



Rayat Shikshan Sanstha's

R. B. Narayanrao Borawake College, Shrirampur
Dist. Ahmednagar - 413709

Best Practice - I
for
Academic Year 2023-24
Green Campus Initiatives





Rayat Shikshan Sanstha's
R. B. Narayanrao Borawake College, Shrirampur

Best Practices (2023-24)

Best Practice- I

1) Title of the Practice: Green Campus Initiatives.

2) Objectives of the practice:

- To promote awareness of environmental issues among the students, staff, and society.
- To achieve better sustainability on the campus and improve the quality of life of all the Stakeholders.
- To conserve water resources through rainwater harvesting.
- To plant rare and medicinal/herbal plants on the college campus.
- To implement the 3 'R' (Reduce/Reuse/Recycle) policy on the campus.
- To enrich organic farming activity to avoid the use of pesticide-based vegetables.
- To use renewable energy resources (solar energy).
- To support and implement "Swachh Bharat Abhiyan" for healthy India.
- To organize seminars/workshops, expert lectures, etc. on environment-related issues.

3) The Context:

Now a day, clean environment is a basic need of human beings for a healthy life. The main aim of the practice is to impart knowledge, create awareness, and to develop an attitude of concern, and nurture the necessary skills to handle environmental and pandemic issues. The semi-urban region and green landscaping of our college are the necessary features for shaping

and sustaining an eco-friendly campus. The college is spread over 42.27 acres of lush green area. The campus is an abode of wildlife species which has provided the context for initiating and imparting the practice for an eco-friendly campus.

4) The Practice:

- The college conducts periodically a green audit by external peers. The objective of the green audit is to promote Environment Management and Conservation on the college campus and introduce and aware students of the real concerns of the environment and its sustainability.
- Department of Botany has conducted programs for labelling the plants on the college campus.
- Department of Zoology has developed Vermicomposting unit on the campus.
- Solar street lights along the roadside on campus are also installed and used efficiently.
- The college is using renewable energy like solar energy for water heaters in girls and boy's hostels.
- The college has installed a Solar Power Generation Plant of 53 kWh.
- Effluent Treatment Plant (ETP) has been installed for the treatment of effluent generated from Chemistry laboratories.
- In this year Rs. 6.13 Lakhs have been incurred on green initiatives and waste management on the campus.
- Our institution has made the MoU's with Amol Scientific Glass Works, Babhaleshwar Tal. Rahata and Karimbhai Raddiwala Depot, Shirampur respectively for proper disposal, recycling and reuse of raw glass materials and raw papers (Raddi).
- The college organizes seminars, workshops, expert lectures etc. on various challenging environmental issues.

- The energy audit of consumption of electricity in the college is conducted periodically by Aditi Engineering Services, Nashik.
- The objective of the audit is to identify energy consumption and conservation opportunity.

5) Evidence of Success:

This best practice has proven to be successful through the following activities:

- Through periodical tree plantations, Flora and Fauna on the campus have enriched, which has turned into an eco-friendly campus.
- Awareness campaign for the plastic-free campus through signboards/display boards made campus plastic-free.
- Through the Effluent Treatment Plant (ETP), effluents from the Chemistry laboratory are recycled and treated water is utilized for different purposes.
- Vermicomposting units helped us to convert solid waste into organic fertilizers which have minimized the solid waste on the campus.
- The college has introduced UGC-funded Career Oriented Courses such as Vermicomposting and Rain Water Harvesting.
- “No Vehicle Day” helps us to minimize the air pollution on the campus.
- Through workshops/ seminars/expert lectures/ NSS/NCC activities, students are made aware of environmental issues.
- Green audit and Energy audit of the campus are done periodically and regularly.
- The Langstroth Hive Boxes are placed in the botanical garden for the conservation of honey bees and effective pollination of flowering plants.

6) Problems Encountered and Resources Required:

- Green Campus initiatives are challenging so it requires determination and a long-term assurance from all the stakeholders.

- Green Campus initiative is a rather expensive practice. It needs expert advice and investment of resources.
- Less awareness of students and the community towards environmental issues.

