



গড়গাঁও মহাবিদ্যালয় GARGAON COLLEGE



MANAGEMENT OF DEGRADABLE AND NON DEGRADABLE WASTE

2023-24



GARGAON COLLEGE
SIMALUGURI-785686
SIVASAGAR (ASSAM)



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WASTE MANAGEMENT AT GARGAON COLLEGE

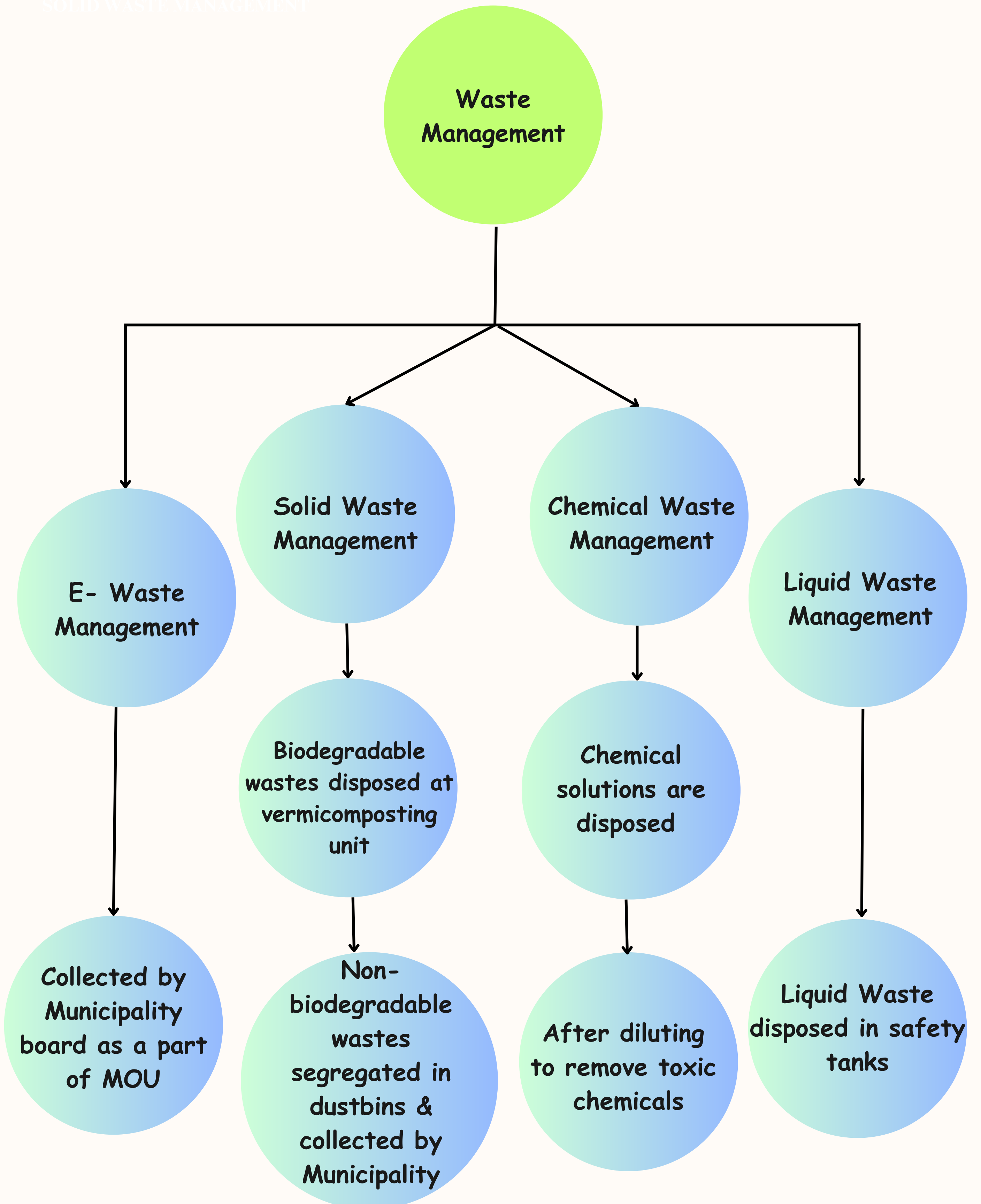
Gargaon College has taken several initiatives for management of degradable and non degradable waste and promote a sustainable and environmentally friendly campus. Waste management refers to the creation and removal of several types of trash, including food, paper, plastic, glass, dust, building, and so on, in addition to recycling.

