



ST. XAVIER'S COLLEGE MAHUADANR

Estd: 2011. Affiliated to Nilamber-Pitamber University, Medininagar NPU/R/953/11

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World Environment Day

5th June 2022

Theme: "Only One Earth!"

Mahatma Gandhi National Council of Rural Education (MGNCRE) calling Higher Education Institutions to contribute to *Swachh* and Sustainable Earth. Joining hands with the MGNCRE in protecting the only one earth, students and faculty of St. Xavier's College, Mahuadanr took number of initiatives to complete the following activities:

Activity 1: Build up! Outdoor classrooms and healthy open places on Campus


Activity 2: Greening and Greenery Rating

Activity 3: Reinforcing Greenery on Campus

Activity 4: Zero waste Championship

Activity 5: Our Green Decisions- Show case your campus video

Activity 6: Programme as per the theme- **Only One Earth!**



Principal
St. Xavier's College
Mahuadanr

Principal
St. Xavier's College

Activity-1

Outdoor Class Room

St Xavier's College, Mahuadanr practices outdoor class room under the shade of the green trees beside the pond in the campus which makes the students one with the nature. Students' performance increases when they learn outside the classrooms.

Objectives of Learning Outdoors:

- Outdoor education effectively employs a greater range of students' intelligences.
- Learning outdoors is active and increases students' physical, mental and social health.
- Outdoor learning and access to nature also decrease stress levels of students and teachers.
- Learning outdoors supports student development. Outdoor education and play supports emotional, behavioural and intellectual development.
- Learning outdoors develops a sense of self- independence, confidence, creativity, decision-making and problem-solving skills, and empathy towards others, motor skills, self-discipline and initiative.

With the goal of achieving the above objectives, Outdoor Classroom teaching was practiced specially during summer. Practical related subjects are often taken outside the classrooms. As per the requirement NSS in collaboration with Eco-Club identified open place which was converted to outdoor classroom near the College Pond under the trees. The outdoor classroom was named as EDTECH ECOSYSTEM and a plot was prepared for outdoor classroom by marking with white lime powder. The class room was in circular shape and rectangle shape. The outdoor classroom could accommodate 40 people in general. Saplings of medicinal, flowering and fruit bearing plants were collected, planted and made boundaries of the plot. Based on the soil local species were collected by students and planted in the campus. The Swatchhta & Green Teams along with the club members discussed and found environmental creativity and innovation which could be added- a way forward. It was decided to keep Beautiful flower gardens around outdoor classroom which would add more aesthetic value.



Area selected for Outdoor Classroom



Outdoor Classroom near the pond



Layout of Outdoor Classroom



Outdoor learning

ACTIVITY 2

Greening and Greenery Rating

The main aim of Greening and Greenery Rating is to understand, evaluate and take action for the development of greening of St. Xavier's College, Mahuadanr. This rating was initiated for College's performance as an environmentally aware and prepared institution. Specifically, it includes:

1. Whether students have a campus quality of life that is both healthy and sustainable.
2. How well a college is preparing students for employment in the clean-energy economy of the 21st century as well as for citizenship in a world now defined by environmental concerns and opportunities.
3. How environmentally responsible a College's policies are.

St. Xavier's College Mahuadanr has taken following steps with regard to Greening and Greenery Rating. This survey is to spread awareness about World Environment Day and popularize the concept of sustainability and living in tune with the nature.

First of all, with the help of NSS & Eco-club a study on Area under green cover, Campus Nursery Management, Plant Protection Management, Constructed Area, Green area inside the boundary, Un-constructed barren area and others was done. Later the Data from the survey was consolidated for analysis and the score was noted. For the development and modification of land left under plantation was selected by the team by using Google map. The Campus Map was prepared and marked the area which need immediate environmental action. Further, list of things to do was done for the same. The Campus Map with highlighted area and list of things to do was displayed on the Notice board for Students and Staff to be aware and for their contribution. Lastly the Swatchhta team met all the departments and conducted meetings for exchange of ideas, holistic understanding of the campus scenario in terms of greenery and way forward. The following are the decision taken:

Nursery Management:

- The seeds from trees and shrubs in and around the campus are to be collected.
- They are to be planted in the campus nursery and kept under supervision of trained nursery manager.

- The saplings from the campus nursery are to be planted in empty and barren spaces, in and around the campus.