7) Notes (Optional): --

Contact details:

Name of the I/C Principal: Dr. Pravin V. Badadhe

Name of the Institution: Rayat Shikshan Sanstha's, R. B. Narayanrao Borawake College,
Shrirampur

City: Shirampur

Pin Code: 413709

Accredited Status: A⁺ Grade with CGPA 3.44 (3rd Cycle)

Work Phone: 02422-222347

Website: www.rbnbcollege.com

E-mail: rbnbcollege@gmail.com

Mobile: +91 9834566259



Rajat Shikshan Sanstha's

**R. B. Narayanrao Borawake College, Shrirampur,
Dist. Ahmednagar - 413709**

Best Practice - I

Green Campus Initiatives

(2023-24)

Geo-tag Photographs of Campus, Audit

Reports, Bills/Vouchers and Water

Conservation Facilities in the Institution

Botanical Garden











GPS Map Camera



Shrirampur, Maharashtra, India
Jm9f+qcx, Shrirampur, Maharashtra 413709, India
Lat 19.619641° Long 74.673752°
21/12/24 10:39 AM GMT +05:30



GPS Map Camera



Shrirampur, Maharashtra, India
JMCF+575, Shrirampur, Maharashtra 413709, India
Lat 19.620302°
Long 74.67328°
26/02/24 10:37 AM GMT +05:30

