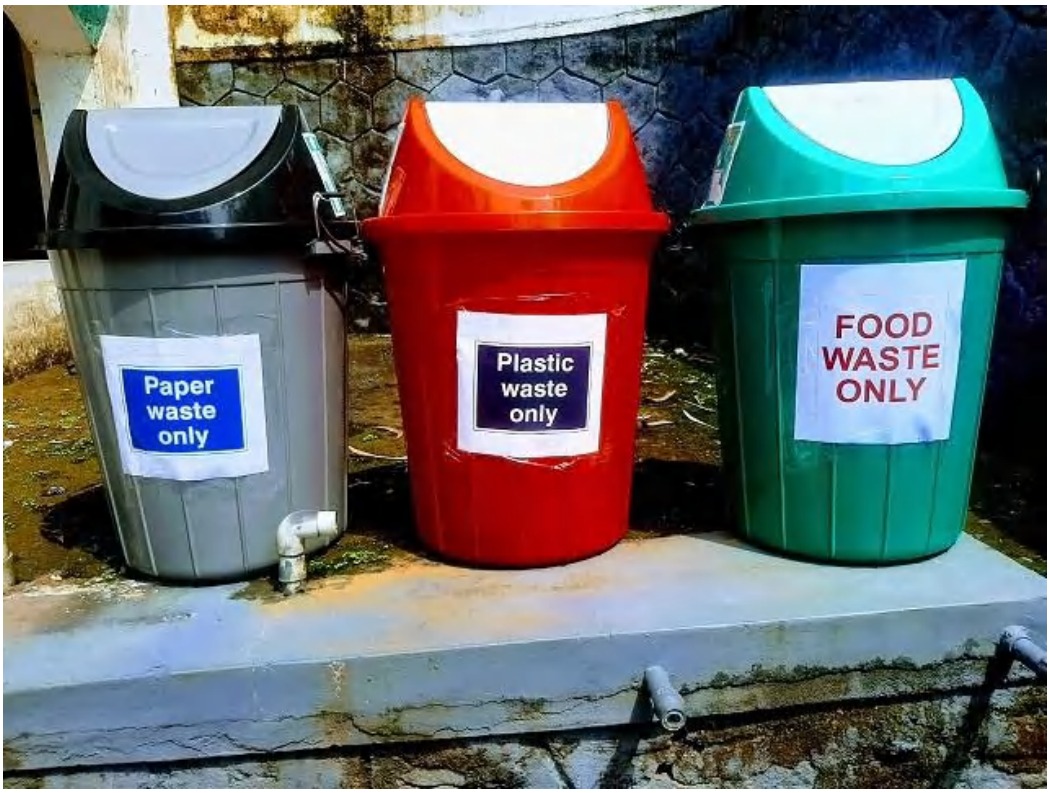
- College is to sign an agreement for collecting and processing E-waste generated from college. The party is approved agency of Kerala state **Suchithwa Mission** for collecting E waste

FACILITIES PROVIDED BY COLLEGE FOR WASTE MANAGEMENT COLLECTION

- Toilets in every floor of all buildings separately for girls, boys and staff.
- There is separate toilet facility for department heads, staff rooms, administrative department and common facility.
- Certain toilets are facilitated for disable friendly with suitable hand rails and support mechanisms.
- Bins are provided in various areas of Campus for segregated collection of bio degradable (food,) and non-bio degradable wastes (Plastic, bottles)
- Every day cleaning and sanitisation is done at each and every toilet by cleaning personnel which used to check by housekeeping supervisor.
- **Separate team is maintained by college for maintain the clean campus, removal of wastes from pets, collection wastes from bins, which is supervised by maintenance supervisor.**

