ENERGY AUDIT, ENVIRONMENT AUDIT & GREEN AUDIT OF SAMADHAN COLLEGE, BEMETARA

Prepared By:

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सदुपयोग ही सुख है, दुरूपयोग ही दुखः है।

मध्यस्थ दर्शन "सह-अस्तित्ववाद", प्रणेता – श्री ए. नागराज

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4. ACKNOWLEDGEMENTS

We express our sincere thanks to Dr. Alka Tiwari, Chairman and Dr. Awadhesh Patel Member, Samadhan College, Bemetara for their kind support and giving us the assignment to contribute in their effort towards Green initiatives & efficient energy management in the college.

We are highly indebted to Dr. Pannalal Yadav, Principal and Mr. Umesh Singh Rajput, Administrator for their guidance, intellectual advice and his kind support in completing the project.

Our boundless gratitude to other teaching and non-teaching staff associated with this Energy Audit, Environment Audit & Green Audit study of Samadhan College, Bemetara for extending cooperation during collection of data and field study work.

We trust that the findings of this study will help the college in improving their green initiative towards creating awareness for healthy and sustainable environment.

Raj Energy Services

Sanjay Kumar Mishra

Certified Energy Auditor, EA- 8696

5. DISCLAIMER

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Exceptions

Nothing in this disclaimer notice excludes or limits any warranty implied by law for death, fraud, personal injury through negligence, or anything else which it would not be lawful for to exclude.

We trust the data provided by the Samadhan College, Bemetara, personnel is true to their best of knowledge.

6. CERTIFICATE

RAJ ENERGY SERVICES
dedicated in energy Conservation
62 & 81, Daya Nagar, Risali, Bhilai Nagar, 490006 (C.G.)
Mob.: 9826179597 Email:resbhilai@gmail.com

ENERGY AUDIT,ENVIRONMENT AUDIT & GREEN AUDIT CERTIFICATE

This is to certify that M/s. Raj Energy Services has conducted Energy Audit, Environment Audit & Green Audit of Samadhan College, Bemetara and submitted report under their Policy for Green Campus of the Institute.

Name of the Educational Institute	Samadhan College Samriddhi Vihar, Village- Phari, Post - Bijabhat, Tehsil & District- Bemetara, Chhattisgarh, PIN 491335
Contact Details	07824-299099, 93293 29726 E- Mail: samadhancollege.bemetra@gmail.com Website: www.samadhancollege.in
Name of Principal	Dr. Pannalal Yadav
Details of facilities Audited	Office, all departments, Laboratories, Classrooms, Seminar Halls, Library, Electrical Systems, Solar Power Plant, and complete Installations including Rain Water Harvesting System etc.
Date of Audit Conducted	5th ,6th & 7th April 2022
Name of Certified Energy Auditor	Sanjay Kumar Mishra
Registration Number	EA- 8696

For, Raj Energy Services

Date: April 18, 2022

(Sanjay Kumar Mishra)

Certified Energy Auditor from Bureau of Energy Efficiency, Ministry of Power, Government of India, New Delhi
EA- 8696

7. AUDITOR'S CERTIFICATE

BUREAU OF ENERGY EFFICIENCY

Examination Registration No. : EA-8696 Serial Number: 5435

Certificate Registration No. : 5435

Certificate For Certified Energy Manager

This is to certify that Mr./Mrs./Ms. Sanjay Kumar Mishra Son/Daughter of Mr./Mrs. R. B. Mishra who has passed the National Examination for certification of energy manager held in the month of May 2008 is qualified as certified energy manager subject to the provisions of Bureau of Energy Efficiency (Certification Procedures for Energy Managers) Regulations, 2010.

This certificate shall be valid for five years with effect from the date of award of this certificate and shall be renewable subject to attending the prescribed refresher training course once in every five years.

His /Her name has been entered in the Register of certified energy manager at Serial Number 5435 being maintained by the Bureau of Energy Efficiency under the aforesaid regulations.

Mr./Mrs./Ms. Sanjay Kumar Mishra is deemed to have qualified for appointment or designation as energy manager under clause (*l*) of Section 14 of the Energy Conservation Act, 2001 (Act No.52 of 2001).

Given under the seal of the Bureau of Energy Efficiency, this 7th day of February, 2013

Digitally Signed: RAKESH KUMAR RAI
Sun Mar 01 10:31:41 IST 2020
Secretary, BEE New Delhi

Secretary
Bureau of Energy Efficiency
New Delhi

Dates of attending the refresher course	Secretary's Signature	Dates of attending the refresher course	Secretary's Signature
22.01.2019			

8. INTRODUCTION

Value education develops a well-balanced individual with a strong character and value. The Samadhan college inculcate moral values, life skills & other personality traits in the students so that they turn out into global & responsible citizens. Moreover, it gives a positive direction to the students to shape their future and even helps them to know the purpose of their life.

The Samadhan College strives to endow the students with a platform, helping them to broaden their horizon and in the process provide them healthy refined, holistic and substantial education. We arm our students with technological supremacy and help them integrate it with values.

The Samadhan College conducts its programs and activities guided by overarching Vision, Mission, Goals, Values, Beliefs statements. All are revisited periodically and revised, if appropriate.

Vision

To foster an environment that inculcates values and skills to achieve excellence in all dimensions of one's living, to have an inquisitive mind, to be ready to face real life challenges and carve out a niche for oneself.

Mission

- To empower students to unleash their inner potential, to leverage their professional standards through their academic capabilities and a sense of ethics

- To imbibe a scholarly culture through research and creative endeavours that accelerates the phenomena of giving back to society.
- To synergize collaborations that strengthen the expertise to build a dynamic intellectual capital.
- To build resilience, sensitivity, critical thinking culminating in a strong personality through a conducive teaching-learning environment.

Objective

- To introduce basics of Chetna Vikas Mulya Shiksha which is based on Madhyasth Darshan Co-existentialism propounded by Shri A. Nagraj Ji along with existing curriculum so that our students can attain universal human goal i.e., Solution in self (Samadhan), Prosperity in family (Samriddhi), Fearlessness in society (Abhay), Harmony with nature (Sah-Astitva) and develop the ability to live with a humane conduct.

Core Values

1) Prudent 2) Competent 3) Benevolent 4) Integrative 5) Reliability 6) Modesty

The overall purpose of education is to enable a human being to live a fulfilling life in harmony with oneself and with family, society, and nature. Values provide the basis for all our actions and there is an essential complementarity between values & skills with needs to be ensured in any education system.

The Samadhan college along with academic knowledge, also give value based Holistic education (CVMS) also to our students to create global and responsible citizens who carve a niche for themselves in the competitive world. This course (CVMS) is based on Madhayasth Darshan: Co-existentialism by Shri A. Nagraj Ji who has propounded this philosophy to understand the human reality in the existence.

The Samadhan College believe in equipping students with knowledge and skills but also back them up with hands on training which assists them in achieving excellence and succeeding in their career. Our aim is the overall development and growth of the students and we are determined to impart our best.

"Value based education is essential for the Holistic Development of a child."

The student of Samadhan college also take active participation in the plantation drive for a greener and more sustainable future. The drive of environmental awareness is also appreciated by the collector.

College has necessary infrastructural facilities like Assembly Hall, Library, Physics lab, Psychology lab, Computer labs, Sports grounds, Wi-Fi campus and parking facilities for students. All courses are flourishing due meritorious skill-based teaching being done by our academic staff.

We have a team of fabulous faculty members who display boundless energy and intense commitment which keeps the ethos of our college shining brightly. We promise an academic environment which is conducive to learning and achievement for all our students.

Sr. no	Course Name	Duration (Years)	Starting Year	No. of Seats
1	Bachelor of Education	2	2012-13	100
2	PGDCA	1	2012-13	30
3	Bachelor of Business Administration	3	2013-14	30
4	Bachelor of Commerce	3	2013-14	50
5	Bachelor of Computer Application	3	2013-14	30
6	Bachelor of Science (Computer Science)	3	2019-20	60
7	Bachelor of Arts	3	2020-21	60

Table 1: Number of seats in college

Library

Objectives

- To take the feedback from the departments and plan for improvement and enrichment of the library. To strengthen the efforts of the librarian in planning library activities and policies.
- Provide an effective forum to the working faculties to communicate their suggestions for the provision of effective library and information services.
- Formulate the rules concerned to circulation policies.
- Advice on budget proposals, manpower development, furniture and other equipment required for library from time to time.

The college have two Computer lab that can accommodate 40 students at a time. The centre is maintained by a qualified staff, who also conducts theory and practical classes for the students. The Centre is available during and after class hours.

Students use Computer Laboratory for power point presentation and web site evaluation. Computer literate students and students with knowledge of computer applications assist beginners during their free time. Beginners in computers are given extra time after college hours

Total Plot Area in Sq. metre	5419.85
Ground Floor Constructed Area in Sq. metre.	1102.93
First Floor Constructed Area in Sq. metre	1184.98
Total Constructed Area in Sq. metre	2287.91

As sports play vital role in making any individual physically and mentally healthy, the college gives due importance to sports activities. The students regularly bring laurels at university, state, national and international levels. Annual Sports Day is an important event of the college and is the most sought-after day among students. The college have a sufficient playground area.

The Samadhan college also promotes and support Prime Minister's **Atmanirbhar Bharat initiative** and students had made diyas from cow dung.

The college has also installed Solar power plant 0f about 100 KW capacity.

The Samadhan College, Bemetara has earned a reputation for providing quality education and leading the way for future generations by implementing environmentally friendly initiatives. The physical layout of the college campus encourages positive thinking. Green spaces develop a surrounding which nurtures connection with nature.