Water distribution to garden through Sprinklers and Drips



Underground Pipeline system for watering the plants in Botanical Garden



Cactus House in Botanical Garden



Plant Cultivation



Tamarind Project on College Campus

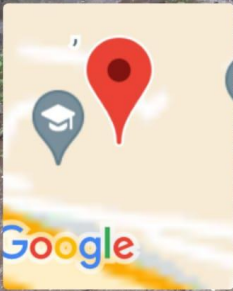


Bore well recharge Pit on College Campus

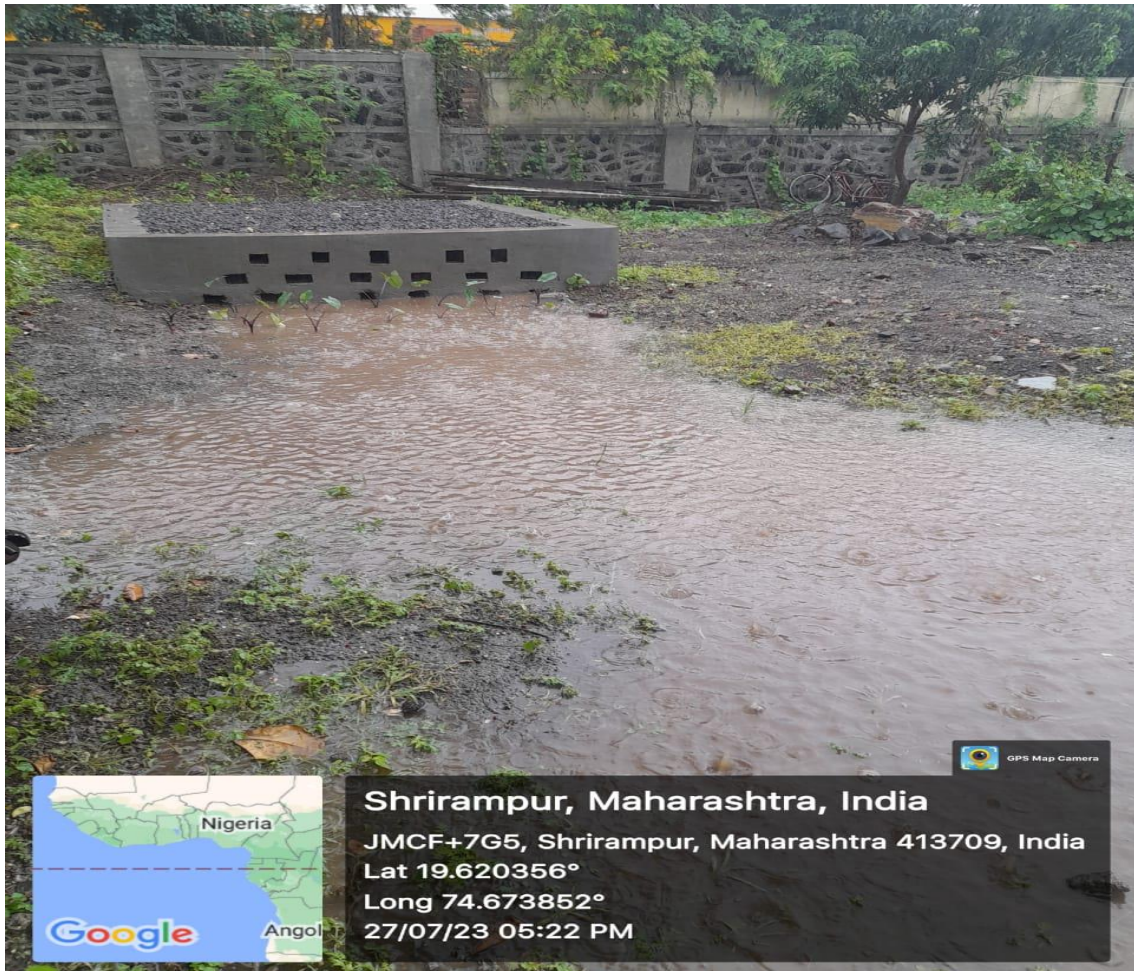




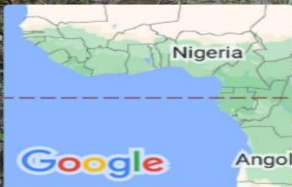
GPS Map Camera



Shrirampur, Maharashtra, India
JM9F+RC9, Shrirampur, Maharashtra 413709, India
Lat 19.619851°
Long 74.673672°
14/10/22 03:49 PM GMT +05:30



GPS Map Camera



Shrirampur, Maharashtra, India
JMCF+7G5, Shrirampur, Maharashtra 413709, India
Lat 19.620356°
Long 74.673852°
27/07/23 05:22 PM

Roof-top rain water harvesting and ground water recharge in Tamarind Project



Construction of Bunds for rain water recharge



Vermicomposting Units



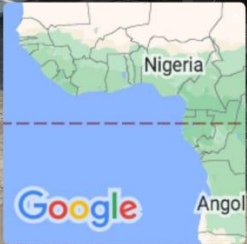


Toka (Kutti) Machine for Vermi-compost Project



Solar Panels in College Campus

Administrative Building



Shrirampur, Maharashtra, India
JMCF+249, Shrirampur, Maharashtra 413709, India
Lat 19.62031°
Long 74.672751°
28/10/23 02:55 PM

Chemistry Building



Shrirampur, Maharashtra, India
R.B.N.B.College, JM9F+PCF, Shrirampur,
Maharashtra 413709, India
Lat 19.619309°
Long 74.673556°
12/01/23 02:16 PM GMT +05:30

MCVC Building 1



 **GPS Map Camera**

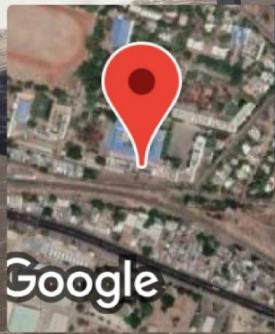
Shrirampur, Maharashtra, India

JM9F+J2W, near RBNB College, Shrirampur,
Maharashtra 413709, India

Lat 19.619087°


Long 74.672706°

12/01/23 02:31 PM GMT +05:30



MCVC Building 2



 **GPS Map Camera**

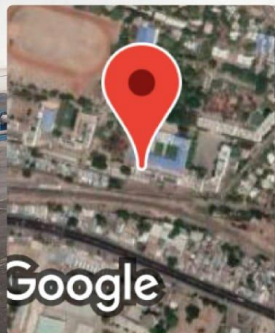
Shrirampur, Maharashtra, India

JM9C+MX6, Shrirampur, Maharashtra 413709,
India

Lat 19.61919°

Long 74.672342°

12/01/23 02:30 PM GMT +05:30



Ladies Hostel 1



GPS Map Camera

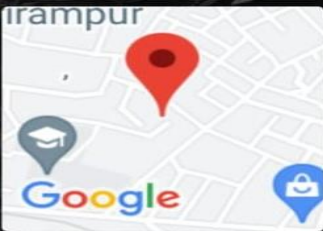


Ranjankhol, Maharashtra, India
JJC9+6RC, Ranjankhol, Maharashtra 413709, India
Lat 19.620705°
Long 74.61953°
21/12/24 02:31 PM GMT +05:30

Ladies Hostel 2



GPS Map Camera



Shrirampur, Maharashtra, India
JMCF+6PW, Shirampur, Maharashtra 413709, India
Lat 19.620669°
Long 74.674356°
30/10/23 09:26 AM