Moreover, wasted material resources that may be better used through recycling, repair, and reuse are commonly found in solid waste. Solid waste generation and management are hot topics. The improper disposal of rubbish might put everyone in risk.

The Gargaon College fraternity is aware of the quantity, kind, and current management of trash generated on campus as well as appropriate disposal and reuse practices. Tree droppings on campus contribute significantly to the quantity of solid waste generated. On campus, there are leaf composting trenches where dry leaves may be turned into manure. In this sense, students are also encouraged to participate.



SOLID WASTE MANAGEMENT





SOLID WASTE MANAGEMENT

This report represents the assessment and analysis of the current state of solid waste management at Gargaon College. Solid waste management is a crucial aspect of environmental sustainability, and this report aims to identify areas core methods adopted for its effective management. At the time of collection, separate dustbins are provided for plastic and biodegradable waste. Old, single-sided papers are recycled for writing and printing in all sectors, and printing on both sides is encouraged. The remaining old newspapers are given to neighborhood sellers, while old magazines are archived. A small number of old newspapers are kept for future study, issue analysis, etc. Very little plastic waste (0.1 kg per day) is produced in the department, office, garden, and other locations. It is neither recycled nor categorised at the time of creation. Trash made of metal and wood is collected and delivered to authorised scrap dealers for additional processing. The municipal collection facility is where current plastic garbage and e-waste are disposed of. Solid waste is collected by the municipal corporation, which then disposes of it in accordance with its policies.

Efforts have been made to reduce the overall quantity of waste created by college staff offices by making use of all available municipal and private recycling resources, such as glass, cans, white, coloured, and brown paper, plastic bottles, batteries, print cartridges, cardboard, and furniture. Biodegradable waste (leaves and food waste) is composted in leaf composting pits, whilst organic rubbish (food waste) is converted into organic manure in vermi-composting machines.



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The unrecyclable waste materials are disposed of in collaboration with the Nazira Municipal Board





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a) Waste segregation:

Segregating waste begins in the classroom. Each classroom is equipped with a trashcan, and the common spaces have two dustbins: one for biodegradable materials and another for non-biodegradable ones. There are dry and wet garbage cans in the corridors in front of the classrooms.



Dustbins & pits in respective places of the departments



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b) Production of Vermicompost



Leaf compost



Vermicompost



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c) Campus Free of Plastic:

Gargaon College has strict restrictions regarding the usage of single-use plastics and outright prohibits its use. Increasing environmental awareness is one of the key tasks. By building notice boards and running awareness campaigns, it is achieved. It was recently instituted by the institution to place used water bottles in banks of plastic bottles. These bottles are recycled by students to make flowerpots, home accents, and other practical items. Bags and plastic bottles can also be used to grow seedlings, fill vermicompost to sell, and other purposes.



Plastic bottle bank



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Plastic bottle bank



Plastic free banners in the campus





REUSE OF PLASTIC AND ITS IMPLICATION: At a Glance



Collection of plastic bottles



Separation of plastic bottles



Soil addition for germination



Transfer of saplings to Organic Garden



Transfer of saplings to Green House



Growth of saplings



Vegetables grown in Organic Garden



Collection of vegetables for distribution



Vegetables distribution to girls hostel



Rationality of Plastic Bottle bank construction

Plastic bottle banks have been constructed at crucial places of the campus for the reuse of used plastic bottles. It serves the following functions:

- By providing a designated place for students to dispose of their plastic bottles, colleges can help mitigate plastic pollution by ensuring proper recycling and disposal practices.
- To foster a culture of environmental awareness as a tangible reminder recycling and reducing plastic waste so as to adopt more sustainable habits. of
- The use of plastic bottles for germination and growth of saplings. The saplings once grown are then transferred to either the Green house or the organic garden of the college. The plants are grown organically by using the leaf compost from the vermicomposting units. Once the vegetables mature and ripe, those are plucked and distributed to the borders of the hostel.