Fire Fighting System

Every college campus is a unique environment with different needs and demands when it comes to fire and life safety systems. However, every campus will benefit from installation of firefighting system. The Samadhan college has also installed fire and life safety system on a

campus to protect valuable assets and save lives. Fire hose reels are provided to protect against class A fire.

नगर सेना, अग्निशमन एवं आपातकालीन सेवाएँ तथा राज्य आपदा मोचन बल, मुख्यालय सेक्टर - 19 अटल नगर नवा रायपुर, जिला रायपुर (छत्तीसगढ़)

अग्नि सुरक्षा प्रमाण पत्र

क्रमांक /00/ BEM00005246 /फायर सर्विस / एन॰ओ॰सी॰ / 2022 / बेमेतरा

दिनांक : 06/07/2022

प्रमाणित किया जाता है कि श्री AVINASH TIWARI के परिसर SAMRIDDHI VIHAR COLONY, VILL.- FARI, POST-BIJABHAT, DIST. - BEMETARA में स्थित SAMADHAN COLLEGE BEMETARA का इस विभाग के निरीक्षणकर्ता अधिकारी श्री एस. जी. मोहम्मद द्वारा श्री उमेश कुमार राजपूत की उपस्थिति में दिनांक 27/06/2022 को राष्ट्रीय भवन संहिता भाग-IV 2016 के अनुसार अग्नि निवारण एवं अग्नि से बचाव संबन्धित उपकरण एवं प्रणाली का निरीक्षण किया गया एवं संतोषजनक पाया गया। अतः निम्न शर्तों के अधीन एक वर्ष अवधि के लिए अग्नि सुरक्षा प्रमाण पत्र जारी किया जाता है।

शर्तें

1. सभी अग्नि सुरक्षा से संबन्धित उपकरण/प्रणाली, निकास द्वार व्यवधान रहित एवं हमेशा अच्छी हालत में रखा जाए। इसमें किसी प्रकार की चूक के लिए प्रबंधन जवाबदार होगा।
2. अग्नि सुरक्षा प्रमाण पत्र जारी होने के पश्चात भवन में विस्तार एवं अन्य कार्य किया जाता है तो इस प्रमाण पत्र को निरस्त माना जावेगा।
3. अग्निशमन प्रणाली/उपकरणों को प्रचालित करने के संबंध में सभी कर्मचारियों को प्रशिक्षित किया जाए एवं नियमित रूप से आपदा की स्थिति में बाहर निकलने का माक ड्रिल कर इसका रिकार्ड बना कर रखा जावे।
4. बेसमेंट का उपयोग करने में बिल्डिंग बाय लॉज का कड़ाई से पालन किया जावे।
5. मकान मालिक/कबजाधारी प्रतिवर्ष अग्नि की रोकथाम और सुरक्षा की स्थिति के संबंध में एक घोषणा पत्र प्रस्तुत करेंगे, जो पुनः निरीक्षण योग्य होंगे।
6. अग्नि सुरक्षा की दृष्टि से SAMADHAN COLLEGE BEMETARA में स्थापित सभी उपकरण हमेशा सुचारु रूप से चालू रखने की ज़िम्मेदारी पूर्णतः AVINASH TIWARI की होगी जिसके लिए नगर सेना, अग्निशमन एवं आपातकालीन सेवाएँ तथा राज्य आपदा मोचन बल मुख्यालय छत्तीसगढ़ की कोई भी ज़िम्मेदारी नहीं रहेगी।

जारी दिनांक : 06/07/2022

निदेशक
ट्रेनिंग आपरेशन
अग्निशमन एवं आपातकालीन सेवाएँ
नगर सेना एवं नागरिक सुरक्षा, छत्तीसगढ़

प्राधिकृत अधिकारी के हस्ताक्षर

Fire Extinguisher in college building

A) ABC Type, Dry chemical powder = 13 Nos.

B) CO_2 Type = 04 Nos.

C) Fire bucket = 11 Nos.

Swachh Bharat Abhiyan

The role of students in Swachh Bharat Abhiyan is important, for which the government is itself conscious. We all know that 'a healthy generation will help create a better nation' that is why the government has separately focused on the developing the healthy habits among the students. The students can convey the healthy habits effectively and people also take their words seriously. The Samadhan College celebrates Swachh Bharat Abhiyan on 2nd October each year.

Contact Detail of College

Name of College	Samadhan College
Address of College	Samriddhi Vihar, Village- Phari, Post - Bijabhat, Tehsil & District- Bemetara, Chhattisgarh PIN 491335
Contact Number	07824-299001
Name of Principal	Dr. Panna Lal Yadav
Mobile Number	9329329726
E- Mail	samadhancollege.bemetra@gmail.com
Web Site	www.samadhancollege.in

9. ENERGY MANAGEMENT

- **Auditing for Energy Management of the Samadhan College for Environmental Consciousness and Sustainability.**

- **Alternate Energy initiatives such as: Percentage of annual power requirement of the Institution met by the renewable energy sources.**

- **Percentage of annual lighting power requirements met through LED bulbs (Current year data)**

ENERGY MANAGEMENT

Energy Management is the strategy of adjusting and optimizing energy, using systems and procedures to reduce energy requirements per unit of output while holding constant or reducing total costs of producing the output from these systems"

Principle of Energy Management

- Procure energy at lowest possible price
- Manage energy use at highest energy efficiency
- Reusing and recycling energy
- Select low investment technology to meet present requirement and environment condition
- Make use of wastes generated within the plant as sources of energy and reducing the component of purchased fuels and bills

9.1 Energy Scenario

Electricity is main energy used in the Samadhan college. Electrical energy is supplied by Chhattisgarh State Power Distribution Company Limited.

An off- grid solar power plant having 100 KW capacity is commissioned as use of renewable energy.

The solar power plant was installed on 12th September,2018 by M/s. Green Ripples Pvt. Ltd, Raipur. The manufacturer of solar modules is HHV Solar Technologies Pvt. Ltd. Karnatak . Now, the solar power plant has planned for grid connection.

9.2 Connected Load of College premises

We have surveyed the college building and noted all the connected load like lighting, air conditioning, water supplying and others,

Sl. No.	Electrical Equipment	Wattage	Quantity	Total wattage
1	LED Tube Light	20	154	3080
2	Air Conditioner	2100	5	10500
3	Air Conditioner	1500	3	4500
4	Fan	70	134	9380
5	Air Cooler	250	15	3750
6	Water Cooler	300	1	300
7	Computer for lab	100	66	6600
8	Office Computers	100	9	900
9	Printer	500	5	2500
10	Mini Exhaust	150	3	450
11	Induction Heater	1500	2	3000
12	Water Pump	3750	1	3750
13	Water Pump	2250	1	2250
14	LED Street Light	30	7	210
15	Others			2000
Total Connected load				53170

Table 2: Connected load of college

9.3 Segment wise connected load

Segment	Watt
Lighting	3080
Heating, Ventilation& Air Conditioning	28580
Office Equipment	3400
Water Supply	6000
Campus Lighting	210
Others	11900
Total Load	53170

Table 3: Segment wise connected load and their percentages

Graphical Representation of Connected Load

A pie graph of connected load is shown in figure: -

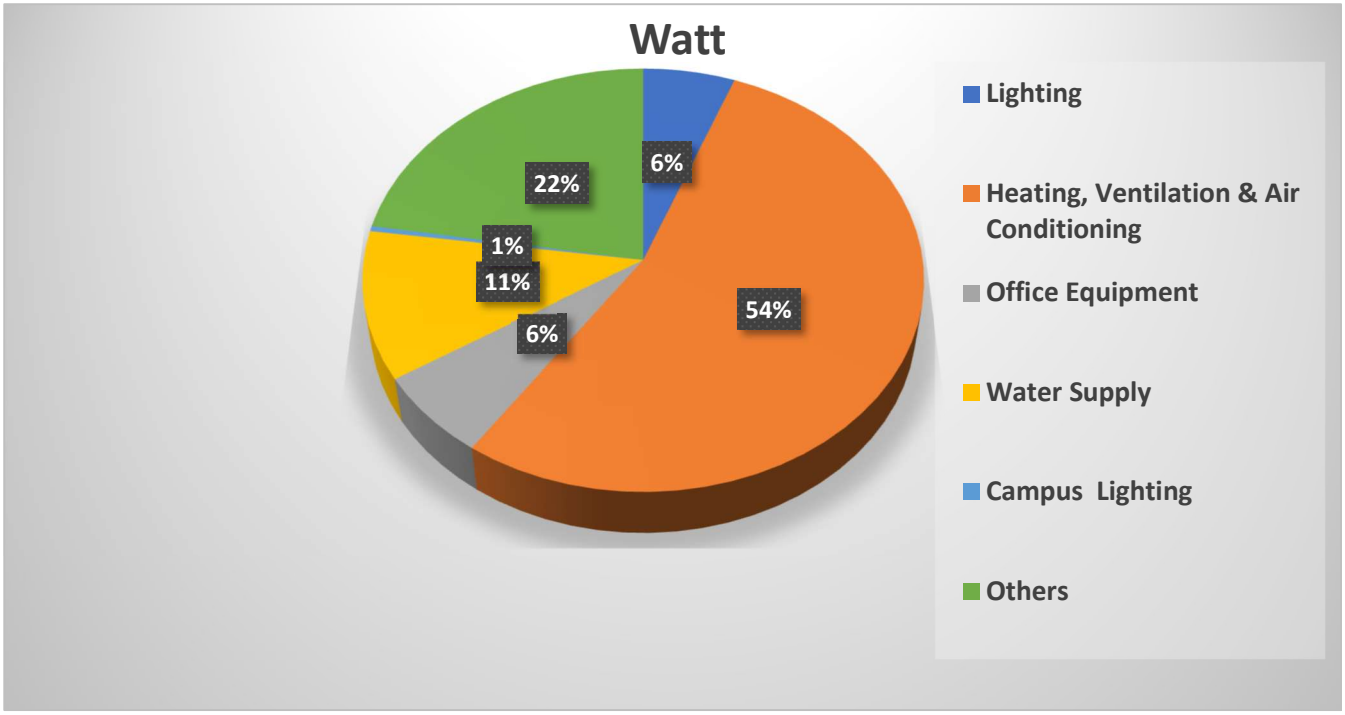

Figure 1: Total Connected Load

The maximum share of connected load is HVAC,54 % which includes Air Conditioners, fans coolers and exhaust.