Solar water heaters in College Campus





Girls Hostel 2



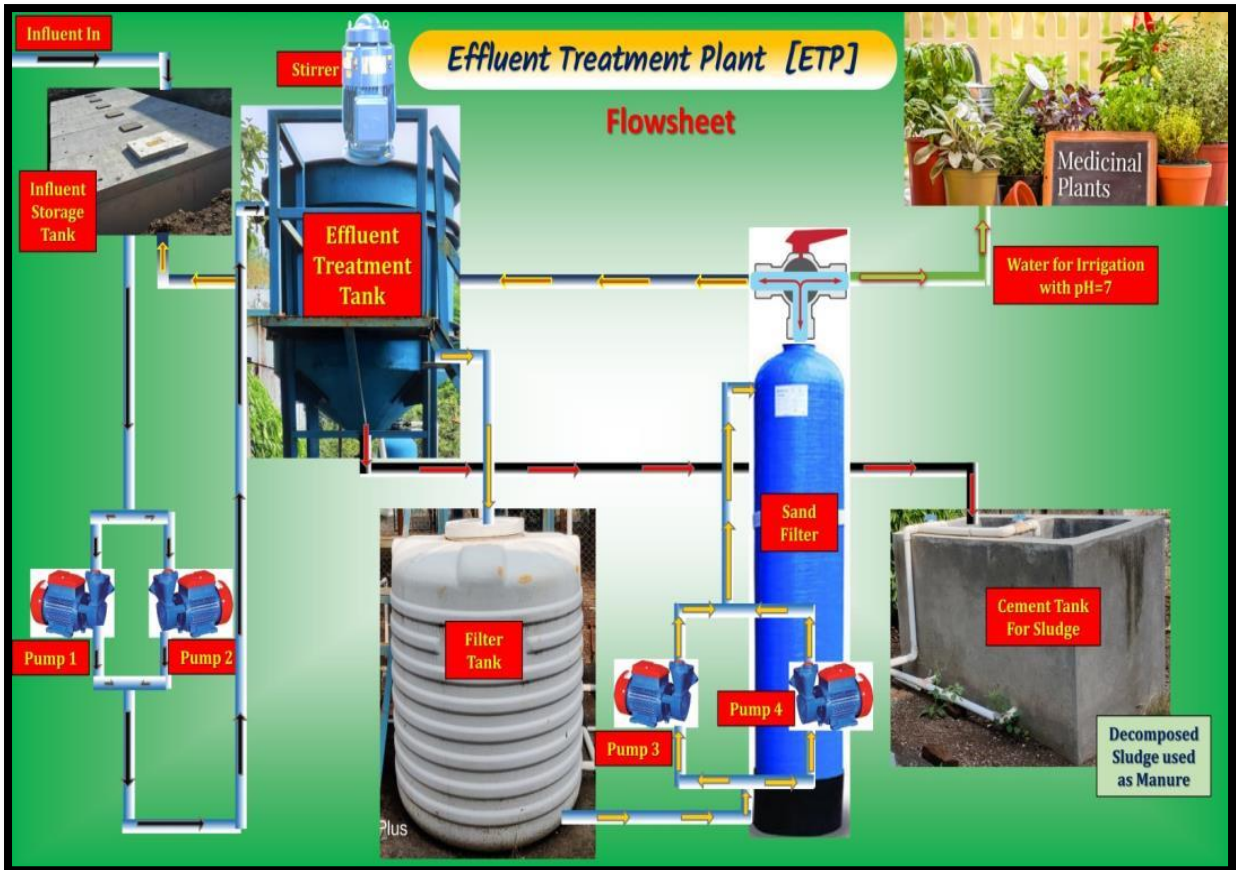
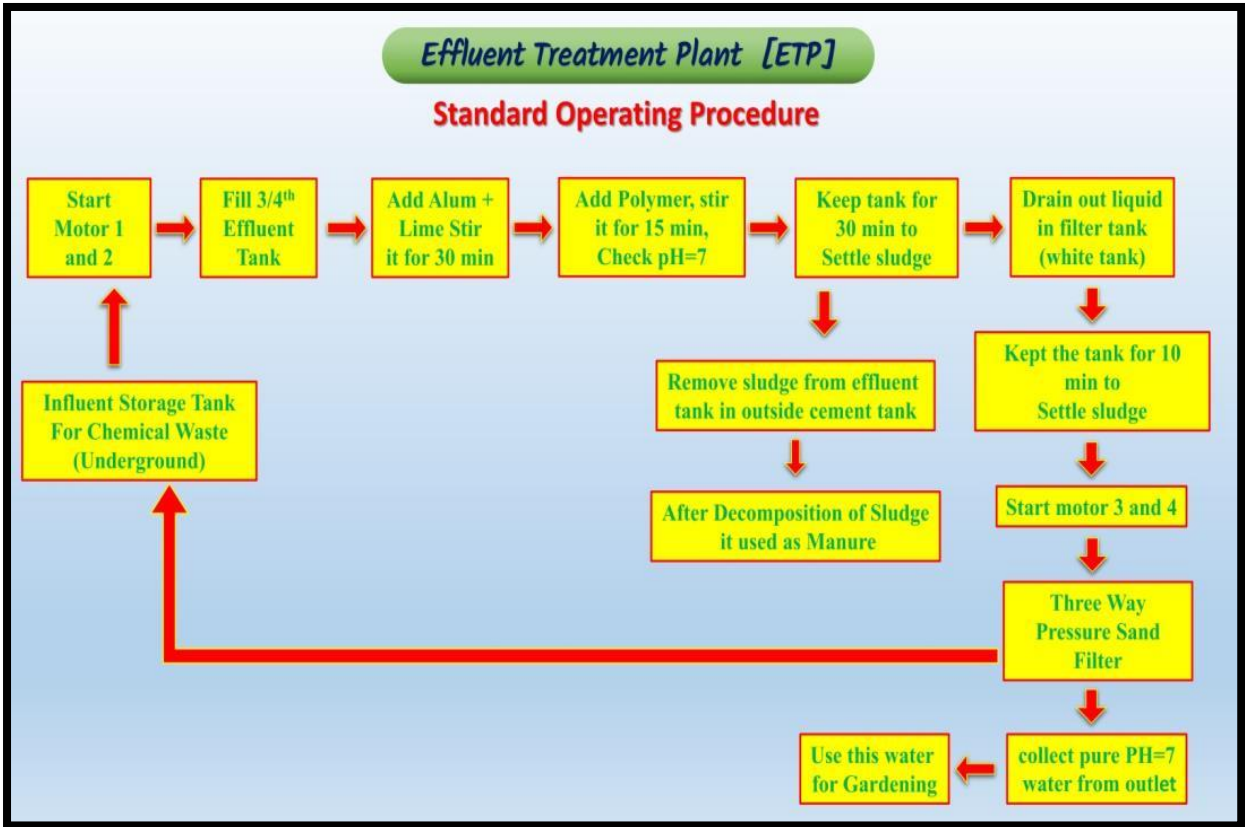
Boys Hostel



