



**SATYA RANJAN COLLEGE**  
**KALAIN, CACHAR**

**GREEN, ENVIRONMENT AND ENERGY AUDIT REPORT**



**PREPARED BY**  
**GREEN, ENVIRONMENT AND ENERGY AUDIT TEAM**  
**SATYA RANJAN COLLEGE**  
**KALAIN, CACHAR**  
**2022**

**OFFICE OF THE PRINCIPAL/SECRETARY**

**SATYA RANJAN COLLEGE**

**KALAIN, CACHAR, ASSAM**

Ref.No SRC/misc/001/22

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**FORWARD**

The present world is facing environmental threats like climate change, increase of pollution in atmosphere, land and water greenhouse effect, bio-diversity loss etc. Population growth and changing lifestyle of people have been increasing the severity of environment problems. In the background of the scenario, higher educational institutions are expected to take pivotal role in environment conservation and protection. The time has come to protect our natural environment through precise efforts.

Satya Ranjan College is committed to create its own identity in protecting environment. The college has planted many trees on campus to help reducing carbon footprints of the college. In addition to these, the college has taken the mission of Camping for Eco-friendly Environment as well as total ban of plastic use in the campus.

Green Auditing is a systematic assessment of resource utilization and waste generation. It will detect the eco-friendly and non-eco-friendly practices on the campus. Keeping these in mind, SATYA RANJAN COLLEGE is going to prepare the Green Audit Report for the promotion of environment awareness among its family members. I hope the report will be helpful to all concerned and also motivate all to go ahead towards a green future.

  
Seal & Signature of the Principal

*Principal*  
**S.R.COLLEGE**  
Kalain : Cachar : Assam

### TEAM MEMBERS OF GREEN AUDIT TEAM

1. Dr. Abira Choudhury, Assistant Professor & head, Department of Philosophy
2. Mrs. Happy Khan, Assistant Professor, Department of Philosophy
3. Mrs. Shipa Choudhury, Assistant Professor & Head, Department of History
4. Dr. Purnima Das, Assistant Professor & Head, Department of Bengali
5. Mr. Dipankar Das, IQAC Co-Ordinator & Assistant Professor Department of Political Science

*B. G. G. G.*

Seal & Signature of the Principal

*Principal*  
**S.R. COLLEGE**  
Katain :: Cachar :: Assam

## **INTRODUCTION:**

Satya Ranjan College was established in the year 1992 with the sole aim of providing higher education to the students of Kalain and in and around Kalain vicinity. The students of this area mostly hail from economically poor families and as such they are unable to provide for themselves the educational expenses outside Kalain. The distances of such outside educational institutions are also another obstacle for the Kalain students in acquiring higher education. Hence, Satya Ranjan College, has been playing an active part in imparting knowledge and education for more than three decades. The motive is not only to provide education but also personality and moral upliftment as a whole. Along with syllabus education, several extra-curricular are also imparted in the college.

The college got its affiliation to Assam University in 1995-96 and presently, there are 19 teaching faculties viz- 6 Assistant Professor (permanent) and 13 Non-permanent Assistant professors in various departments in the college (13 Male+06 female). And 12 (permanent) non-teaching staffs (10 Male+02 Female). It has also 01- Assistant Librarian (permanent) and 01 Library Assistant (permanent).

The College is located in a rural campus occupying about 5.15 acres land in Kalain area of Cachar District of Assam. The College is functioning under the leadership of the Governing Body and guiding the society with a clear vision.

Since the establishment, the college boast itself in producing the finest students who are now absorbed in different jobs both public and private sectors. Not only that, even these students are engaged in various social works through some NGOs or other organisations.

The college mission does not stop here. The college aims to strive towards academic excellence, research progression, skill-development of students, faculty development, administrative reforms, infrastructural development and many more in coming days. The College is determined to become a pioneer institution of higher education in the state of Assam.