9.4 Total Annual Energy Consumption

We have analysed the electricity bills of the Samadhan College for the period of 2021-22.

Sr. No.	Months	Billed Unit consumption
1	Apr-21	0
2	May-21	2337
3	Jun-21	789
4	Jul-21	1167
5	Aug-21	818
6	Sep-21	2245
7	Oct-21	1045
8	Nov-21	390
9	Dec-21	350
10	Jan-22	823
11	Feb-22	573
12	Mar-22	720
Annual KWH consumption		**11,257**

Table 4: Annual unit Consumption

The connected load is comprised of class room & office lighting, Heating, ventilation and air conditioning, Street lighting and other connected load.

9.5 Equipment wise Annual Unit Consumption

Sl. No.	Electrical equipment	Wattage	Quantity	Diversity factor	Operational hours	Unit Consumption	Segment
1	LED Tube Light	20	154	0.2	720	444	Lighting
2	Air Conditioner	2100	5	0.8	270	2268	Heating, Ventilation, and air conditioning
3	Air Conditioner	1500	3	1	270	1215	
4	Fan	70	134	0.2	720	1351	
5	Air Cooler	250	15	0.4	410	615	

6	Mini Exhaust	150	3	0.5	720	162	
7	Office Computers	100	9	0.3	720	194	Office equipment
8	Printer	500	5	0.2	720	360	
9	Water Pump	3750	1	1	800	3000	Water supply
10	Water Pump (fire safety)	2250	1	1	60	135	
11	LED Street Light	30	7	1	3650	766	Campus lighting
12	Water Cooler	300	1	1	905	272	
13	Computer for lab	100	66	0.2	60	79	
14	Induction Heater	1500	2	1	105	315	
15	Others					81	Others
Annual Electricity consumption						11257	All Segment

Table 5: Equipment wise Annual Unit Consumption

9.6 Segment wise Annual Unit Consumption

Segment	Unit Consumption
Lighting	444
Heating, Ventilation & Air Conditioning	5611
Office Equipment	554
Water Supply	3135
Campus Lighting	766
Others	747

Table 6: Segment wise Annual Unit Consumption

Graphical Representation of Annual Unit Consumption segment wise

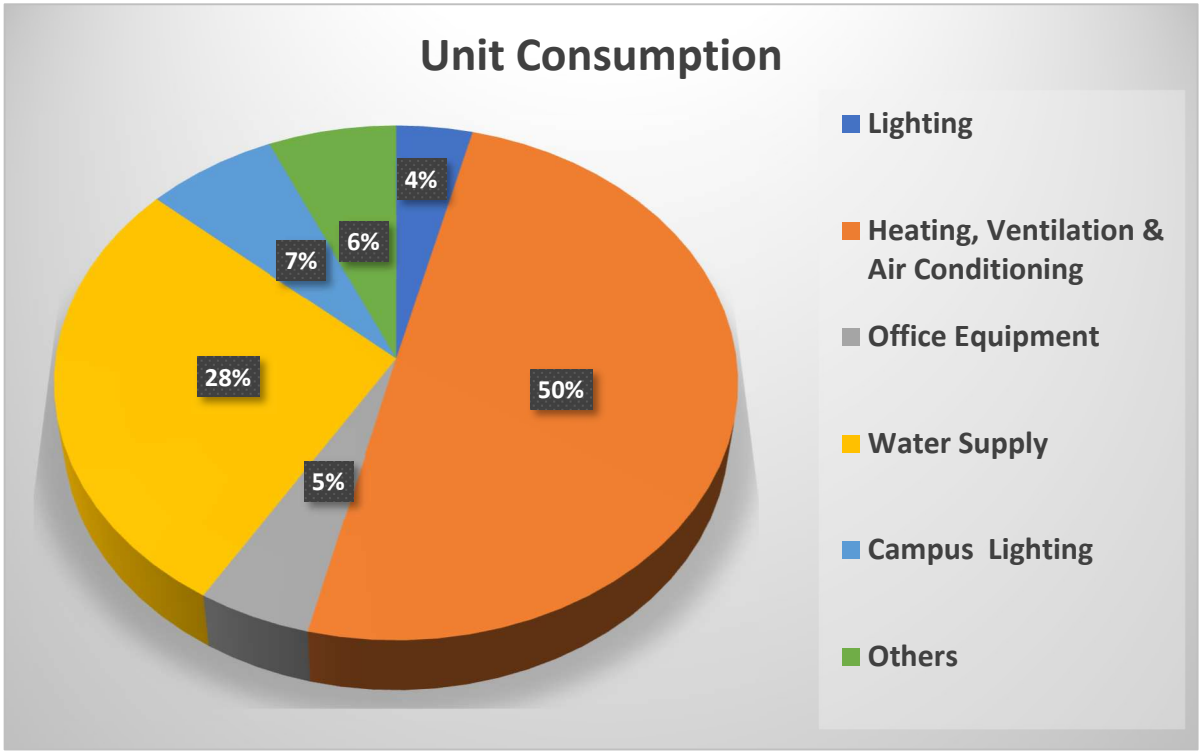

Figure 2: Segment wise Annual Unit Consumption

The maximum share of unit consumption is towards HVAC i.e., 50%

9.7 Electricity Generation from Solar Power Plant

An off-grid solar system permits electricity to be harnessed by solar panels and stored inside a battery without direct connection to the utility grid, providing an independent power supply to your home or business.

Basically, an off-grid solar system is a novel innovation which provides you independent energy harnessed by the sun. An off-grid solar system is made up of the following components.

- solar panels
- charge controllers
- battery bank(s)
- inverters

College has installed an off grid solar power plant of 100 KW Capacity. The ingenuity of an off-grid solar energy system is made-up of the efficiency of its components. A

solar energy system is consisting of solar panels, charge controllers, battery bank, and inverters etc.

1. **Solar Panels (PV array).** . The Sunlight is soaked up by the solar panels and transferred to the charge controllers.

2. **Charge Controllers.** The charge controller is the “delivery man” between the solar panels, the inverters, and the battery bank. Charge controllers also act as a regulator, ensuring that the amount of power received through the solar panels does not overload the battery, instead keep the battery fully charged and top it off when needed. The charge controllers either deliver the energy directly as DC power to your lights or to the inverters to be converted into AC power for household appliances and all excess energy goes to the…

3. **Battery Bank.** With the charge controllers feeding energy to the batteries, the battery bank acts as the heart of the off-grid solar system, as it stores up excess energy for cloudy days and nights, when needed it pumps electricity to the…

4. **Inverters.** Lastly, inverters convert the DC (direct current) power into AC power which is passed on to be digested by college electrical appliances as DC power and allows student & staff of the college to switch on the light, fan or any other electrical equipment.

Schematic Diagram of Off- grid Solar Power Plant

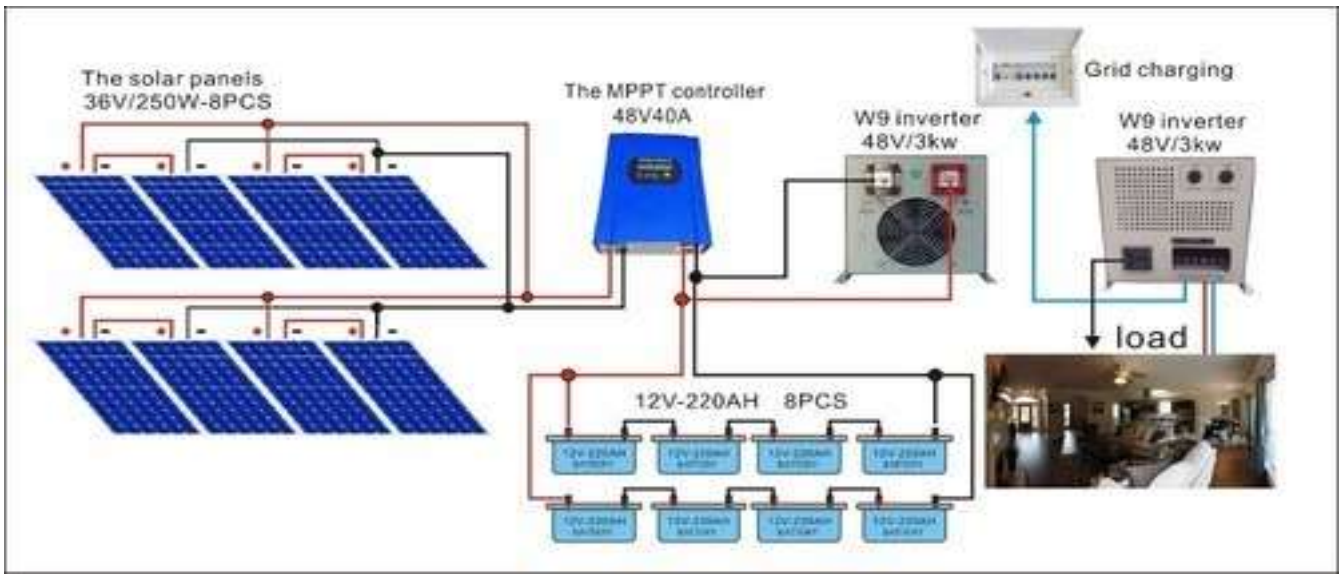

Figure 3: Schematic Diagram of Off- grid Solar Power Plant

Technical Specification of Solar Power Plant

Maximum Power	280 watts
Open Circuit voltage of each module	44.7 V
Short Circuit Current of each module	8.17 A
Rated Voltage	36.75 V
Rated Current	7.63 A
Total Numbers of Module	342
Total Capacity of Solar Power Plant	95.76 KW

Table 7: Technical Specification of Solar Power Plant

At present, off grid solar power plant is in the process of converting it into grid connected solar power plant.