Ranjankhol, Maharashtra, India
JJC9+6RC, Ranjankhol, Maharashtra 413709, India
Lat 19.620705°
Long 74.61953°
21/12/24 02:30 PM GMT +05:30



Effluent Treatment Plant (ETP)



**R. B. Narayanrao Borawake College,
Shrirampur**

**Department of Chemistry
ETP-Effluent Treatment Plant**



Introduction

Effluent treatment plant cleans industrial effluents, Laboratory waste water, contaminated water from rivers and lakes, and so on just in order to reuse the water for additional purposes. Along such lines, water is reutilized and sustained. In fact, such gushing treatment ensures that any contaminant will be expelled from the water making it reusable. It is mostly used in industries such as pharmaceuticals, textiles, tanneries, and chemicals where there is a chance of extreme water contamination. Nevertheless, how this treatment will be applied may vary from industry to industry. Such treatment plant ensures that the contaminated and polluted water from industries get treated and become reusable before being released back to nature. Without this treatment, it won't be possible for humans to get clean usable water for household chores.

Applications of ETP

1. Food and processing industries
2. Pharmaceutical industry
3. Textile and Paper industries
4. Automobile industries
5. Textile and dye industry
6. Dairy and Beverage industries

Problem encountered and resources required

The problem of lack of technical assistance and trained personnel. The lack of space as the centralized facility can be planned in advance to ensure that adequate space is available. The problems of monitoring for the pollution control boards. To organize the disposal of treated wastes and sludge and to improve the recycling and reuse possibilities as once individual units are required to pay for waste treatment/disposal, they tend to adopt means to reduce waste generation. Chemicals are costly and require continuous power supply. Chemistry department staff and students shows active involvement in this project.