Recommendation

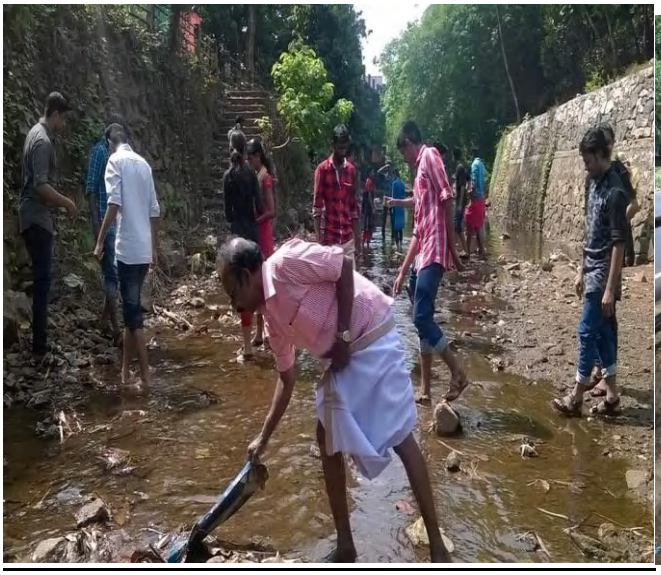
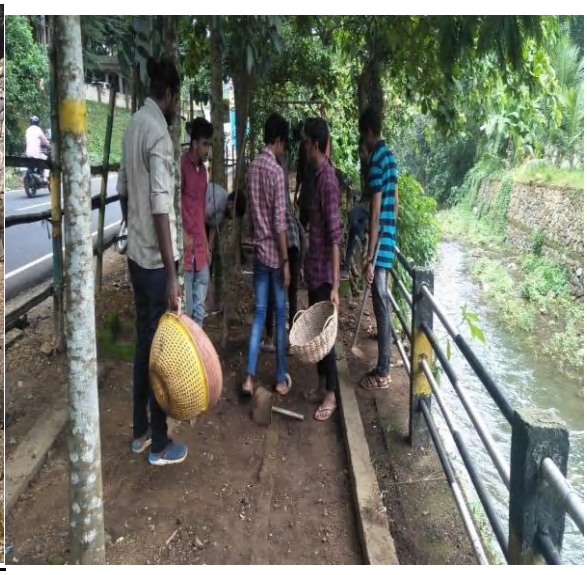
Sample waste bin photos are given below.



STUDENT ACTIVITIES FOR ENVIRONMENTAL CONSERVATION

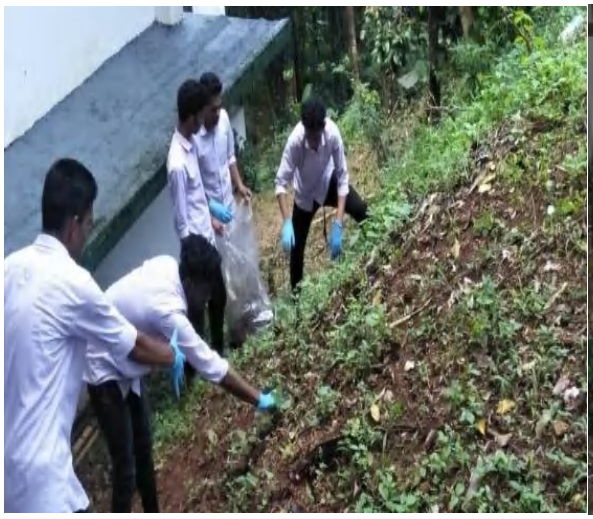
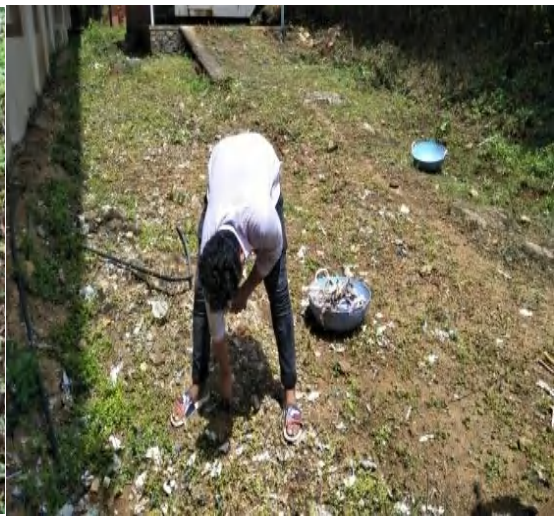
1. Thannal

Under the Thannal project cleaning of tributary of Pampa River near to Erumely temple done. Plastic, cotton wastes etc are removed before Sabarimala pilgrimage season and cleaned the sides of roads etc. This projects well accredited by public and carried on by the college many years.