Solar Roof Top Grid Connected Solar Power Plant

In grid connected rooftop or small SPV system, the DC power generated from SPV panel is converted to AC power using power conditioning unit/Inverter and is fed to the grid either of 440/220 Volt three/single phase line or of 33 kV/11 kV three phase lines depending on the capacity of the system installed at residential, institution /commercial establishment and the regulatory framework specified for respective States. These systems generate power during the day time which is utilized by powering captive loads and feed excess power to the grid as long as grid is available. In case, where solar power is not sufficient due to cloud cover etc., the captive loads are served by drawing balance power from the grid.

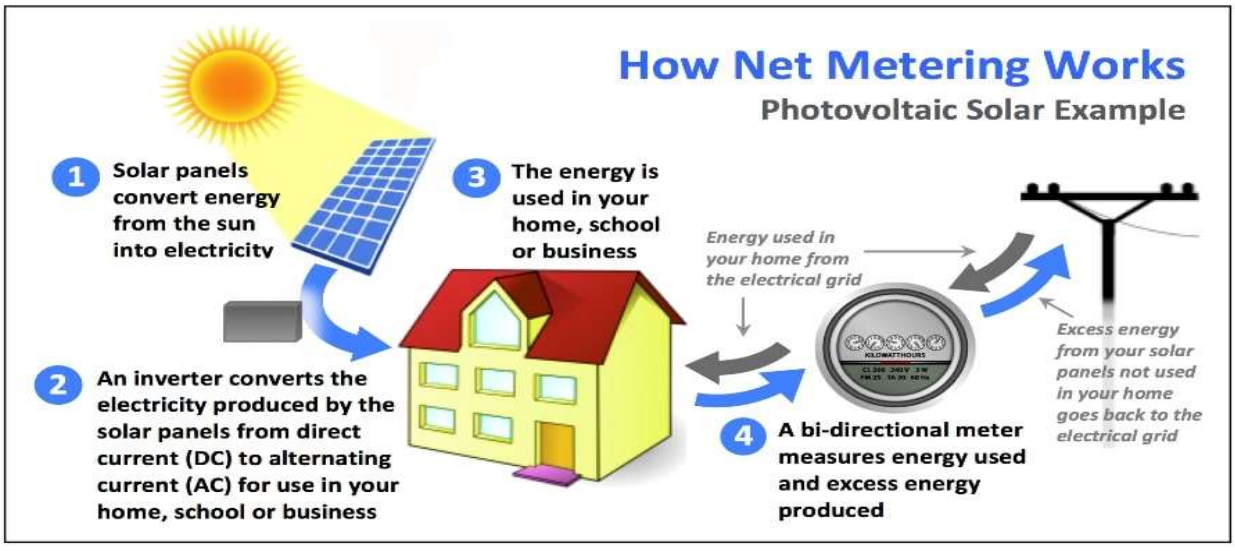

Figure 4: How Net Metering works

Net Metering

The grid connected rooftop system can work on net metering basis wherein the beneficiary pays to the utility on net meter reading basis only. Alternatively, two meters can also be installed to measure the export and import of power separately.

Considering the fact that one kw solar power plant produces 4-unit energy per day on an average.

Total Capacity of Solar Power Plant = 95.67 KW

Annual energy generation = 95.67 x 4 x 365

= 1,39,678 units

9.8 Percentage of annual power requirement of the Institution met by the renewable energy sources.

At present, the college has installed solar power plant of about 100 KW capacity and sanctioned load is 31 KW and connected load is about 54 KW. So, we can say that 100% requirement of college buildings can be fulfilled by installed solar power plant..

Total Contract Demand in KW	54
Capacity of Solar Power Plant in KW	95.67
Percentage of annual power requirement of the Institution met by the renewable energy sources.	100%

Table 8: Percentage of annual power requirement of the Institution met by the renewable energy sources**.**

The complete requirement of electrical energy is fulfilled by solar power plant installed at roof of the Samadhan College.

Graphical Representation of Percentage of annual power requirement of the Institution met by the renewable energy sources.

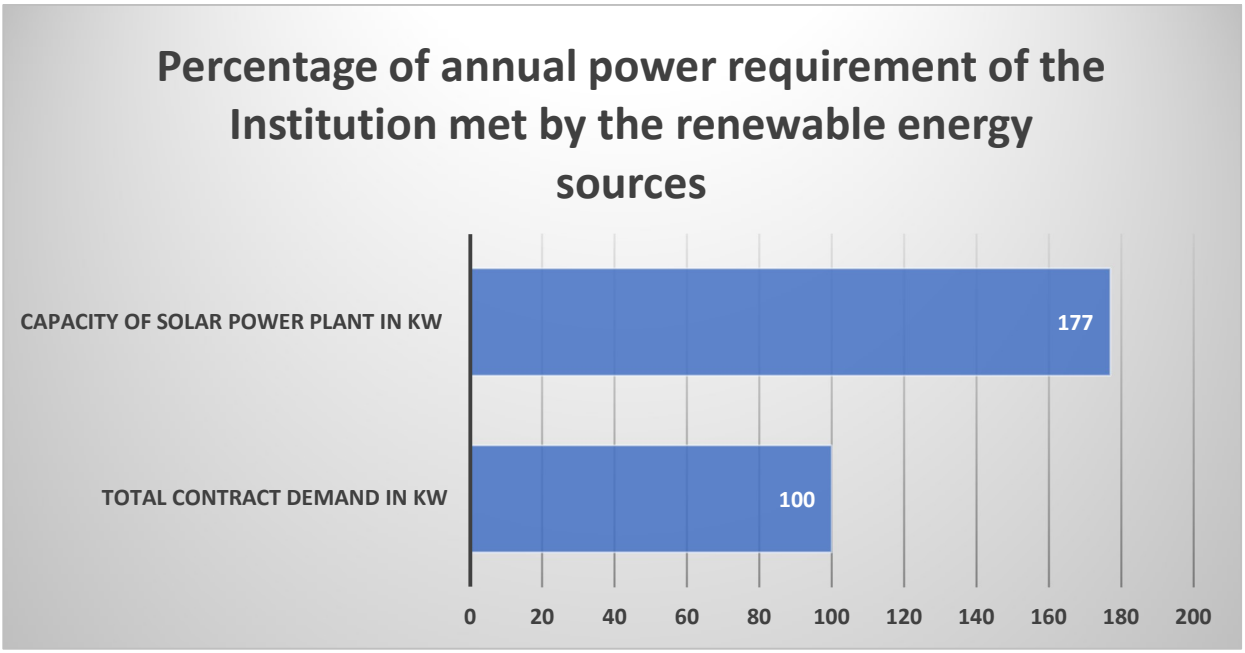

Figure 5: Graphical Representation of Percentage of annual power requirement of the Institution met by the renewable energy sources.

9.9 Percentage of annual lighting power requirements met through LED bulbs.

All lighting luminaries installed at Samadhan College is LEDs. No conventional inefficient lighting fixtures are installed in the campus.

Thus, we can say that 100% lighting power requirement is met through LED bulb

Electrical Load of Conventional light in Watt	0
Electrical Load of LED light in Watts	3290

Table 9: Percentage of annual lighting power requirements met through LED bulbs

Graphical Representation of Percentage of annual lighting power requirements met through LED bulbs

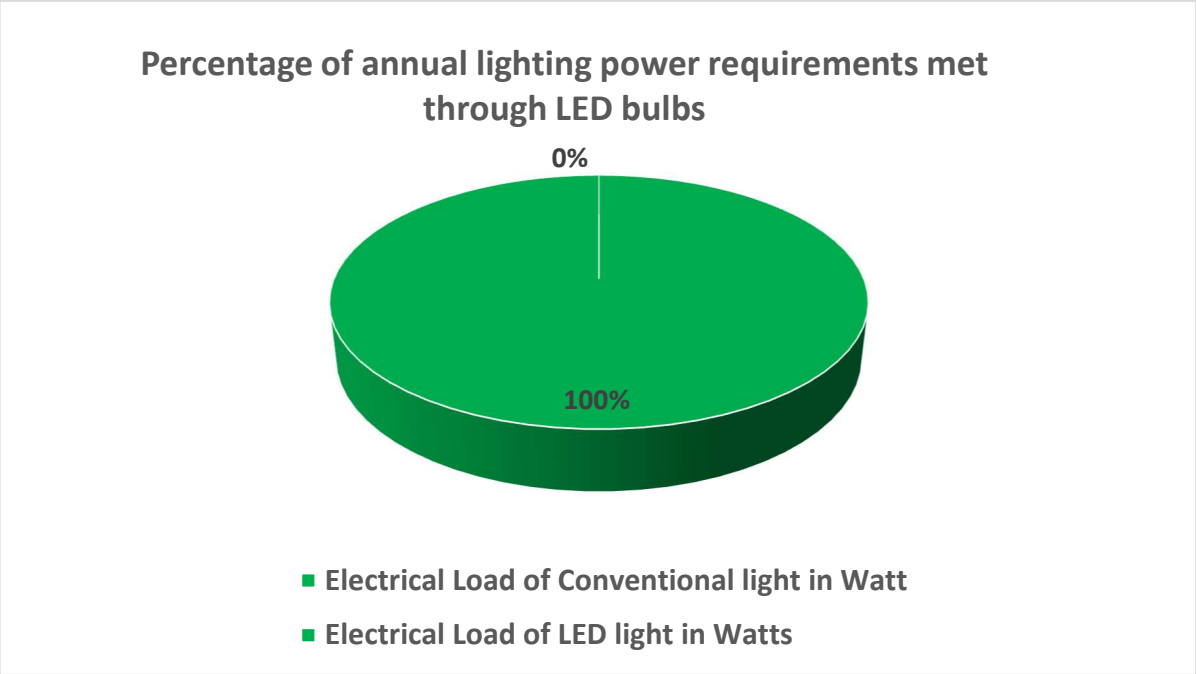

Figure 6: Graphical Representation of Percentage of annual lighting power requirements met through LED bulbs

Thus, LED lighting covers 100% of total lighting power requirement.