Plant Protection and Plantation Management:

- There should be continuous watch of the growth of the saplings and later the planted trees.
- Old trees which fall are to be replaced.
- Wherever there is a need for protection from pests and insects bio pesticide is to be administered.
- Wherever a sapling doesn't survive replacement plantation is to be done as a strategy.

Water harvesting:

- Since the soil is eroded, first set up water harvesting structures, such as swales, trenches, percolation tanks. These systems will increase the efficiency of water use.

Sapling plantation:

- Saplings from nurseries are to be used in the first plantation cycles. The goal is to revive soils and life by planting diverse species.

Fencing:

- Cattles are common. To avoid damage, fences are to be raised around the boundaries.

Local crops:

- Local crops such as millets, pigeon peas, green grams are to be grown.

Green area on the campus

S. No.	Criteria	Maximum Points	Points scored
1	Area under green cover	66	66 (Area under greenery=41.25%)
2	Campus Nursery Management	14	10
3	Plant Protection Management	20	15
	Total	100	91

Find out the total land area available on the campus and fill in the table.

Total Land Area Occupied	
Description	Area in Square Metres
Constructed area	8094
Green Area inside the boundary (Green area includes any area which has grass cover, tree cover and horticulture)	60705
Unconstructed barren area or others	28329
Total land area	97128

Nursery Management

S. No.	Campus initiatives	Points	Management response	Scored
1	Allocation of designated place for plantation	4	Yes	4
2	Maintenance of nursery with shade and water	4	Yes	4
3	Nursery staffed	4	Yes	4
4	Nursery strategy for campus and community plantation	4	Yes	4

Plant Protection and Plantation Management

S No		Maximum Points	Yes	No	Points Scored
1.	Plantation monitoring	4 Pt(if yes)	Yes		4
2.	Plant support with bio fertilizers and water support	4 Pt(if yes)	Yes		4
3.	Replacement plan for plantation	4Pt(if yes)	Yes		4

4.	Controlled Bio pesticide administration	2Pt(if yes)	Yes		2
5.	Locational Drip support	6 Pts(if yes)		No	0
	Total		20		14
			Points		

**Environmental Action
for Greenery**



Campus Map for Greenery

Environmental Action for Greenery

- Bushes are to be cut and to leave them to decay.
- The professor will examine the lab results of soil samples taken from allotted area for Greenery, and advise what fertilizers, etc and what crops to cultivate.
- Water Availability
- Manure Availability (Basic Cow Dung, Cow Urine etc.)
- Plant any plant that grows quick as per your agro-climatic zone and once it is grown cut them to decay in the land.
- Water harvesting
- Sapling plantation
- Fencing

- Regenerate through biodiversity
- Animals for regeneration
- Local crops such as millets, pigeon peas, green grams are also grown.



Display on the Notice Board



Greening area by planting saplings



Departmental meeting by Green team for exchange of ideas

Activity 3

Reinforcing Greenery on Campus

In a move to reinforce Greenery which improves energy efficiency and enhances the environmental quality of the campus, St. Xavier's College, Mahuadanr with the help of the Green Student Teams named as Green Warriors conducted a discussion on the success story of the College in achieving the District Champion award from MGNCRE in 2022.

I. A massive tree plantation was organised in which students of our college were asked to bring saplings from their homes. The programme was organised on 27th May 2022. On the occasion of the tree plantation drive, honourable Principal Dr. Fr. M.K. Jose addressed the students and encouraged the Green Warriors for their commitment in reinforcing greenery on the campus. The samplings were planted in the barren areas of the campus. Each student adopted a plant vowed to take care of it.

II. Sustainable campus nursery for mango trees will be created through the formation of Mango Seed Bank. The Mango season is yet to arrive.



nauguration of Plantation



Swatchhta team and green team (Green Warriors) groups



Vision orientation to the team members

Activity 4

Zero Waste Championship

The objective of the Zero Waste Management is to prevent the generation of waste and reduce consumption. It ensures that products are made to be Reused, Repaired and Recycled back into nature. The zero waste lifestyle is a mission to save the earth from waste and recyclable materials.

St. Xavier's College Mahuadanr has taken following steps with regard to zero waste. First of all, the college has a group of volunteers called *Swachhta* Team under Eco-Club. They take special care in keeping the campus free from waste. Using Google map a campus map was prepared and the virtual division was made on the map. Each *Swachhta* team was given specific plots on the campus to observe Zero Waste for one week. The team demonstrated waste management process to the fellow students. They used eight bins to dispose waste. The bins were labelled with different labels of waste such as organic, cooked food, paper, metal, plastic, glass, e-waste, chemical and bio-waste. The *Swachhta* teams guided the students in the segregation of waste before disposing the wastes in to the bins. The different component of the ball point pen was separated and disposed into respective bins.