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College policy on Ban of single use Plastics

GARGAON COLLEGE

ESTD: 1959

Reaccredited by NAAC with B Grade

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Ref No:

NOTICE

Policy for ban on single use of plastic inside the Gargaon college campus

As per the order from Ministry of Environment, Forest and Climate Change, implementation of Plastic Waste Management Rules, 2016 has been enforced in the college for the past five years.

The following rules need to be followed strictly inside the college campus-

1. Single use plastic items are banned inside the college premises.
2. Complete ban on use of plastic carry bags inside the college campus.
3. Banners, buntins, cups, cling films, flex, flags, and plates including the above items made of thermocol and plastic which use plastic micro beads are banned.
4. Students and faculty members are encouraged to bring their own water bottles to discourage the use of plastic bottles.
5. Canteen staffs are encouraged to utilize the reusable cups, plates, dishes and anything not made from plastic.
6. Use of plastic film to pack or cover any book including magazine or invitation card is completely banned.

[Signature]
Principal

(Dr. Sabyasachi Mahanta)

Principal
Gargaon College
Simaluguri, Sivasagar (Assam)



MoU with Simaluguri Municipal Board

The residual plastics are taken by Simaluguri Municipal Board for further recycling at their end as part of its MoU with Gargaon College



Memorandum of Understanding
between
Gargaon College, Simaluguri
and
Simaluguri Municipal Board
Date:

Gargaon College and Simaluguri Municipal Board recognize their mutual interest in community participation, environment sustainability, waste management among other areas. Gargaon College and Simaluguri Municipal Board, therefore, agree to establish a programme for cooperation in the areas of mutual interest and in accordance with the terms and conditions set forth in this Memorandum of Understanding (MoU).

Objectives

The objective is to facilitate collaboration between the institution and the board, provide opportunity for students in areas of internship and to promote community participation on the basis of mutual benefit, good initiatives, and frequent interactions.

Gargaon College and Simaluguri Municipal Board agree on the following terms:

1. Waste Management:

- The Municipal Board will provide guidance and support to the College in implementing effective waste management practices on its campus.
- The College will collaborate with the Municipal Board to establish waste segregation systems, recycling initiatives, and awareness campaigns to promote sustainable waste management practices.
- Both parties will share relevant information, expertise, and resources to optimize waste reduction and recycling efforts.

2. Internships and Trainings:

- The Municipal Board will offer internship opportunities to eligible students of the College, providing them with practical experience and exposure to waste management projects and initiatives.


Principal
Gargaon College
Simaluguri, Sivasagar (Assam)


Chairperson
Simaluguri Municipal Board
Sivasagar, Assam

- The College will recommend suitable students for internships and facilitate their engagement with the Municipal Board's waste management programs.

- The Municipal Board will organize training sessions, workshops, and seminars for the students of the College, imparting knowledge and skills related to waste management, environmental sustainability, and related subjects.

3. Community Participation:

- The College and the Municipal Board will collaborate to engage the local community in waste management activities, awareness campaigns, and other environmentally-focused initiatives.
- Joint events, such as clean-up drives, recycling workshops, and public lectures, will be organized to encourage active participation and create a sense of environmental responsibility among the community members.
- Both parties will actively involve community stakeholders, including residents, local businesses, and organizations, in the planning and implementation of sustainable waste management projects.

Duration and Review:

This MoU shall be effective from the date of signing and remain in force for a period of 5 years. It will be subject to review and renewal by mutual agreement between the College and The Municipal Board.

This MoU would represent the understanding and commitment of both parties to work collaboratively towards waste management, internships, and community participation initiatives. It sets forth the framework for cooperation and lays the foundation for a sustainable and mutually beneficial partnership.

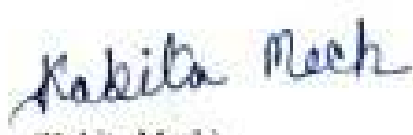
Arbitration

In case of any dispute relating to any aspect of collaboration under this MoU, the Principal, Gargaon College and Chairman, Simaluguri Municipal Board will jointly resolve the dispute in a spirit of mutual respect and shared responsibility.