9.10 Awareness Activities in Energy Management

1) Slogans for energy saving affixed near switch board.

To spread awareness among students, teaching and non-teaching staff about energy saving, slogans for not wasting electricity is pasted near switch boards.

2) All conventional lights are replaced by energy efficient LED lights.

There are no conventional tube lights, CFL in the college campus. All conventional lights are replaced by energy efficient LED lights.

9.11 Recommendations

1) Installation of Motion Detectors in college premises

It has been estimated that a single unit of energy saved at the end use point is equal to 2.3 units of energy produced. Keeping this in mind, College should installed motion sensors at different important rooms in college.

Motion sensors automatically turn outdoor lights on when they detect motion and turn them off a short while later. They are very useful for outdoor security and utility lighting as seen from above pictures.

Brief Introduction of Motion Detectors:

They can detect the Infrared Rays released by human body. The light or any other electrical appliance can be activated automatically by the active presence of a human body within the detection range / coverage area & when there is no presence the light will be deactivated automatically.

Control of lights through motion-sensors may also be appropriate for areas that are periodically used throughout the day. Typical uses may be; single occupancy offices, hall, bathrooms, and staffrooms. By automatically turning off after a few minutes, they avoid wasted energy use and help conserve resources. These sensors have many benefits given below

- Allow significant savings on energy bills
- Cheap and simple to install, particularly wireless systems
- User-friendly
- Convenient lights switched on automatically when needed
- Long battery life due to their low power consumption
- Help with health and safety requirements (e.g. lighting in corridors) Therefore, Control of lights through motion-sensors has been installed in our college for energy saving.

Motion sensors automatically turn outdoor lights on when they detect motion and turn them off a short while later. They are very useful for outdoor security and utility lighting as seen from above pictures.

2) Formation of ENCON Club:

We recommend to formation of the ENCON (Energy Conservation) in the Samadhan College, Bemetara for spreading awareness on the importance of energy conservation. ENCON Club will participate in all energy conservation activities and organize program with the support of Chhattisgarh State Renewable Energy Development Agency, (CREDA) Raipur and Bureau of Energy Efficiency,(BEE) New Delhi.

Energy Club will celebrate “Energy Conservation Day” on 14Th December, each year. It would not only help in imparting knowledge on energy efficiency but also in its implementation in households and institutions.

Objective of ENCON Club

The objective of the club is to create awareness among the students, staff and teachers and equip them for efficient management of all forms of energy, to promote energy efficiency and energy conservation. The club will keen to spread “Energy Conservation Messages” in the society by conducting awareness program to students and public.

9.12 General Recommendation for Energy Saving in Office Equipment

Equipmen	Wattage	Comments
CRT Monitor	100 - 120W (during operating condition)	CRT monitors consume a lot of power, much of which is wasted as heat, and represent the largest power consumption component in a typical desktop computer. Emit potentially harmful radiation. Fortunately, most CRT monitors these days are legacy equipment as new computers are generally supplied with LCD monitors. Unfortunately, most CRT monitors end up in landfill.
Desktop Computer	150W (during operating condition)	Power consumption will differ significantly depending on whether a CRT or LCD monitor is used. In home and office situations where it is necessary to run multiple desktop computers, it may be possible to make significant power savings by running a single terminal server computer with several LCD monitors and keyboards attached. Terminal server computers can also greatly simplify network management, software upgrades, etc
Photo copier	7-30W (Sl. Mode) 40-300W (Standby) 200-1300W (op. cond)	Most of the energy used in a photocopier is consumed by the hot rollers, which are usually kept hot on stand-bay, consuming from 40-300W. Significant energy savings (40% to 60%) can be made by ensuring that photocopiers are switched off at night and on weekends. Some photocopiers consume up to 30 watts even when switched off, so photo copiers should be switched off at the power outlet to ensure they are really "off".

LCD Monitor	30-50W (During operating condition)	LCD monitors typically require about 30% of the power required for a CRT monitor with the same screen area. In addition, the amount of heat generated by an LCD monitor is considerably less than a CRT monitor, resulting in a lower load on ACs. Building cooling needs may be decreased by up to 20%.
Inkjet Printer	120 W (During operating condition)	Inkjet printers use relatively little power in comparison to laser printers. From an energy consumption point of view, inkjets are preferable to lasers. Unfortunately, they typically cost more to run on a cost -Per -print basis and sometimes produce less than optimum results
Laser Printer	25-80W (Standby) 150-1100W (During operating condition)	Laser printers consume significant amounts of power even when in standby mode. Over the course of an 8 -10 hr working day, a laser printer could consume around 1kWh of energy. On the other hand, laser printers are cheaper to run on a cost-per page basis and generally produce better results. Both the number of laser printers used, and the number of hours they are operated for, should be minimized. As with printing of any kind, office procedures should be developed which minimize the need for printing to paper
Laptop Computer	15-40 W during operating condition)	Laptop computer power consumption is typically 10% to 25% of that of a desktop computer. In situations such as an office or home office, where computers may operate for 8 to 10 hours a day, this difference is significant and could represent an energy saving of up to 1kWh per day.

Table 10: General Recommendation for Energy Saving in Office Equipment

10. WATER MANAGEMENT

- **Auditing for Water Management of the institute for Environmental Consciousness and Sustainability**

- **Rain water harvesting structures and utilization in the campus**

WATER MANAGEMENT

This indicator addresses water consumption, water sources, irrigation, storm water, appliances, and fixtures. Aquifer depletion and water contamination are taking place at unprecedented rates. It is therefore essential that any environmentally responsible institution should examine its water use practices.

Samadhan College, Bemetara has two ground waters bore well sources.

Two submersible pumps having rating of 5 HP & 3 HP are operated to lift water from bore well. There are two water tanks of 3,500 litre dedicatedly for the use in firefighting system installed in college building, which relates to a submersible pump of 3 HP capacity. One pump having 5 HP rating is used to fill water storage tank having 20,000 litre capacity for fulfilling daily requirements of college.

Water Storage Capacity

Water Storage facility	Capacity	Quantity	Total Capacity
water tanks for fire safety	3,500	2	7,000
Overhead Water Storage Capacity	20,000	1	20,000

Table 11: Overhead water storage tank capacity in college

Quantities of water taps and water coolers

Sl. No.	Water taps details	Quantity
1	Water taps in toilets	46
2	Water taps in wash basin	23
3	Water taps in bathroom	12
4	Water taps for gardening	11
Total Nos. of water taps		92

Table 12: Quantities of water taps and water coolers

10.1 Water Consumption

We have discussed with college students, college faculty and other people regarding the use of water in college campus. The main use of water is for garden, drinking, staff quarter, toilet flush.

Water Audit at Samadhan College, Bemetara,					
1	2	3	4	5	6
Activity	**Average litres of water used per activity in litres**	**Number of times activity done each day**	**Total water used by a person each day (litres)**	**Number of people in the College using water**	**Water Consumption per day (litres)**
Wash hands and face	1.25 litre	One times a day	1.25	100	125
Toilet flush	6 To 21	once	10	100	1000
Drinking (cup)	0.4	Two	0.8	300	240
Gardening & Others	8000	once			8000
Canteen (Av. For 5 people breakfast)	2		2	150	300
Overflow of water& leakage					150
Water used by staff quarter					1500
Total Consumption of water in litre					11315

Table 13: Total water consumption in college

Many plantation drives are taken by the college on its campus. Samadhan college also have participation in agriculture.

Graphical representation of water consumption per day

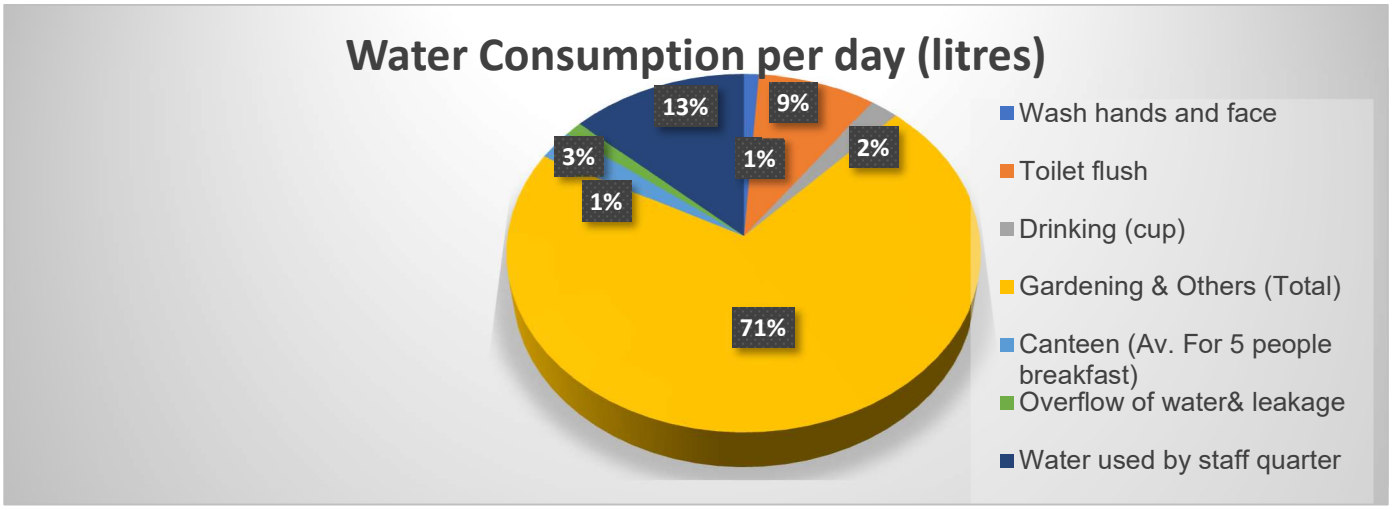

Figure 7: Graphical representation of water consumption per day

10.2 Rain Water Harvesting System

Rainwater harvesting is a technology used to collect, convey and store rain water for later use from relatively clean surfaces such as a roof, land surface or rock catchment. RWH is the technique of collecting water from roof, Filtering and storing for further uses. Rainwater Harvesting is a simple technique of catching and holding rainwater where its falls. Either, we can store it in tanks for further use or we can use it to recharge groundwater depending upon the situation. Rainwater harvesting system provides sources of soft, high-quality water reduces dependence on well and other sources and in many contexts are cost effective.