The *Swachhta* teams also observe Electricity free days except in extreme summer, during which the Institution refrain from using electric appliances such as fans and light except in cases unavoidable. Fuel free days are observed as cycle day when everyone uses bicycle for conveyance. The team also conducts awareness programme about creating a plastic free environment. Plastic free days are observed regularly in the college. The team also actively participated in the vaccination campaign conducted in the college with the help of the local administration. The students of the *Swachhta* team made a tour of the villages conscientizing the local people about the importance of getting vaccinated.

The team also got involved in organizing competitions on "Best out of Waste" i.e. using waste materials for Creative Arts and Crafts.

The *Swachhta* team members take care to provide water feeders for birds, to make compost from green waste, to collect seeds and distribute seeds, maintain herbal garden, place segregation of wastes at different places in the campus.

Rain water harvesting projects are monitored by the team. The administration appreciates the effort taken by the teams to create zero waste in the campus and the best team was awarded. They were given Zero Waste Championship awards and certificates.

On the occasion of the World Environment day, 5th June *Swatchhta* team members took a pledge to keep the campus and the neighbourhood clean. The following activities were conducted by the *Swatchhta* team

1. Created a few more Swatchhta Teams under Eco-Club with names of students.
2. Using Google map a campus map was prepared and the virtual division was made on the map. Each *Swatchhta* team was given specific plots on the campus to observe Zero Waste for one week.
3. The team demonstrated waste management process to the fellow students. The bins were labelled with different labels of waste such as organic, cooked food, paper, metal, plastic, glass, e-waste, chemical and bio-waste.
4. Observe electricity free days
5. Fuel free days
6. Plastic free days
7. Participate in the vaccination campaign conducted in the college.
8. The students of the *Swatchhta* team made a tour of the villages' conscientising the local people about the important of getting vaccinated.
9. The team also got involved in organizing competitions on "Best out of waste" i.e. using waste materials for creative arts and crafts.
10. The *Swatchhta* team members take care to provide water feeders for birds, to make compost from green waste, to collect seeds and distribute Seeds, maintain herbal garden, place segregation wastes at different places in the campus.
11. Rain water harvesting projects are monitored by the team. The administration appreciates the effort taken by the teams to create zero waste in the campus and the best team was awarded.
12. They were given zero waste championship awards and certificates. Name the students.
13. On the occasion of the World Environment day, 5th June *Swatchhta* Team members took a pledge to keep the campus and the neighbourhood clean.



Area selected for Zero Waste Management



Swachhta team of SXCM





Solid waste management (In house compost making)



Fuel free day



Plastic free college campus



Plastic free campaign at Gurgurtoli village



Vaccination drive at college



Best out of Waste competition



Water feeders for birds in the campus



Green Warriors of SXCM

Activity 5

Our Green Decisions

Aim: To instil in students the need to save the earth for a sustainable future.

Objectives:

1. To reduce energy consumption by switching to renewable energy source (electrifying the campus through solar panel).
2. To recharge groundwater through traditional method of water harvesting (a large pond in the campus).
3. To promote environmental literacy by the observance of environmental days of the year in the institution.
4. To create plastic free zone (to do something drastic to ban plastic).
5. To save energy by switching off electric appliances when not in need.
6. To observe compost awareness week with the actual production and use of bio-manure by the students.
7. To ensure the protection of the environment through effective waste management measures (segregation of waste).
8. To adopt a plant for next generation (each one, plant one).
9. To meet the increasing demand of water through rainwater harvesting (a large tank is under construction).
10. To release water into fields and garden by channelizing it through waste water management.

The success story of achieving our green initiatives is briefed by our principal Dr. Fr. M. K. Jose.

What, why and how aspects of green initiatives of the campus are explained by Asst. Profs. Shalini Bara, Saheb and John Vinod Kujur respectively.

The procedures involved in making the campus green and eco-friendly through green decisions are explained by members of the green team: Nancy, Dona, Ujala, Abhijeet, Rekha, Anjil, Nitesh, Laxmi, Akansha and Amar Punit.