Objectives

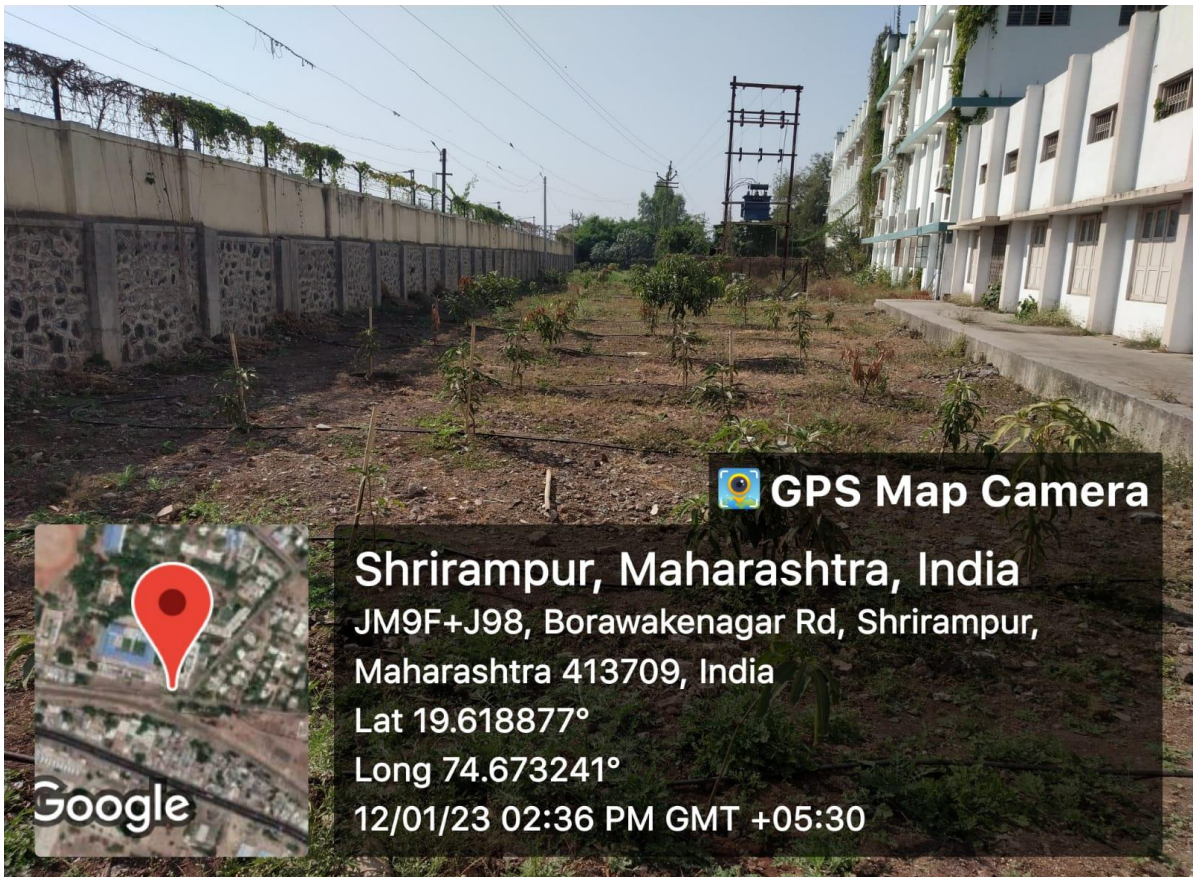
1. To improve quality of waste water.
2. To eliminate the pollutants and toxicants from the waste water.
3. To preserve the water quality of natural water resources.
4. To make wastewater usable for other purposes.
5. To prevent the harmful diseases.
6. To reduce the treatment cost for individual units while protecting the environment.



Effluent Treatment Plant (ETP) for water recycling

Tree Plantation at College Campus





Plastic-free Campus



Shrirampur, Maharashtra, India

JMCF+249, Shrirampur, Maharashtra 413709, India

Lat 19.61987°

Long 74.672675°

12/01/23 01:51 PM GMT +05:30



Google

GPS Map Camera



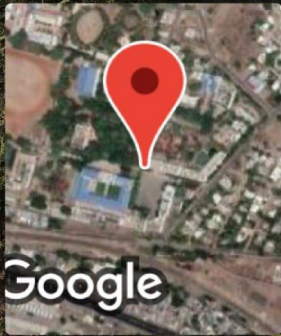
Shrirampur, Maharashtra, India

JM9F+RC9, Shrirampur, Maharashtra 413709, India

Lat 19.619758°

Long 74.673211°

12/01/23 02:02 PM GMT +05:30



Google

GPS Map Camera

No Vehicle Day



Rayat Shikshan Sanstha's
R. B. Narayanrao Borawake College Shrirampur, Dist-Ahmednagar
(Autonomous)


Notice

Date: 02/08/2023

All the Teaching, Nonteaching staff and Students are Hereby Informed that Third Thursday of every month will be observed as "NO Vehicle Day" in the college premises to take care of the ecosystem.

All are requested to either use Bicycles or Electric Vehicles in the College Campus.




I/C Principal
R. B. Narayanrao Borawake College,
Shrirampur





E-Vehicle in the parking stand of the college

Audit Reports



Bio Geo Consultancy, Pune

School, Colleges, Company Green Audit, Energy Audit, Carbon Credit, Gender Audit etc.
Flat No. 14, Neelkanth Society, Bombay Sappers Colony, Wadgan Sheri, Pune 411014.
Email ID morerajani95@gmail.com Mobile No. : 8983349170

BGC/GA/2022-23/133

DATE : 9/01/2023

Certificate of Green Audit

This is to certify that the Environmental green Audit Report of 2022-2023 prepared by Bio-Geo Consultancy with due cooperation of the principal and staff of Rayat Shikshan Sanstha's R. B. Narayanrao Borawake College, Shrirampur, Tal.-Shrirampur, District- Ahmednagar - 413719, India, is prepared by following appropriate procedures, methods, knowledge and expertise in the field of Environmental Sciences.