## **COURSE OFFERED**

### **Under Graduate B.A Course (CBCS-PASS)**

- ✓ PHILOSOPHY
- ✓ BENGALI
- ✓ ENGLISH
- ✓ ARABIC
- ✓ HISTORY
- ✓ POLITICAL SCIENCE
- ✓ ECONOMICS
- ✓ MANIPURI

### **Under Graduate B.A Course with (CBCS-HONOURS)**

- ✓ ECONOMICS
- ✓ BENGALI
- ✓ POLITICAL SCIENCE

## **MISSION & VISION OF THE COLLEGE:**

### **VISION**

- To impart higher education for all sections of the society, especially to the under privileged section and strengthening the Socio-economic base of the surrounding area through quality higher education.

### **MISSION**

- To increase the accessibility to higher education and act as a catalyst of social transformation by spreading education for all & especially to the marginalized segments of the society.

- Maximizing efforts for grooming young energetic human resources to achieve excellence in academic, cocurricular and community-oriented exercises.
- Fostering intellectual growth, aesthetic appreciation, and character development in our students by instilling a high sense of dedication and discipline in the mind of the students.
- Developing Human resources to capacity building individuals by providing Qualitative, innovative, and responsive education for all to acquire life oriented, value based and career-oriented education, so that they become self- respectful, self-confident, and self-dependent in the changing world.
- To produce able citizens who can take up national responsibilities and provide leadership in the various walks of life in the best interest of the nation.
- To evolve and improve the teaching learning pedagogy to optimise academic achievement.

#### **CORE VALUES:**

The College is guided by the core values of

- Commitment, Discipline, Hard work, Honesty, Punctuality, Moral and Ethical values.
- Equal opportunity for all sections.
- Gender sensitization and encourage women in all activities.
- Transparency
- Team work
- Decentralization of power and democratic outlook in decision making process.
- Develop nationalistic outlook.

## OVERVIEW OF THE COLLEGE



### **EXECUTIVE SUMMARY:**



A green, Environment and Energy Audit is a moment in time that evaluates how well a campus complies with relevant environment and energy laws and regulations. Even though it serves as a useful benchmark, if no system is in place to keep track of environmental and energy compliance, the audit quickly becomes out of date. This audit report includes observation and ideas for raising environmental awareness.

#### **OBJECTIVES OF GREEN AUDIT:**

The "GREEN CAMPUS" initiative has been adopted by the college for environmental conservation and sustainability. The Green Audit is the tool to detect and monitor the sources of environmental pollution, monitoring of quantity & quality of water, and other things for the safety of human health.

The main objective of this green audit is to assess the environmental quality and the strategies implemented by Satya Ranjan College to manage the quantity. The specific objectives are:

- To assess the quality of water and also minimize its consumption.
- To monitor waste generation and management in the campus.
- To ensure installation of devices that reduces pollution.
- To ensure optimum utilization of resources.
- To ensure the safety of all its stakeholders.
- To empower the stakeholders to contribute in environmental protection.
- To promote safe and clean environment.



### **ENVIRONMENTAL POLICY OF THE COLLEGE:**

Having taken the green campus initiatives, the college protects its environment and keeps the campus pollution free. With the educational policies it takes necessary steps for the development of environment. The college administration, staff and students consider it as their responsibility to maintain and preserve green environment of the institution.

#### **Aims of the College: -**

- 1) To create awareness among people including college family members about green environment.
- 2) To plant more trees every year.
- 3) To make a pollution free campus.
- 4) To sensitize every one of our college family about proper use of drinking water without any wastage.
- 5) To use dry and wet dustbin for keeping college campus clean.
- 6) To minimize the use of paper to go towards paperless office.
- 7) Performing Green Audit to develop and keep eco-friendly campus.

### **AWARNES AND TREE PLANTATION PROGRAMME**

The college has been regularly conducting awareness programmes for the college family and the society for maintaining and protecting environment. The college undertakes tree plantation programmes through National Service Scheme (NSS), National Cadet Corps (NCC), Natures Club of the college and unites every year on various occasions like Worlds Environment Day, Teacher's Day, Independence Day etc.