2. Campus cleaning

70 of the NSS volunteers of M.E.S College had actively cleaned the college premises. The students were divided into 7 groups containing 10 volunteers each. Each of the groups was assigned to clean a particular location within the campus.

Unused paper collection

To inculcate the importance of protecting nature and conserving trees, **the Bhoomithra sena club** collected unused papers of used books from the students. Thousands of trees are cut down daily to make papers and innumerable papers are unnecessarily wasted. In order to create awareness on this

issue, the club collected unused papers as a first step. These papers will be binder separately to make notebooks.

3. **Plastic Pollution Awareness Programme**

NSS volunteers had made the students aware about the usage of plastics and the harmful effects caused by them towards the humanity, environment and ecosystem. The volunteers also explained to the students about the conversion of useless plastic products into useful crafts The classes had successfully come to an end with the presence of NSS program officers Mr. Sajan Antony and Mrs. Rejoola .M

Vermicomposting Programme

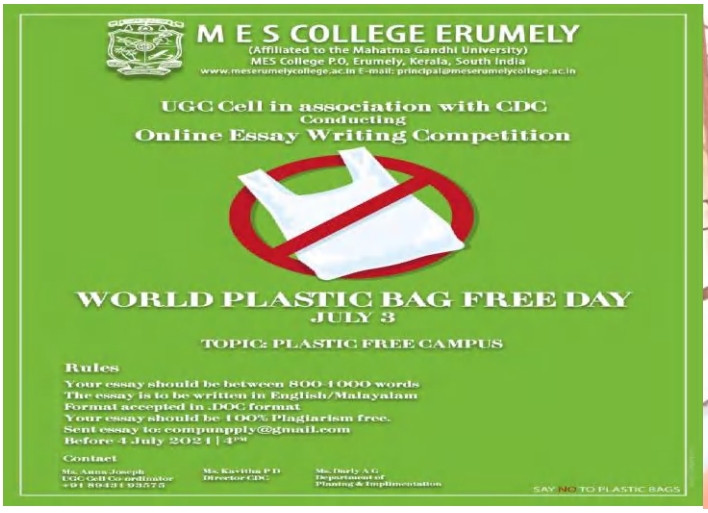
Vermin compost project is a running project of NSS unit, M.E.S College Erumely in the campus to demonstrate and practice eco-friendly waste management measures. A vermicomposting tank established by the unit is working nearer to the ladies hostel. Degradable kitchen wastes from the college and hostel are used for composting. The technical direction and worms for the tank was collected from Malanadu Development Society, Parathodu.

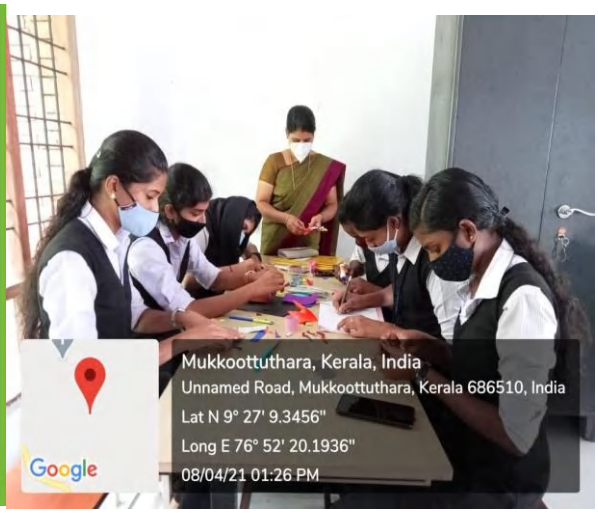
VALICHERIYAL MUKTHA CAMPUS,GRAMAM, NAGARAM