We were actively associated with the process of collecting data and documentation of trees, bushes, grass cover and soils causing carbon sequestration. I have also conducted workshops of students and teachers on methods of quantification of biomass and Environmental Green Audit.

I wish a great future to the college and expect that the students and staff would be enthused to reduce carbon footprint by adopting methods of conservation of soil, water, plants and energy within the college campus and in society as well.

Place: Pune

Date: 9/01/2023

(Dr. Praveen G. Saptarshi)
Auditor

(Dr. Jyotiram More)
Coordinator



Bio Geo Consultancy, Pune

School, Colleges, Company Green Audit, Energy Audit, Carbon Credit, Gender Audit etc.
Flat No. 14, Neelkanth Society, Bombay Sappers Colony, Wadgan Sheri, Pune 411014.
Email ID morerajani95@gmail.com Mobile No. : 8983349170

BGC/GA/2022-23/11

DATE: 6/12/2022

ENVIRONMENTAL AUDIT

This is certified that Rayat Shikshan Sanstha's prepared by Bio-Geo Consultancy with due cooperation of the principal and staff of R. B. Narayanrao Borawake College, Shrirampur, Tal.- Shrirampur, District- Ahmednagar – 413719, India, has conducted in December 2022 to assess the Environmental initiative planning, efforts, activities, implemented in the college campus like survey, interviews, observations & Various Activities under this them like Green Audit, Energy Audit etc. The objective of this environmental audit is to reach the impact of equivalent initiatives for environmental maintenance of the campus and also to create environmental awareness among the students & stakeholders.

Place: Pune

Date : 06/12/2022

(Dr. Praveen G. Saptarshi)
Auditor

(Dr. Jyotiram More)
Coordinator



Bio Geo Consultancy, Pune

School, Colleges, Company Green Audit, Energy Audit, Carbon Credit, Gender Audit etc.
Flat No. 14, Neelkanth Society, Bombay Sappers Colony, Wadgan Sheri, Pune 411014.
Email ID morerajani95@gmail.com Mobile No. : 8983349170

BGC/GA/2022-23/134

DATE : 24/01/2023

Certificate of Carbon Sequestration

This is to certify that the Carbon Sequestration Report prepared by Bio-Geo Consultancy with due cooperation of the principal and staff of Rayat Shikshan Sanstha's R. B. Narayanrao Borawake College, Shrirampur, Tal.- Shrirampur, District- Ahmednagar - 413719, India, is prepared by following appropriate procedures, methods, knowledge and expertise in the field of Environmental Sciences.

I was actively associated with the process of collecting data and documentation of trees, bushes, grass cover and soils causing carbon sequestration. I have also conducted workshops of students and teachers on methods of quantification of biomass and carbon sequestration.

I wish a great future to the college and expect that the students and staff would be enthused to reduce carbon footprint by adopting methods of conservation of soil, water, plants and energy within the college campus and in society as well.

Place: Pune

Date: 24/01/2023

(Dr. Praveen G. Saptarshi)
Auditor

(Dr. Jyotiram More)
Coordinator

Expenditure on Green Initiatives

Main Kird 2023-24
R. B. Narayanrao Borawake College, Shirampur,
Dist- Ahmednagar - 413709

Botanical Garden Ledger Account

1-Apr-2023 to 31-Mar-2024

Page 41

Date	Particulars	Vch Type	Vch No.	Debit	Credit
12-6-2023	Cr Cash	Payment	164	2,250.00	
22-6-2023	Cr Cash	Payment	243	360.00	
8-7-2023	Cr Cash	Payment	314	500.00	
19-8-2023	Cr Cash	Payment	494	180.00	
28-8-2023	Cr Cash	Payment	531	8,225.00	
4-9-2023	Cr Cash	Payment	551	1,750.00	
	Cr Cash	Payment	552	1,750.00	
23-9-2023	Cr Cash	Payment	626	500.00	
13-10-2023	Cr Cash	Payment	715	420.00	
15-1-2024	Cr Cash	Payment	1147	8,610.00	
15-3-2024	Cr Cash	Payment	1373	660.00	
28-3-2024	Cr Cash	Payment	1442	120.00	
				25,325.00	
Dr	Closing Balance				25,325.00
				25,325.00	25,325.00