10.3 Rain Water Harvesting System at Samadhan College

The college has a rain water harvesting system for college building. The dimension of rain water harvesting pit is 10 ft. x 6 ft. x 6 ft.

10.4 Amount of water received through rain

Open roof area (A)	1184 Sq. Meter
Rainwater of one -fourth roof area is for RWH purpose.	296 Sq. meter
Average rainfall per square meter in Bhilai (B)	1200 mm or 1.20 Meter
Amount of water received through rain (C = A x B)	355.2 Cu. Meter
Run off Coefficient factor through rain (D)	0.80
Total water received (E =C x D)	284 Cu. Meter

Table 14: Amount of water received through rain

10.5 Other Activities of College in Water Management

Water Conservation Awareness Drive

A. To create awareness of water conservation and water harvesting among students, teachers and non-teaching staff, several slogans are pasted near water taps, wash basin and watercoolers.

B. Waste rainwater discharged from the roof through pipe goes in center garden and then goes in field through underground pipe, which is used for agriculture purpose.

10.6 Recommendations

1. Waste water from water coolers/purifier should be used to water various indoor and outdoor plants to ensure least water wastage and beautification of the campus.

2. Potted plants have been placed below the outlets of Air Conditioners so that the water discharge from these outlets can be utilized properly.

3. Overflowing of water through overhead tank should be installed by installing water level controller at overhead tanks. This will not only save water but also reduce operational time of pump.

4. Gardens should be watered by using drip/sprinkler irrigation system to minimize water use.

11. WASTE MANAGEMENT

- **Auditing for Waste Management of the institute for Environmental Consciousness and Sustainability.**

- **Waste Management steps including: • Solid waste management • Liquid waste management • E-waste management**

WASTE MANAGEMENT

This indicator addresses waste production and disposal, plastic waste, paper waste, food waste, and recycling. Municipal solid waste has a few adverse environmental impacts, most of which are well known and not in need of elaboration. To reduce waste at institute, students and staff are educated on proper waste management practices through lectures, advertisement on notice boards, displaying slogan boards in the campus.

Waste is collected daily from various sources and is separated as dry and wet waste. Colour coded dustbins are used for different types of wastes. Green for wet and blue for solid waste.

Nagar Palika Parishad collects daily garbage by housekeeping personnel for further processing.

11.1 Solid Waste management

Solid waste can be divided into two categories: general waste and hazardous waste. General waste includes what is usually thrown away in homes and schools such as paper, plastics tins and glass bottles. Hazardous waste is waste that is likely to be a threat to one's health or the environment like cleaning chemicals and petrol. Small bucket and big buckets are used for solid waste.

Small Plastic bucket = 30 Nos.

Big Plastic Bucket = 08 Nos.

Total Production of Solid Waste (Bio degradable) : about 2-4 Kg

Total Production of Solid Waste (Non Bio degradable) : Less than 1 Kg

Two compost pit of size 192 sq. fit is constructed.

11.1.1 Non Bio degradable Waste – Plastic Bottles / Waste Paper etc.

Non- biodegradable are those waste, which cannot be decomposed by biological processes . These are of two types –

1)Recyclable: waste having economic values but destined for disposal can be recovered and reused along with their energy value. e.g. Plastic, paper, old cloth etc.

2) Non-recyclable: waste which do not have economic value of recovery. e.g., Carbon paper, thermocol, tetra packs etc. Disposal of non-biodegradable waste is a major concern, not just plastic, a variety of waste being accumulated. There are a few ways to help non-biodegradable waste management. The impact of non-biodegradable waste on the environment and focus on its safe disposal for sustainable environment.

Waste material like plastic, papers etc. are collected and sold out to scrap vendor from time to time.

College has constructed a compost pit to produce compost manure from the canteen solid waste and waste from tiffin and other sources. Manure will be used for the purpose of garden as well or for planted tree.

11.2 Liquid Waste Management

The college do not produce any hazardous waste chemicals, so there is no chance of mixing in ground water.

11.3. Recommendations

2) More focus on solid waste management

A continuous practice of the same will helps to conserve energy and natural resources in the campus other practices like landfill waste can be reused, college can increase the number of dustbins targeting the areas with no or less no. of dustbins, waste segregation at the micro level is a necessity; separate bins for recyclable and non-recyclable wastes have to be set up throughout the campus, awareness has to be created among the staff and student through various programmes and policies, emphasis to be laid on –reduce, reuse and recycle.

3) Re-use of impure wastewater from water purifiers,

Impure drinking water is one of the main sources of infection, even mild poisoning, in many cases. Hence, it is important to use water purifiers in college campus. Two 2 water purifiers are installed in college campus. Waste water from these purifier outlets should be used to water various indoor and outdoor plants to ensure least water wastage and beautification of the campus.

2) Re-use of waste water from Air Conditioners

Potted plants have been placed below the outlets of Air Conditioners so that the water discharge from these outlets can be utilized properly.

3) Re-use of waste water from surrounding area

A temporary pond shall be constructed to collect the waste water from kitchen & other sources in the college campus. The pond would serve as a recharge point source for underground water as well as while some of it is used for on-site construction and irrigation of plants spread across the college campus

11.4 E-Waste Management

Waste Electrical and Electronic Equipment (WEEE) or E-waste is one of the fastest growing waste streams in the world. In developed countries, it quals 1% of total solid waste on an average.

In developing countries, it ranges from 0.01% to 1% of the total municipal solid waste generation. In countries like China and India, though annual generation per capita is less than 1 kg, it is growing at an exponential pace. Presently, a very small amount of E waste from offices and glass waste from labs is generated in College.

Generally, in colleges, the E-waste is kept in store room and disposed every year by selling it to vendors, but Samadhan College has planned to reuse the old non-working computer by changing some hardware like motherboards, hard disk, processor, SMPS etc. with installing updated software.The total e-waste kept in college is about 30 Kg.

12. GREEN AUDIT

- **Green Campus Management and Carbon Footprint of the institute for Environmental Consciousness and Sustainability.**
- **Green Practices**
- **Students, staff using a) Bicycles b) Public Transport c) Pedestrian friendly roads**
- **Plastic-free campus**
- **Paperless office**
- **Green landscaping with trees and plants**

12.1 Green Campus Management

All plant and animal species - including humans - are linked together in a complex web of life; we depend upon biodiversity for our survival. Biodiversity is the key to healthy ecosystems and ultimately a healthy planet. It keeps the air and water clean, regulates our climate and provides us food, shelter, clothing, medicine and other useful products. Each part within this complex web diminishes a little when one part weakens or disappears.

Area under green cover in College campus (Approx.)	1.30 acre
Availability of Nursery on Campus (Yes / No)	Yes
Plant Protection Management	Yes

Number of plantations done in the year 2020-21	2100
Extent of area (% of area) under tree cover	25%

Table 26: Green Area management

The trees work hard to keep the air we breathe clean and healthy. They are like sponges. Their leaves take in much of the poisonous unwanted carbon dioxide in the air, and replace it with the oxygen we need for healthy living. This system of absorbing gases on which all plants rely for their food is called photosynthesis. In this process, the plants with the help of sunlight, water, minerals and the green material called Chlorophyll within the leaves change the carbon-dioxide into food for themselves. When doing this they release oxygen into the air which is vital for all life on earth. At night when there is no sunlight the plant no longer makes food, so it does not release the same amount of oxygen.

One is often told not to sleep with plants in one's room, as they will use up all the oxygen. However, at night although photosynthesis does take place the plants also rest, so that little oxygen is absorbed from the air and very little harm can be done to the ones sleeping in the room.

The roots of trees dig deep into the earth and hold it together so that the rain and wind cannot wash or blow it away. This is very important as the earth has only a very thin layer (seldom more than one foot) of fertile soil covering it. If this is washed, blown or worn away leaving rock or sand on which no plants can grow then the earth would become a desert. The removal of this top-soil is called soil erosion. Scientists, all over the world are trying to find ways to prevent soil erosion. One of the most important ways is creating by planting more trees.

Trees send up water vapour into the atmosphere through their leaves. When this vapour meets the cool air above it turns into drops of water which then fall as rain. They give us beauty, colour, and greenery. This is something which we often forget and fail to appreciate. They are the homes of many birds, animals and insects. Each of these is important in maintaining the balance of nature.