Valicheriyal Muktha Campus, Gramam, Nagaram' titled programme was inaugurated in our College. It was inaugurated by Mr. Hari. G., Coordinator of the Bhoomitra Sena Club. An orientation class was conducted by Eldo Varghese., making the volunteers aware about the impacts of throwing unnecessary goods with the lack of care for the environment. Then the volunteers cleaned the campus and they gave awareness in all classes for each student in our college.

WORLD PLASTIC BAG FREE DAY

Essay writing is a very sensitive form of self-expression. It is a harmonious blending of 'thought' and 'expression'. Essay writing has assumed great importance in our competitive examinations. It is considered to be the most effective test of the ability of a candidate to express his thoughts on a topic of interest in general, unambiguous and impressive language. Keeping this perspective in mind, the UGC Cell organized the Essay writing competition for the students of M.E.S College Erumely. An essay writing competition was held by UGC Cell in association with CDC in the college on July 3(World Plastic Bag Free Day). 10 students participated in the competition. The Judge of Competition was Mrs. Bindu P R (Assistant Professor St. Antony's college Peruventhanam).





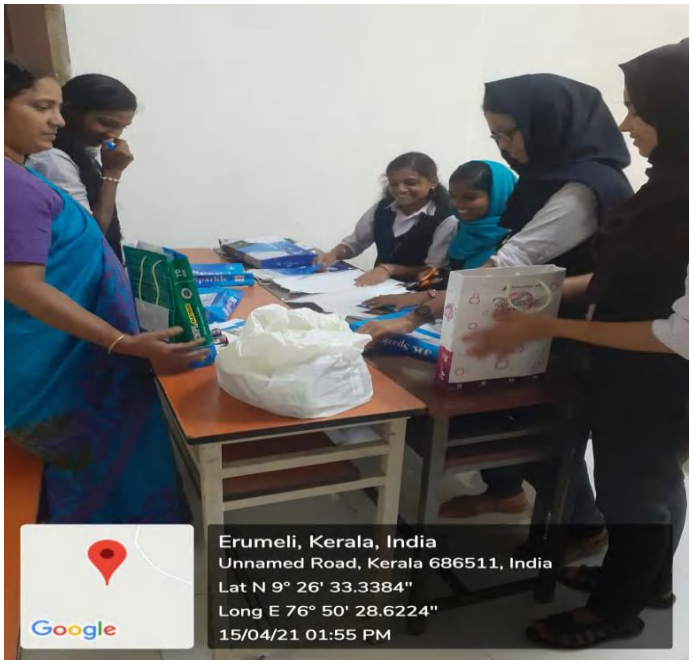
Eco Friendly Paper Seed Pen making

Department of Commerce Br Finance and Taxation conducted an activity to reduce single use plastic waste and motivate growing green eco-friendly pens made from recycled paper with embedded seeds and were distributed to employees