JR
I/C Principal
R.B.N.Borawake College
Shrirampur

Main Kird 2023-24
R. B. Narayanrao Borawake College, Shirampur,
Dist- Ahmednagar - 413709

College Garden Expenses Ledger Account

1-Apr-2023 to 31-Mar-2024

Page 52

Date	Particulars	Vch Type	Vch No.	Debit	Credit
12-6-2023	Cr Cash	Payment	163	2,250.00	
26-7-2023	Cr Cash	Payment	379	3,920.00	
	Cr Cash	Payment	380	1,750.00	
				7,920.00	
Dr	Closing Balance				7,920.00
				7,920.00	7,920.00


JR
I/C Principal
R.B.N.Borawake College
Shrirampur

Main Kird 2023-24
R. B. Narayanrao Borawake College, Shirampur,
Dist- Ahmednagar - 413709

Earn & Learn Scheme.
Ledger Account

1-Apr-2023 to 31-Mar-2024

Date	Particulars	Vch Type	Vch No.	Debit	Page 72 Credit
4-2023	Cr Cash	Payment	11	2,205.00	
	Cr Cash	Payment	12	2,250.00	
	Cr Cash	Payment	13	2,205.00	
	Cr Cash	Payment	14	1,260.00	
4-2023	Cr Cash	Payment	26	31,770.00	
4-2023	Cr Cash	Payment	37	1,260.00	
5-2023	Cr Cash	Payment	51	2,340.00	
	Cr Cash	Payment	52	2,160.00	
6-2023	Cr Cash	Payment	81	30,375.00	
8-2023	Cr Cash	Payment	160	2,475.00	
	Cr Cash	Payment	161	2,070.00	
8-2023	Cr Cash	Payment	189	1,575.00	
8-2023	Cr Cash	Payment	270	22,365.00	
7-2023	Cr Cash	Payment	324	3,870.00	
7-2023	Cr Cash	Payment	391	20,070.00	
8-2023	Cr Cash	Payment	483	3,015.00	
8-2023	Cr Cash	Payment	528	16,155.00	
9-2023	Cr Cash	Payment	666	39,645.00	
9-2023	Cr Cash	Payment	782	56,520.00	
10-2023	Cr Cash	Payment	875	90,405.00	
11-2023	Cr Cash	Payment	920	1,520.00	
12-2023	Cr Cash	Payment	1052	27,810.00	
1-2024	Cr Cash	Payment	1268	39,240.00	
	Cr Cash	Payment	1269	73,425.00	
2024	Cr Cash	Payment	1328	76,505.00	
				<u>5,52,490.00</u>	
Dr	Closing Balance				<u>5,52,490.00</u>
				<u>5,52,490.00</u>	<u>5,52,490.00</u>


I/C Principal
R.B.N. Borawake College
Shrirampur

Main Kird 2023-24
R. B. Narayanrao Borawake College, Shirampur,
Dist- Ahmednagar - 413709

Water Purifier Repairs
Ledger Account

1-Apr-2023 to 31-Mar-2024

Page 255

Particulars	Vch Type	Vch No.	Debit	Credit
Cr Cash	Payment	76	3,360.00	
Cr Cash	Payment	97	4,850.00	
Cr Cash	Payment	313	4,400.00	
Cr Cash	Payment	351	670.00	
Cr Cash	Payment	352	2,260.00	
Cr Cash	Payment	710	430.00	
Cr Cash	Payment	711	230.00	
Cr Cash	Payment	951	960.00	
Cr Cash	Payment	1317	400.00	
Cr Cash	Payment	1390	1,780.00	
			<u>19,340.00</u>	
Dr Closing Balance				<u>19,340.00</u>
			<u>19,340.00</u>	<u>19,340.00</u>

Jp
I/C Principal
R.B.N.Borawake College
Shrirampur

Building Kird 2023-24
R. B. Narayanrao Borawake College, Shirampur,
Dist- Ahmednagar - 413409

Plumbing Material / Charges
Ledger Account

1-Apr-2023 to 31-Mar-2024

Page 28

Date	Particulars	Vch Type	Vch No.	Debit	Credit
1-2023 Cr	Cash	Payment	33	305.00	
1-2023 Cr	Cash	Payment	109	1,882.00	
1-2023 Cr	Cash	Payment	121	290.00	
2-2023 Cr	Cash	Payment	217	6,181.00	
				<u>8,658.00</u>	
Dr	Closing Balance				<u>8,658.00</u>
				<u>8,658.00</u>	<u>8,658.00</u>

Jp
I/C Principal
R.B.N.Borawake College
Shrirampur