## ENVIRONMENTAL AUDIT

### Methodology:

The methodology for performing a green audit included various tools such as questionnaire preparation, physical inspection of the campus, observation and review of documentation. The study covered following topics in order to summaries the current state of environmental management on campus.

### Water management:

Water covers 70% of our earth's surface and hence, it is the most important part of our life. Water Pollution and waste are critical contributors of water crisis. Drinking or using contaminated water can cause a variety of illness or even death. As a result, it is critical to ensure that drinking water is safe, clean and free of bacteria and disease. Our college investigates the quality and use of water on campus. Water auditing is done by District Level laboratory Cachar.



## **Waste Management**

The wastage generated in the college campus are disposed in the following ways-  
:

- 1) Students are encouraged not to use plastic / plastic materials. Hence, if it is found, thrown into the pit allowed for such wastes.
- 2) Flex used for publicity are reused or disposed properly.
- 3) Wastes generated in the day of any program of the college are collected by NCC and NSS, Natures Club volunteers and kept in dustbin for collection.
- 4) To reduce plastic cups, plates, disposable bottles are replaced by paper made items.

## **Liquid waste Management**

- 1) Toilets are properly connected to the drainage system which gets rid of waste through drain which are regularly cleared and maintained.
- 2) waste water from canteen is reserved in a tank for use in gardening, watering trees etc.

## WATER QUALITY AND MANAGEMENT

Testing of water ensures clean & safe drinking water for all. Keeping this in mind the water quality of Satya Ranjan College is duly tested by District level Laboratory, Cachar. From the analysis of the report, it is observed that results are desirable. So, the water of the college can be considered as potable water. Water supply for drinking and other purposes is maintained by the submersible bore wells installed in the campus.



GOVERNMENT OF ASSAM  
**DISTRICT LEVEL LABORATORY, CACHAR**  
 Address: Office of the Executive Engineer (P.H.E),  
 Silchar Div. No- 1, Silchar

Email: [dlsl@assam.gov.in](mailto:dlsl@assam.gov.in)

TC-18494

Test Report No. / Sample ID: 18494  
 Report To: Satya Ranjan College  
 Customer Contact No: 9830202020  
 Sample Description: Sample Bottle: Paper & Glass  
 Sample Type: Drinking  
 Sample Collected by: Sample Collected by Customer  
 Sample Location: Satya Ranjan College  
 Block: Assam  
 Sample Quantity: 1 Ltr.

### Test Report

Sl. No.	Parameter	Protective Limit	Results	IS: 10500 (2012) (Revised) Maximum Permissible Limit for drinking water		Unit
				Maximum Permissible Limit	Alternative Maximum Permissible Limit	
1	pH	6.5 - 8.5 (at 20°C)	6.78	6.5 - 8.5	No violation	pH units
2	Total Dissolved Solids	500 mg/l	250	500	250	mg/l
3	Turbidity	5 NTU	2.4	5	5	NTU
4	Iron	0.3 mg/l	0.27	0.3	No violation	mg/l
5	Chloride	250 mg/l	10.26	250	100	mg/l
6	Total Hardness	750 mg/l	14.26	750	500	mg/l
7	Total Hardness	500 mg/l	10	500	500	mg/l
8	Calcium Hardness	75 mg/100 ml	10.26	75	200	mg/l
9	Magnesium	100 mg/100 ml	10.26	100	200	mg/l
10	Fluoride	1.5 mg/l	0.18	1.5	1.5	mg/l
11	Chlorine	5 mg/l	0.1	5	5	mg/l
12	Chlorine	5 mg/l	Agreement	Agreement	Agreement	mg/l
13	Chlorine	5 mg/l	Agreement	Agreement	Agreement	mg/l
14	Ammonia	0.5 mg/l	0.01	0.5	0.05	mg/l
15	Nitrate	50 mg/l	48	50	No violation	mg/l
16	Sulphate	450 mg/l	1.54	450	450	mg/l

Note: 1. The water quality shall be checked for periodic monitoring to ensure the safety of drinking water for the public.  
 2. The water quality shall be checked for periodic monitoring to ensure the safety of drinking water for the public.  
 3. The water quality shall be checked for periodic monitoring to ensure the safety of drinking water for the public.