PAPER BAG MAKING

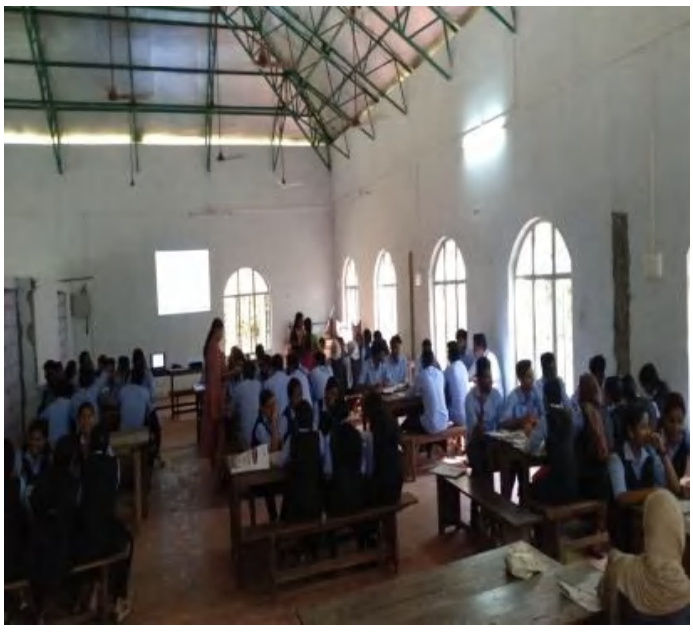
The Department of Business Administration identified that A4 sheet covers were disposed of as a waste in offices and colleges and so they decided to make the best use of this resource and create eco-friendly carry bags out of A4 sheet covers. The aim of this initiative is mainly to create awareness on the need to use eco-friendly carry bags, develop the creative and inventing skills in BBA students and to reduce the use of plastic bags. The Department aims to create self-employment opportunities for its students by teaching them new skills and turning them into an entrepreneur. The fun-filled activity inspired the students to contribute to Mother Nature by using eco-friendly bags and saying no to plastic bags The

activity was carried out under the guidance of Mrs. Darly AG, Associate Professor, Dept. of Business Administration.



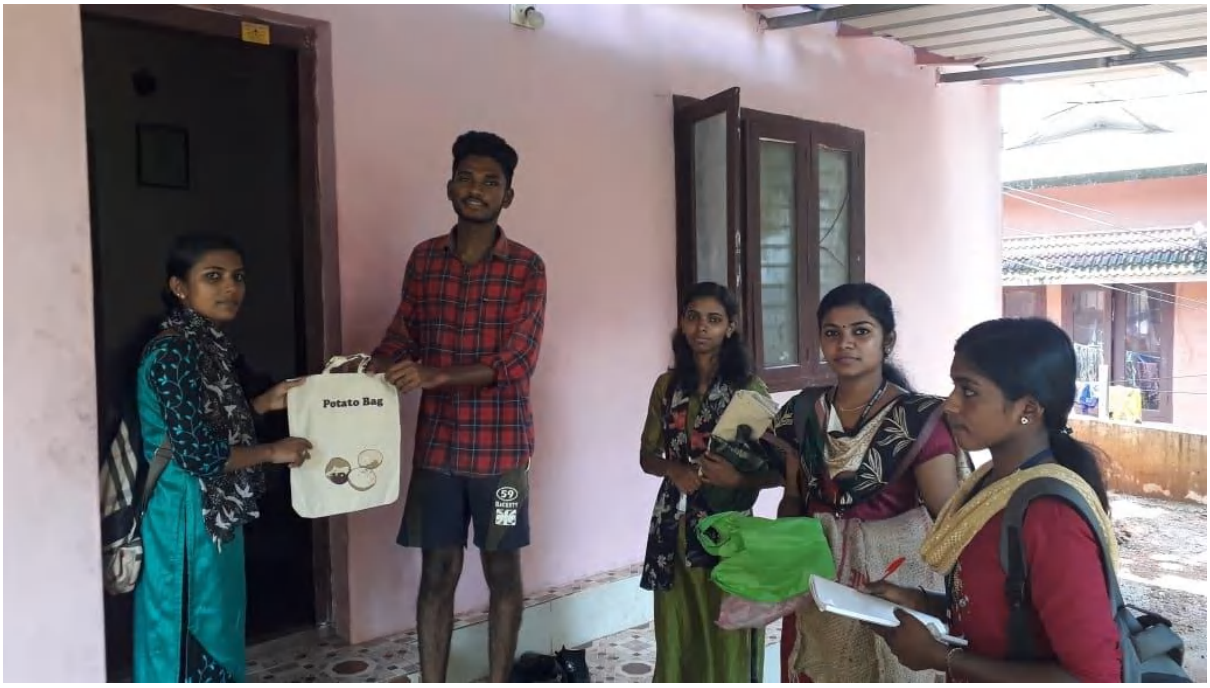
WORKSHOP FOR THE MODEL OF WASTE MATERIAL