12.2 Green Audit

Green Audit defined as documented, verification process of specified environmental activities, events, conditions, management system. Green Audit can create awareness in college staff as well as students which are our responsibility too, to save our environment and also can find the waysto improve environmental issues which are increasing day by day. Environmental problems such as recycling of waste, water conservation and recycling, pollution control, plantation, biodiversity conservation etc. can solve through Green Auditing. Good growth come from good education as well as good mental and physical health if we protect our environment, we can also protect our health.

Green Audit means of assessing environmental performance. It is a systematic documented periodic, and objective review by regulated entities of facility operations and practices related to meeting environmental requirement. It is otherwise the systematic examination of the interactions between any operation and its surroundings. This includes all emissions to air, land and water, legal constraints, the effects on the neighbouring community, landscape and ecology, the public's perception of the operating company in the local area. Green audit does not stop all compliance with legislation. Nor is it a 'green washing' public relations exercise. Rather it is a total strategic approach to the organisation's activities.

VISION

To empower the youth, especially belonging to the underprivileged sections of society, through quality education by inculcating philanthropic values and enabling them to meet the challenges of the contemporary knowledge society.

MISSION

To translate the vision into reality the institution is committed to -

- Embrace in its fold students from all sections and categories especially addressing to the needs of thefirst generations learner.

- Expose the students (especially the under-privileged ones) to variety of activities, academic and extra-academic, aiming at their overall development.
- Inculcate humanistic and social values in the students to motivate them towards community services.
- Kindle the entrepreneurial spirit in students.
- Inspire the young minds to develop the habits of critical thinking to achieve Creative Excellence.
- Promote quality research among the teachers and students.
- Sensitize the students on issues relating to ecology, environment, human rights and gender equality.
- Foster global competencies.

12.3 Green Campus Policy of College

Samadhan College, Bemetara is committed to develop its campuses as places where education is combined with environmentally friendly practices to promote Sustainable Development by o restricted entry of automobiles, promoting the use of Bicycles and provision of Pedestrian Friendly pathways e ban on use of disposable Plastics in line with the State Government Guidelines. creating awareness with stakeholders on the need for maintaining greenery in the campus for sustainable ambience. Encouraging all stakeholders to support and participate in ensuring green cover in the campus. o preserving age old trees and protect them to have prolonged life. enhancement of green cover by landscaping with trees and plants. conduct of green audit at regular intervals and implement the suggestions towards creating green campus. The faculty, staff and students are encouraged to contribute collectively to develop an eco-friendly sustainable campus and disseminate the concept of ecofriendly culture to the nearby community and wherever possible.

Samadhan College, Bemetara envisions a clean and green university campus where ecological friendly practices and education combine to encourage sustainable and eco-friendly systems in the campus and beyond the campus. The green campus offers the organizationa prospect to take the lead in redefining its green culture through promoting environmental ethicsamong students and staff The Institute also promotes clean and green

campus through adopting, practicing and promoting environmentally friendly practices among students and staff to generate Eco consciousness among them and in the world around them.

Objectives of the policy: To compose students by understanding the importance of environment and its problem areas Important function of the policy.

- To train students to create responsiveness amongst public.
- To encourage students to keep environment safe and clean.
- To encourage students to adopt environment friendly practices which include paper bags, save.
- To help the students to minimize the use of polluting product.

Why Green Audit

The excessive environmental degradation is creating the “Environmental poverty”. Thus, academic leaders should initiate the knowledge and benefits of resources so that their institutionsrespond to environmental issues and challenges. We believe that there is an urgent need to address these problems and reverse the trends of environment degradation.

OBJECTIVES -

- To assess environmental performance
- To promote environmental awareness
- To improve health
- To conserve resources
- To reduce waste
- To improve environmental standards
- To sustainable use of natural resources
- To develop responsibility about environment
- To enhance college profile

PLANTATION -

To create Environmental awareness at the college campus we organize plantation programwith all the staffs and students of our college. We try to plant more trees. To keep the greeneries in the campus we maintain the garden by paid staff under the guidance of garden committee members.

To create- green cover, eco-friendly atmosphere, pure oxygen at the college campus, plantation program is organized every year with involving all students, principal, and all departments faculty members. In this session van mahotsav program was organized and about 100 ornamental, avenue, medicinal plant with rare and exotic beautiful trees was planted in botanical garden and other parts of college campus. To keep the greeneries in the campus, we regularly maintain the gardens which are looked after by paid staff under the guidance of garden committee members. Moreover, every year we try to plant new trees. Seasonal flower garden is also a unique feature of this college. There are so many plants are present in our college campus categorized below-

12.4 List of The Plants Audited

Sl. No.	Name of tree	Quantity
1	Mulberry	3600
2	Coconut	125
3	Neem	28
4	Wood Apple	18
5	Elaeocarpus	10
6	Coral tree	16
7	Sandal	11
8	Mango	12
9	Mahogany	15
10	Teak	15
11	Cardamom	5
12	Ashoka	5
13	Jambolana	5
14	Banana	6

15	Banyan	2
16	Peepal	2
17	Nursery Plants	4800
18	Kalpvriksha	1

Table 16: List of the plants audited

Quantity of flora

Particulars of Flora	**Numbers**
Full grown Tree	128
Semi Grown Tree	3725
Quarter grown plants	5300

Table 17: Type and quantity of flora

12.5 Carbon Footprint

A carbon footprint is the amount of greenhouse gases—primarily carbon dioxide— released into the atmosphere by an individual, event, organization, service, or product, expressed as carbon dioxide equivalent. In addition to the water, waste, energy and biodiversity audits we can also determine what our carbon footprint is, based on the amount of carbon emissions created. The release of carbon dioxide gas into the Earth's atmosphere through human activities is commonly known as carbon emissions.

An important aspect of doing an audit is to be able to measure our impact so that we can determine better ways to manage the impact. In addition to the water, waste, energy and biodiversity audits we can also determine what our carbon footprint is, based on the amount of carbon emissions created.

According to Carbon Trust (2007), "Carbon Footprint is defined as a measurement of the total GHG emissions caused directly and indirectly by an individual, an organization, event or product and is expressed as a carbon dioxide equivalent (CO_2e)". An organizational carbon footprint measures the GHG emissions from all the activities across the organization, including energy used in buildings, industrial processes, fugitive emissions and organization's vehicles. Besides quantifying organization's total GHG impact, a CF analysis will provide the organization with a comprehensive GHG inventory, allowing it to identify and target reductions from its major emissions sources.

Generally, carbon footprint of a college is related to following emissions :-

1) Direct GHG emissions from:
   - Combustion of diesel used in electricity generators
   - Combustion of LPG in canteen and chemistry laboratories
   - Combustion of fuels in college bus
   - Fugitive emissions from refrigeration/air-conditioning equipment
2) Indirect emissions from purchased electricity
3) Other Indirect GHG emissions from:

- GHG emissions due to transportation used by Teaching Staff, Non-Teaching Staff, and Students of from college (to and fro)
- GHG emissions due to paper consumption
- GHG emissions from garden waste generation across the campus

We have considered electricity and transportation, which contribute a major portion of carbon emission in the Samadhan college.

12.5.1 Carbon Emission by Transportation

The two major fuels used by the transport sector are petrol and diesel. These fuels are carbon intensive as they contain 80-85% of carbon by weight. The carbon emission by transportation is calculated in following table:-

Sl. No.	Fuel Used	Types of Transport	Persons	Numbers of Persons	A Nos. of Vehicle Used	B milage	C Average distance in KM	D= C/B Fuel Consumed per Day per Vehicle in ltr	E Total working days	F=E x D Fuel Consumption Per Vehicle in a year	G Emission factor	H=G x F x A Total emission
1	No Fuel	Bicycle/ Pedestrian	Students	15								
			Non-Teaching Staff	4								
			Teaching Staff	4								
2	Petrol	Two-Wheeler	Students	100	90	40	47	1.175	176	206.8	2.67	49694
			Non-Teaching Staff	6	6	40	10	0.25	176	44	2.67	705
			Teaching Staff	26	26	40	16	0.4	176	70.4	2.67	4887
3	Petrol	Four-Wheeler	Directors/ Teaching Staff	3	3	20	8	0.4	176	234.1	2.67	1875
4	Diesel	Public Bus	Students	130	6	6	65	10.83	176	1906.7	2.67	30545
			Non-Teaching Staff	2	1	6	20	3.333333	176	586.6667	2.67	1566
			Teaching Staff	2	2	6	110	18.33333	176	3226.667	2.67	17230
5	Diesel	College Bus (Kawardha)	Students/Teachers	40	1	6	8	1.333333	176	234.6667	2.67	627
Total Co2 emission in KgCo2 eq per Year												**1,07,129**

Table 18: Carbon emission by transport

Thus, total emission by the transport is 1,07,129 KG CO_2 eq. Per year

12.5.2 Carbon Emission by Electricity

Electricity is taken by grid which uses coal for generating electricity or DG set which uses diesel for electricity generation.

Parameter	Emission Factor (A)	Unit in KWH (B)	Total emission (C= A x B)
Grid Electricity	0.82	11,257	9231
Total $KgCO_{2Eq.}$ Emission by Electricity			**9,231**

Table 19: Carbon Emission by Electricity

Thus, total emission by purchased electricity is 9,231 $KgCO_{2Eq.}$

12.5.3 Total Carbon dioxide emission at Samadhan College, Bemetara

Area	CO2 eq. emission in KG
Electricity	9,231
Transport	1,07,129
Total	**1,16,360**

Table 20: Total Carbon dioxide emission at Samadhan College, Bemetara

12.5.4 Reduction of Carbon Emission

A) The following installation /activity is responsible for reduction in carbon emission: -

- Off grid Solar Power Plant of 100 KW Capacity
- Composting
- Tree plantation.

Here, we are considering solar power plant and tree plantation.