Report prepared by:   
 Technical Manager  
 District Level Laboratory, Cachar

  
 District Level Laboratory, Cachar

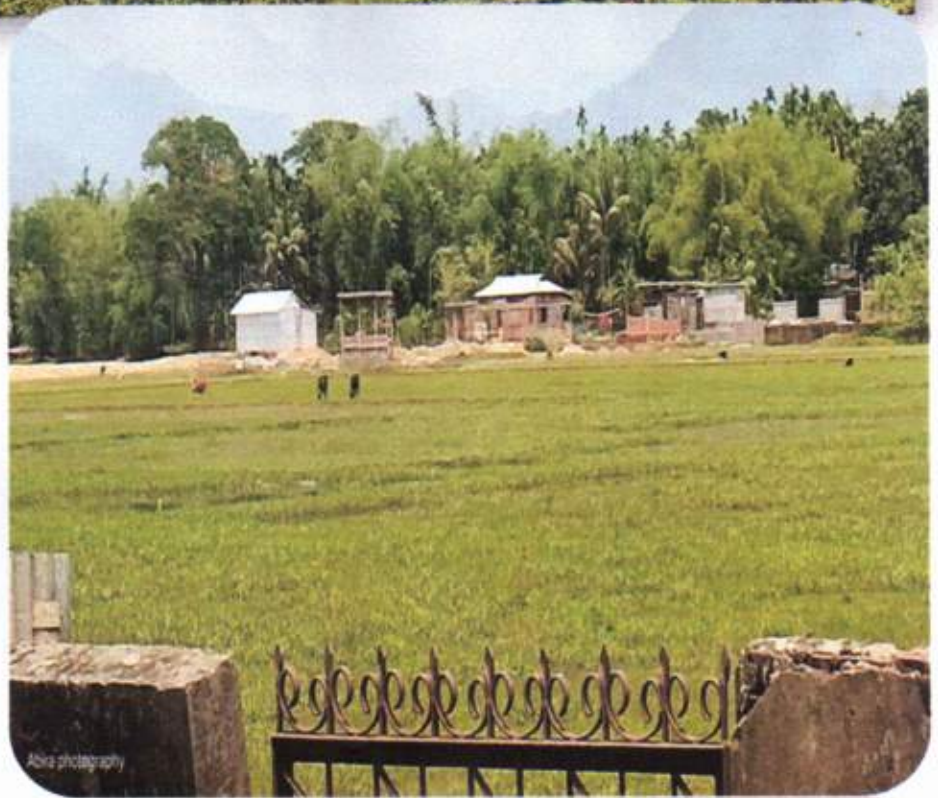
  
 Quality Manager  
 District Level Laboratory, Cachar

**PLANT'S NAMES OF THE S.R COLLEGE, CAMPUS**

<b>SL.NO</b>	<b>NAME</b>	<b>SCIENTIFIC NAME</b>	<b>NUMBER</b>
1	DEBDARU TREE	POLYALTHIA LONGIFOLIA	7
2	JACKFRUIT TREE	ARTO CARPUS HETEROPHYLLUS	2
3	CHRISTMAS TREE	PICEA ABIES	6
4	NEEM TREE	AZADIRACHTA INDICA	2
5	MANGO TREE	MANGIFERA INDICA	2
6	ORANGE TREE	CITRUS SINENSIS	1
7	LYCHEE TREE	LITCHI CHINENSIS	1
8	GUAVA TREE	PSIDIUM GUAJAVA	3
9	ARJUNA TREE	TERMINALIA ARJUNA	1
11	HOLY BASIL	OCIMUM TENUIFLORUM	6
11	CARAMBOLA TREE	AVERRHOA CARAMBOLA	2
12	JUJUBE TREE	ZIZIPUS JUJUBE MILL	3
13	COCONUT TREE	COCUCIFERA	4



Abira photography



Abika photography



PLANTATION AT SATYA RANJAN COLLEGE







PLANTATION PROGRAMME BY NATURE'S CLUB

### **NO SMOKING AND TOBACCO FREE CAMPUS:**

User of Tobacco and tobacco products are completely banned inside the college premise and consuming such products is considered as a punishable offence. The instructions have been mentioned in the code of conduct regarding this matter as well as boards are displayed in various places in the college.