PG Department of Commerce Conducted a workshop on making paper file, paper pen and doormat from waste clothes and Papers for P G Students. On 27/01/2020, Monday in Association with Kudumbasree Accredited Agency "Sredha" by the trainer Sangeetha M T. Ms. Sunu Sukumarn (Assistant Professor) welcomes all members to the training, Mrs. Shamla Beegom N S (HOD & vice Principal) inaugurated the session, Dr. Rajeswari R introduces the trainer Mrs. Sangeetha M T conducted the training Session.



Students of Erumely M.E.S College with Gandhian ideas

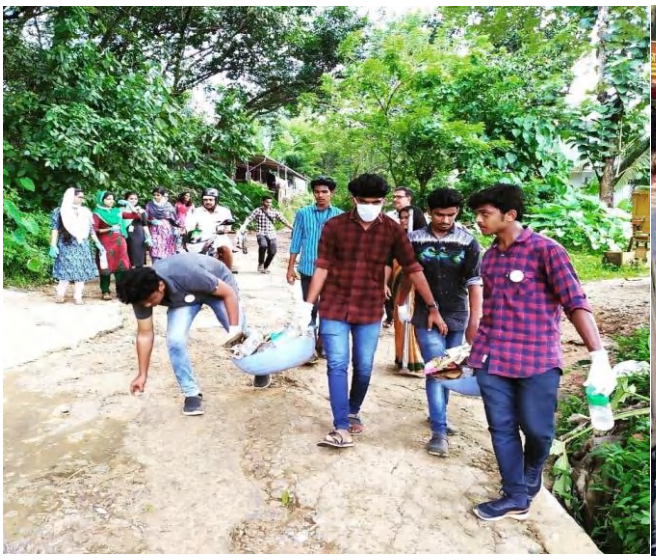
As part of the Swachhat Hi Seva program implemented by the Central Government to implement the concept of Plastic Free Villages, Erumely Grama Panchayath collected plastic bags from households in different parts of the state with the help of self-made cloth bags and distributed 'replacement cloth bags' and imparted knowledge on how the use of plastic is detrimental to our country. The cloth bags made by the Entrepreneur Sheep Club were delivered directly to about 200 homes by students from the Social Work Department. Kanjirappally Block Panchayat Member PK Abdul Karim Erumely inaugurated the distribution of cloth bags to Grama Panchayat Development Affairs Standing Committee Chairman Shri Ajesh Kumar.



MEGA CLEANING PROGRAMME

As a part of Mahatma Gandhi's 150th birthday, 200 NSS volunteers of M.E.S College Erumely cleaned the whole city Erumely town. The cleaning had started to become a huge success because of the cooperation of the Erumely Panchayath. They had provided all the essential materials that were needed to avoid injection. They also provided high refreshment for the NSS volunteers. The cleaning process had started with a meeting which was conducted in the seminar hall of Erumely panchayat. Presidential address was done by P H Najeeb, Chairman of M.E.S College Erumely. The meeting and the programme were inaugurated by T S Krishna kumar, president of Erumely grama panchayat. Felicitation was done by P K Abdul kareem, member of Kanjirapally Block panchayat, Ajesh Kumar, Development and standing committee chairman of Erumely Grama panchayat and Maheen M N, principal of M.E.S College erumely.
All the NSS Volunteers were divided into five groups and they were assigned to clean Erumely police station premises, health care centre, Temple premises, KSRTC bus stand premises, Erumely bus stand

premises, and surrounding roads. Later program officers Rejoola O M and Sajan Antony guided the Volunteers for the cleaning process.