This MoU is hereby signed by the Heads of the respective institutions/boards.

Date:
Place:


(Dr. Sabyasachi Mahanta)
Principal
Gargaon College
Simaluguri, Sivasagar (Assam)


(Kabita Mech)
Chairperson
Simaluguri Municipal Board
Sivasagar, Assam



Snippets of workshops regarding Plastic waste management and upcycling

- To raise awareness and build skills among the stakeholders of the college and the community for upcycling of plastics workshops and training programs are held from time to time.
- Students also conduct exhibitions to show case the items upcycled from plastic bottles etc.
- Workshops are also conducted in the adopted village to help enhance the livelihood of people especially women by converting wasted plastic into bricks, earrings, decorative items etc., which can be sold by them.





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Vermicomposting Units at College





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Organic Garden





Newspaper clips on the waste management activities of the college

Workshop on solid waste management

OUR CORRESPONDENT

SIVASAGAR, May 7: A one day state level workshop on solid waste management was held at Gargaon College on Tuesday. The workshop was organized by ECO Club, Gargaon College in collaboration with NSS Unit and Department of Chemistry, Gargaon College and supported by Ministry of Environment, Forest and Climate Change, Government of India.

The workshop began with a plantation programme. Dr Sabyasachi Mahanta, acclaimed academician and Principal of Gargaon College delivered the welcome address. Emphasizing upon the need to protect one's environment in consideration of the drastic signs of climate change, Dr Mahanta underscored the urgency of making citizens aware of the ways to manage solid waste in order to keep the environment clean and maintain the equilibrium of the ecosystem. He cited several instances of the lackadaisical attitude of citizens towards the environment including the nuisance of spitting in public spaces. He explained the hazards of such practices

and the necessity of changing such habits inimical to the environment.

Dr Rimjim Borah, Coordinator of Eco Club, Programme Officer of NSS Unit and Head of the Department of Economics, Gargaon College in a comprehensive and illuminating presentation titled "Overview of Solid Waste Management" explicated the meaning and types of solid waste and methods of waste management.

Providing a statistics of waste deposition by different countries, she highlighted how India is among the 12 countries responsible for 60% of the planet's mismanaged plastic waste but is simultaneously classified as a "low-waste-producing" polluter. Using several concepts from Economics such as "Negative Externality", she highlighted the importance of consumption without exerting a negative effect on others.

Further, she emphasized the significance of Green accounting which serves as a vital tool to help in the management of environmental and operational costs of natural resources.

The second resource person, Dr Bikash Sarma, Assistant Professor of the

Department of Chemistry, Sonari College in an informative talk titled "Plastic Waste Management" explained about the formation of plastic, the ways to reduce the plastic waste, hazards of plastic waste and the different government regulations for management of such waste.

In another enlightening presentation titled "Upcycling of Plastics and Success Stories", Dr Saheen Shehnaz Begum, Assistant Professor of the Department of Chemistry, Gargaon College explained about the concept of upcycling of plastic by the process of creative redesigning to convert plastic made materials into functional products. The presentations were followed by a hands-on training on waste management conducted by the NSS volunteers of Gargaon College in which participants were trained how to turn wastes into wealth. Around 100 students from various schools along with teachers-in-charges participated in the workshop. The programme concluded with the vote of thanks delivered by Dr Rimjim Borah, Coordinator of Eco Club and Programme Officer of NSS Unit, Gargaon College.

Workshop on vermicomposting

OUR CORRESPONDENT

SIVASAGAR, May 6: As part of Environment Education Programme, Mission Life in Assam, a one day state level workshop on vermicomposting was organized by Eco-Club, Gargaon College in collaboration with the NSS Unit & Department of Zoology and supported by Ministry of Environment, Forest & Climate Change, Government of India on Monday. The programme was chaired by noted academic, poet and Principal of Gargaon College, Dr Sabyasachi Mahanta.