### **DISPLAY BOARDS IN COLLEGE CAMPUS:**

The College displays various boards for environmental awareness, noise control, conservation and proper use of water and tobacco free campus. There are display boards help increasing environmental awareness the students.

### **NOISE POLLUTION MANAGEMENT:**

Pressure horns are not allowed in the college campus so no one of the staff and students use pressure horns to keep the college noise free. Besides that, various boards have been displayed in the library and other places in order to maintain silence in the college.



#### **SOIL POLLUTION MANAGEMENT:**

##### **Plastic Free Campus**

The college has been trying to make it a plastic free campus by creating awareness regarding the same among the students and staff members by displaying boards and other programmes. Another practice of the college is that the canteen uses reusable utensils which helped in keeping the campus plastic free.



## **NOISE POLLUTION MANAGEMENT**

Several display boards have been placed in the library and other areas to raise awareness about the importance of maintaining silence in the college. The college has a no-honking policy that prohibits the use of any honk or noise on campus. Certain areas of the college campus, such as the library and classrooms, have been designated as Silence Zones, and noise pollution is kept to a minimum.



## **ENERGY USE AND CONSERVATION**

Energy consumption, energy sources, energy monitoring, lighting, appliances, natural gas, and vehicles are all addressed in this indicator.

### **OBSERVATIONS**

Following Energy Sources are used in the college

- ELECTRICAL
- PETROL
- LPG

### **RECOMMENDATIONS**

1. Energy savings awareness should be done by displaying the boards at appropriate places in the College Campus.

### **OVERALL RECOMMENDATIONS**

- ✓ List of equipment\instrument and their consumption of (energy/water) is to be estimated.
- ✓ Septic tank sewage water analysis is to be done.
- ✓ Drinking water analysis should be done every year.
- ✓ Automatic leak detections in water flowing pipeline shall be installed.
- ✓ Water usage reduction techniques to be used.
- ✓ Tree plantation shall be done to maintain biodiversity.
- ✓ Monitoring of Exhaust gases from the motor vehicles shall be done.
- ✓ Awareness for green environment, energy and water conservation among students and staff can be done by displaying boards.

## ENERGY AUDIT

Power consumption of Electrical/Electronic appliances of Satya Ranjan College

SL.NO	ITEMS NAME	QUANTITY	POWER CONSUMPTION/UNIT (WATT)	TOTAL POWER CONSUMPTION (KW)
1	Fan	68	70	4.76kwh
2	Led/Tube light	56	9	0.504kwh
3	Computers & accessories And CCTV	15	500	$7.5+1=8.5$ kwh
4	Xerox Machine	01	400	0.4kwh

## FUTURE ACTIONS PLANS

1. Year wise internal audit on green, environment and energy to be conducted regularly.
2. Proper management and month-by-month mapping of water and energy usage will be carried out by monitoring the data in the records.
3. Departmental awareness programmes will be organized by each committee's departmental staff representative.
4. Proper waste monitoring and disposal from canteen & office.
5. Effective waste water management.
6. Energy conservation through proper use of electrical appliances.

## CONCLUSION:

- The administration and other authorities are eager to make the campus clean & green.
- Staff and students are aware of the institute's social responsibility.
- Green, Environment, and Energy audits help campus authorities understand the impact of implications for greenness and water and energy conservation.
- The campus community functions are eco-friendly, allowing the student community to develop a genuine approach to conservation of nature and natural resources.
- The findings presented in this report will assist authorities in developing future action plans to incorporate more sophisticated ideas in future efforts to conserve biodiversity, water and energy.



*Sulham D*  
Sub-Divisional Engineer  
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APDCL, CAR, KALAIN