PHC Cleaning Programme at Erumely

The NSS unit organised an intensive cleaning programme at the primary health centre Erumely as part of the Gandhi Jayanthi day celebrations.93 volunteers and programme officers Mr. V.G Harishkumar and Anitha Mathew Participated in the programme. The programme was inaugurated by Adv. P A Salim, District Panchayat Member and presided over by Dr. Smitha, Medical Officer, PHC Erumely. Health inspectors, ward members, programme officers and volunteer secretaries participated in the programme. The one day cleaning programM.E.S consist of cleaning 0.3 hectares of land. Some areas were beautified by planting trees and flowering plants.

Cleaning Programme at Erumely

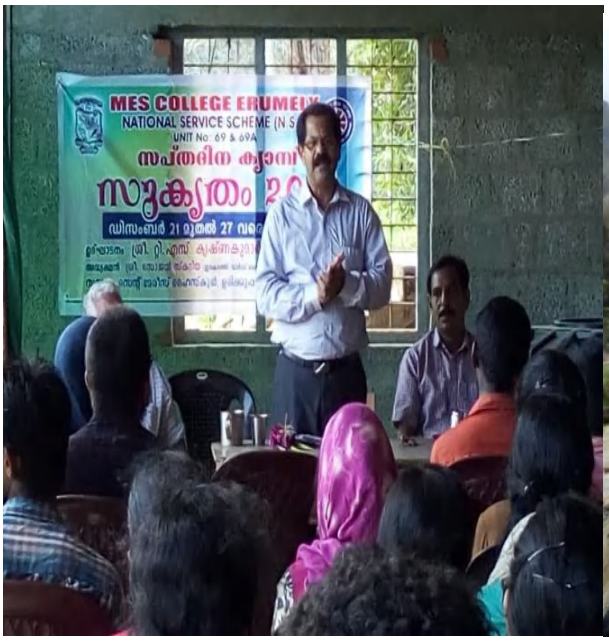
The NSS volunteers of the college participated in the mega cleaning programme organised by the MLA Shri. PC George. 130 volunteers from the college participated in the Programme