The programme started with the felicitation of the dignitaries and lighting of lamps. In his deliberation, Dr Mahanta highlighted the importance of raising awareness about environmental sustainability among the young generations for a

better future of the planet earth. He also pointed out the practice of vermicomposting can go a long way in the promotion of eco-farming. He also highly praised the efforts of the organizers in conducting the event. Dr Rimjim Borah, the coordinator of the Eco club and Programme Officer of NSS Unit, Gargaon College delivered a speech on 'Environmental Education Programme and Mission Life in Assam'.

Dr Borah focussed on the role of eco clubs for successful implementation of various themes of Life Mission for achieving sustainable eco-friendly environment in Assam.

Dr Arundhati Bordoloi, Subject Matter Specialist (Soil Science) of Krishi Vigyan Kendra, Sivasagar was invited as resource person of this workshop. Her delibera-

tion was on the topic, "The Science of Vermicomposting: Principles, Processes and Microbial Activity-Earthworms". Dr Bordoloi lucidly pointed out the science of vermicomposting as a clean, sustainable, and zero-waste approach to manage organic wastes.

A total 120 students of eleven (11) schools of Sivasagar district along with 17 teachers in charge enthusiastically participated in the workshop. These include Nazira Bortola HS School, Nazira HS & MP School, Panibil High School, Hahchara High School, Mothiachiga Rajmow High School, Bogidole High School, Dhi-taipukhuri H.S School, Ligitripukhuri High School, Kenduguri High School, Na-Mati High School, and Cherekapar High School.

Dr Surajit Saikia, the Coordinator of IQAC

demonstrated some video clips regarding organic farming in Gargaon College. A hands-on training was provided to all participants for construction of vermicomposting bins as well as preparation and maintenance of earthworms in various seasons. All total 160 participants including Dr Rina Handique, Vice Principal of Gargaon College, Dr Bidyananda Borkakoty, HoD, Deptt. of Education, Pranab Dowerah, HoD, Deptt. of Assamese and all faculties of Gargaon College, NSS Volunteers were present in this workshop.

The programme was moderated by Dr Rimjim Borah, Coordinator of Eco club and Programme Officer of NSS Unit, Gargaon College. Dr Borah offered vote of thanks to all the participants and resource person for making the workshop a grand success.



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Cleanliness Drive by teachers and students





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Liquid Waste Management

Waste water management, also referred to as liquid waste management, is an essential component of maintaining public health and the environment. In order to avoid water contamination and guarantee the sustainable use of water resources, liquid waste must be handled and treated properly. Chemicals used in labs for chemistry, zoology, and botany are diluted before being disposed of appropriately to get rid of any potentially dangerous materials, even in trace levels. Chemical waste from the lab is disposed of safely, both alkaline and acidic. It is not permitted to utilise radioactive or toxic compounds in laboratories.

Biomedical Waste Management

It is essential to manage biological waste in order to stop the spread of illnesses, save the environment, and promote public health. Materials produced in labs, healthcare facilities, and research facilities that might be hazardous to the environment or public health because they are radioactive, poisonous, or contagious are categorised as biomedical waste. Biomedical waste is created in very tiny quantities at the institute, but it is disposed of carefully and correctly.



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Hazardous Chemicals and radioactive waste Management

To avoid contaminating the environment, safeguard public health, and adhere to legal requirements, managing radioactive waste and dangerous substances is crucial. As of right now, these wastes are not produced on college campuses.

E-Waste Management

The complex nature and possible health and environmental risks of e-waste provide special concerns. Electronic equipment, parts, and accessories that have been abandoned may contain dangerous elements, making them a type of trash. Electronic component components include polychlorinated biphenyls (PCBs), cadmium, lead, and mercury, which are harmful to the environment and human health when present. Few electronic waste items are generated on campus. Electronic garbage and damaged items from the computer lab are stored properly. Encouraging the usage and recycling of e-waste as a symbol of excellent practices, Gargaon College provides an Add-on course on computer hardware networking. In order to dispose of E-waste in a scientific way, the institute has decided to collaborate with a vendor to collect it from the campus and transport it to a disposal location.



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YouTube Links

[Prepare Leaf Compost at College Campus](#)

[Making and using leaf compost at College campus](#)

[Vermicompost Project](#)

[One Day Workshop on Vermicompost for Green Livelihood](#)

[Kharif Vegetables at Organic Garden](#)