Given below is the link of video:

<https://www.youtube.com/watch?v=AMbFzaZkjJk>

Activity 6

Plantation drive in the neighbourhood community

Vijay Nagar, Shantipur and Mahuadanr

Date: 25th May 2022

MGNCRE calls for the active involvement of the Higher Education Institutions (HEIs) in rehabilitating the environment by contributing to Swachh and Sustainable Earth. St. Xavier's College, Mahuadanr responded to this call magnanimously by taking up plantation drive in the neighbourhood community, Vijay Nagar, Shantipur and Mahuadanr on 25th May 2022. This was a creative preparation for the world environment day 2022, which had the theme, **“Only One Earth”**. The program was coordinated by NSS unit of the college under the supervision of Asst. Profs. Maxcentius Kujur, John Vinod Tirkey, Ronit Marcel Xess, Shephali Prakash and Shalini Bara.

PROCEDURE:

The students of the NSS unit and the professors assembled in Vijay Nagar, Shantipur at 10AM. There was fruitful interaction between the students and the villagers. The students spoke about caring for the ‘Only One Earth, which is our own planet, which is, in fact, Our Common Home’. Villagers shared their views on the traditional way of caring for mother earth. Slogans related to the environment were repeated by the students such as:

“HAMARE PEDHON KA SANRAKSCHAN, HAMARE BHAIVSHYA KA SANRAKSCHAN”- "Protection of our trees is the, protection of our own future".

“SABKO AAGE AAKR PEDH LAGANA HAI”- All must come forward and plant trees”.

“PARYAWARAN HAMARA RAKSHA KAWACH HAI ISKA SANRAKSHAN KRNA HAMARA KARTAVYA HAI”- Environment is our defence shield, it is our duty to protect it”.

Then the students made a tour of the homes with the villagers and collected as many saplings as they could find. They included Mango, Litchi, Jackfruit, Indian Blackberry, Shisham, sal etc. The students and the villagers cleared the barren areas in the village, dug pits, put manure, planted the saplings and watered them.

Students took the green decision to take care of the plants adopted by them. Planting of trees is important to nurture the environment and protect it against air pollution and global warming. The plantation drive was a huge success as it brought awareness to the students and the villagers about each citizen's duty to care for the only one earth. St. Xavier's College, Mahuadanr stands as a beacon for environmental resilience.



PLANTATION DRIVE IN THE CAMPUS

Date: 28th May 2022

Joining hands with the MGNCRE in protecting the only one earth, students and faculty of St. Xavier's College, Mahuadanr launched a massive plantation drive before the onset of monsoon as part of week-long World Environment Day celebration. On May 28th 2022, the students, who are the Green Warriors of SXCM, brought sapling from their homes and conducted a plantation drive in the campus to make the campus 'Go Green'.

It was mainly to create green canopy and its ambient environment so that heat waves could be reduced.

PROCEDURE:

The students gathered at the entrance of the college at 9:30AM with the saplings collected from their homes. The principal Dr. Fr. M. K. Jose addressed the students and spoke about the importance of planting more trees in and around the campus. He congratulated the Green Warriors for their initiative in bringing the saplings from their own homes and organizing this drive. More than 100 saplings were planted in the campus to reinforce its greenery. Students participated passionately in the activity. Spades were brought, pits were dug and saplings were planted. Each student adopted a plant. To mark the occasion, posters related to plantation and protection of environment was also displayed. At the end, the principal appreciated all the green warriors for the efforts put in to make the event a great success. On this occasion the best green warrior's award was given to Nancy Baxla (Department of Botany) and Nitesh Kumar Soni (Department of Mathematics) their initiative and wholehearted cooperation towards this drive. Indeed, the programme was a grand success.



Massive tree plantation drive in the college campus



Tree plantation by the Principal



Plantation by the students

Similar activities and outreach programs related to caring of environment are conducted in the college throughout the year. The following photos are some of the highlights of such events.



Environmental awareness program at Rajdanda village



Helping the younger generation to care for the Only Earth at Prathmic Middle School, Rajdanda



Cleanliness drive at St. Michael School, Sale




Educating the villages to make Bio-manure at GurgurToli

Conclusion:

St. Xavier's College, Mahuadanr is grateful to MGNCRE for providing such an opportunity to initiate and develop green practices in the college campus as well as neighbourhood communities. It brought awareness among the students and staff, the resources available for use for future generations. Every activity made us eco- friendly to stay and live with the intent of not to harm the environment we live in.

Thank you!



Principal
St. Xavier's College
Mahuadanr

Principal
St. Xavier's College