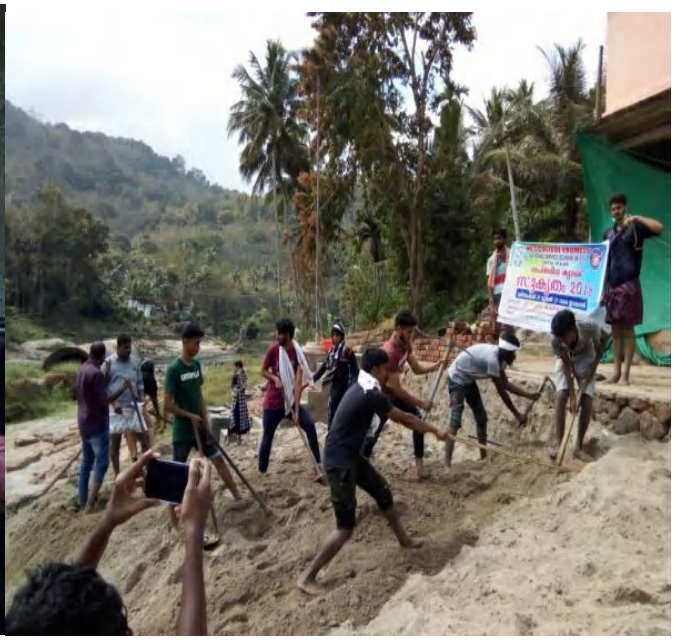
Green Village Clean Village

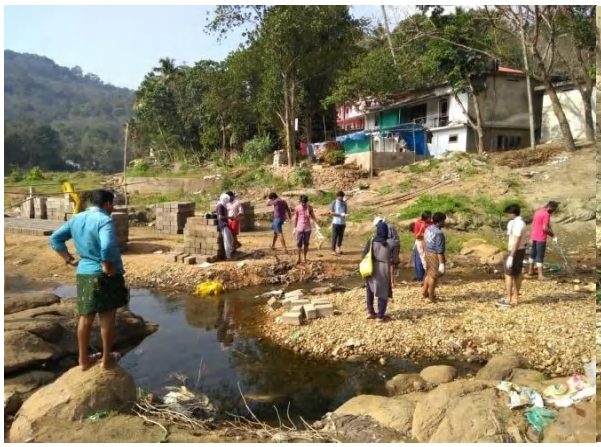
The survey conducted by the NSS volunteers of the 50 houses of Mukkada village conveyed the ideal “Green Village Clean Village”. A seminar was conducted by providing a thorough awareness regarding Bio-compost and waste management to the volunteers, who later conveyed this to the villages.

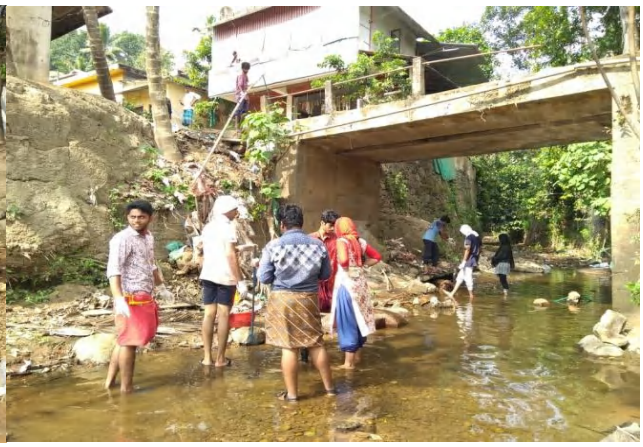
Following the flood most of the houses of the village seemed useless and filled with mud. The NSS volunteers cleaned those houses and repaired them to rehabilitate. The plastic waste was collected and removed from the rivers. After cleaning a board imprinted ‘Don’t Deposit Waste Here’ was also set up there.

The camp was visited and evaluated by the NSS co-ordinator of the Mahatma Gandhi University, Kottayam Mr. Mathew M.J. He expressed his approval that the efforts of the seven day camp was superb and it was really a grand success of the NSS Unit. The public ground of the village was turned useless because of the flood. The NSS unit with great effort removed the mud and soil from there and planted saplings of fruit trees on the margin of the ground. This is an effort of the NSS unit deserving appraisal for highlighting the motto of Green Village Clean Village. The NSS unit deposited 20 Waste Bin at 10 points in the campus aiming to separate the waste as Biodegradable and Non-biodegradable for the purpose of making bio-compost. Three pits were dug at College Canteen, Men hostel and Ladies Hostel for implementing the plan. Farming of Tapioca, medicinal plants and vegetables were also successfully done at the four plots granted by the college management.









CONCLUSION

Environment audit is the best way to analyse and solving the critical issues of waste management. Environment audit can add value to management approach being taken by college for identifying, collecting, segregating and processing of waste generated in the college campus. By analysing the waste generation in each segment such as biodegradable, non-degradable, R waste etc. gave an indication of waste generation and thus put control for the same to reduce the environmental impacts in due course. The findings in the report shows that college perform fairly well in waste management issues and taken considerable efforts in a responsible manner. During audit and the conversations with the college team, we observed that M.E.S Management done various approaches in the past few years to performing well to sustainable environment. Even though there is space for further improvement that mentioned in the executive summary, the college is a good example for the minimisation of environment issues in the existing conditions.

ANNEXURE

Certificate of Attendance

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Total Quality. Assured.

G KRISHNAKUMAR

has attended the following live virtual classroom course:

Transition training for Environment Management System as per ISO 14001:2015

Course is designed to explain:

- Requirements of ISO 14001:2015 in context of audit.
- Key changes from ISO 14001: 2004 to 14001:2015

Session Duration: 16 Hours

CERTIFICATE NUMBER
2020260507

TRAINING DATE:
25th & 26th May, 2020

Authorising Signature:

Intertek India Private Limited