12.5.5 Reduction of Carbon Emission by Solar Power Plant

The off grid solar power plant is in process of converting into grid connected solar power plant. If it is not generated from solar then it would be purchased from electricity distribution companies. The electricity is generated from burning of coals in thermal power plant, which causes carbon dioxide emission.

It is assumed that the total generation of grid connected solar power plant is 1,39,678 units.

Parameter	Emission Factor	Unit in KWH	Total reduction of emission
Solar Power Plant	0.82	139678	1,14,536

Table 21: Reduction of Carbon Emission by Solar Power Plant

Thus, grid connected solar power plant will reduce 1,14,536 KG of CO_2eq. Per year.

12.5.6 Reduction of Carbon Emission due to absorption of CO_2 by Tree Plantation

Planting is a great way to help sequester carbon emissions. Through photosynthesis ***trees absorb carbon dioxide to produce oxygen, food and wood***.

Particulars of Flora	Numbers	Carbon absorption by one tree Per year in Kg	Total Carbon Di Oxide absorbed in Kg
Full grown Tree	128	6.8	870
Semi Grown Tree	3725	3.4	12,665
Quarter grown plants	5300	1.7	9,010
Total Carbon dioxide absorption by trees			22,545

Table 22: Carbon absorption by tree plantation.

12.5.7 Total Reduction in Carbon dioxide emission

Area	Reduction in CO2 eq. emission in KG
Solar (expected)	1,14,536
Trees	22,545
Total	**1,37,080**

Table 23: Total Reduction in Carbon dioxide emission

12.6 Recommendation

1) As India has set the goal of achieving “Net Zero carbon emissions” by 2070, Considered a milestone in climate action pledges, "net zero" refers to a balance where emissions of greenhouse gases that raise the globe's temperature continue but are offset by the absorption of an equivalent amount from the atmosphere.

The pledge was among following five commitments by the Prime Minister at the UN Conference.

- India will reach its non-fossil energy capacity to 500 GW by 2030.
- India will meet 50 percent of its energy requirements from renewable energy by 2030

- India will reduce the total projected carbon emissions by one billion tonnes from now to 2030.
- By 2030, India will reduce the carbon intensity of its economy to less than 45 per cent.
- By 2070, India will achieve the target of net zero.

As Samadhan College is very conscious about sustainable environment and very soon, grid connected solar power plant will be started. In view of this, it is recommended to get registered with Smart Campus Cloud Network- SCCN. The registration has no fee. The link for registration is https://sccnhub.com/campus-registration-2/steps/1.

Smart Campus Cloud Network – SCCN is a flagship project of TERRE Policy Centre and backed by international policy experts, world leaders and the industrial fraternity. Smart Campus Cloud Network-SCCN is aimed at accelerating the momentum of implementation of Sustainable Development Goals-SDGs- and carbon neutrality across the Universities and Higher Educational Institutes.

SCCN is Global Network of the Universities and Higher Educational Institutes (HEIs) that localises Sustainable Development Goals (SDGs) & Carbon neutrality. The network encourages the youth in the universities to undertake projects in their own campus that relate to SDGs and Climate Change. SCCN is not just a project, it is a movement by youth.

The movement launched recently has now created a digital network of nearly 400+ Universities and Higher Educational Institutions (12 from abroad) to promote the practical projects in the campus. SCCN is intended to transform campus into laboratory for Sustainable Development Goals and Carbon neutrality. It is also skill building and training centre for the youth who are ready to be responsible citizens and ambassadors for Sustainability

Net Zero will not be a burden on the Samadhan College. It will be in fact cost-saving proposition. It would also reduce pollution and improve the mental and physical health of students to better study and generate creative ideas.

2)A Continual plantation of trees should be going on. It is recommended to increase the Green Cover further to more area in coming years.

ANNEXURE

1. AWARDS AND CERTIFICATES


THE PROGRESS
GLOBAL
AWARDS 2021
EXCELLENCE IN EDUCATIONAL SERVICES
7th November 2021
CERTIFICATE OF
ACHIEVEMENT
THIS AWARD IS GIVEN TO
SAMADHAN COLLEGE
POST-BIJABHAT, DIST.- BEMETARA
CHHATTISGARH
FOR THE
Best in Social & Community Services
UNDER THE CATEGORY
COLLEGE AWARDS
Dr. S. M. Ghosh
Dr. B. K. Sthapak


THINK MEDIA INC
Think India Education Summit 2015
Chhattisgarh
Mahindra
Truck and Bus Division
Think India Education Awards 2015
Certificate of Excellence
presented to ..... Samadhan College .....
in recognition of ..... having the best Infrastructure .
at Rungta International School, Near Nandan Van, Veer Savarkar Nagar, Raipur, Chhattisgarh
on February 9th, 2015.
Vijay Michihito Batra
Founder & Chief Editor
Think Media Inc.
Krishan Khanna
Chairman, Hitech
Dr. M.J. Xavier
Former Director IIM-B
Executive Director, VIT University


HEARTFULNESS ESSAY EVENT -2019
ORGANISED BY
Shri Ram Chandra Mission
United Nations Information Centre
and the Heartfulness Education Trust
UN Information Centre for India and Bhutan
Certificate of Appreciation
This certificate is awarded to
SAMADHAN COLLEGE - BEMETARA
BEMETARA (CH-19G/BEM/361813)
for their outstanding contribution to the success of this Event.
Kamlesh D. Patel
PRESIDENT
Shri Ram Chandra Mission
Derk Segaar
DIRECTOR
UN Information Center for India and Bhutan
Brighter Minds


150 YEARS OF CELEBRATING THE MAHATMA
स्वच्छ भारत
एक कदम स्वच्छता की ओर
हेमचंद यादव विश्वविद्यालय, दुर्ग (छ.ग.)
प्रमाण पत्र
स्वच्छता अभियान
महात्मा गांधी जी की 150वीं जन्म जयंती वर्ष के अवसर पर हेमचंद यादव विश्वविद्यालय, दुर्ग राष्ट्रीय सेवा योजना प्रकोष्ठ द्वारा सत्र 2019-20 में स्वच्छ भारत अभियान के अंतर्गत महाविद्यालय परिसर में स्वच्छता अभियान चलाया गया। जिसमें ...समाधान महाविद्यालय... ...बेमेतरा..... ने ...बेमेतरा..... जिले में ..प्रथम..... स्थान प्राप्त किया।
(डॉ.आर. पी. अग्रवाल)
कार्यक्रम समन्वयक, रासेयो
(डॉ.सी. एल. देवांगन)
कुलसचिव
(डॉ.अरूणा पल्टा)
कुलपति


कार्यालय कलेक्टर एवं जिला निर्वाचन अधिकारी, जिला बेमेतरा
"Electoral Literacy for Stronger Democracy"
प्रमाण-पत्र
शैक्षणिक सत्र 2019–20 में मतदाता जागरूकता के क्षेत्र में कैम्पस एम्बेसडर के रूप में उत्कृष्ट कार्य करने के लिए श्री / कुमारी ---- डिकी सलूजा बी.सी.ए. तृतीयवर्ष समाधान महा. बेमेतर पिता / पति ---- राजकुमार सलूजा को दिनांक 25 जनवरी 2020 को राष्ट्रीय मतदाता दिवस के अवसर पर यह प्रमाण–पत्र प्रदान किया जाता है।
कलेक्टर एवं जिला निर्वाचन अधिकारी
जिला बेमेतरा


सहभागिता प्रमाण पत्र
हरित बेमेतरा
हम सबका हो एक ही नारा
स्वच्छ, हरा परिवेश हमारा।
समाधान महाविद्यालय परिवार, बेमेतरा
ने 4 अगस्त 2019 को समाधान महाविद्यालय, समृद्धि विहार परिसर में
1100 पौधो का रोपण कार्यक्रम
में सम्मिलित होकर एवं हरियर बेमेतरा के लिए योगदान देकर
हमारा गौरव बढ़ाया। हम इनके उज्जवल भविष्य की कामनां करतें हैं।
पौधों का
जन्मोत्सव
विधायक
जिला - बेमेतरा, छ.ग.
जिलाधीश
जिला - बेमेतरा, छ.ग.
सचिव

2. IN PRINT MEDIA FOR NOBLE CAUSE

कलेक्टर निवास से हुआ प्रारंभ काढ़ा पेय वितरण अभियान

बेमेतरा. कोविड 19 महामारी को देखते हुए नगर के समाजसेवी भाइयों और बहनों ने पिछले पांच दिनों से अभियान चलाकर रोग प्रतिरोधी आयुर्वेदिक औषधि सर्वज्वरहर चूर्ण से बने काढ़े को आज अभियान के पांचवे दिन में कलेक्टर शिव अनंत तायल के निवास से वितरण शुरू किए.

इस अवसर पर कलेक्टर ने स्वयं काढ़ा पिये और सभी स्टॉफ को भी वितरित करवाये. साथ ही काढ़ा वितरण में लगे सभी सेवा भावी भाइयों और बहनों को संबोधित किये. उन्होंने जिस तरह तेजी से कोरोना बढ़ रहा है, आप सभी का रोग प्रतिरोधक क्षमता बढ़ाने और आयुष मंत्रालय के गाइड लाइन को पर्चे के माध्यम से वितरित करने का ये प्रयास सराहनीय है. स्वयं सोशल डिस्टेंस और कोविड 19 से सुरक्षा हेतु अन्य सभी नियमों का पालन करते हुए अपनी और लोगों की सुरक्षा का ध्यान रखते हुए ही यह सेवा कार्य संचालित करें. समाज सेवा का ये प्रयास सराहनीय है. समाज के सहयोग से ही इस महामारी से हम सब अपनी सुरक्षा कर सकते हैं. जो गाइड लाइन आयुष मंत्रालय का है और इस पर्चे में लिखा है उसका पालन सभी जरूर करें और लक्षण दिखने पर अपनी कोरोना जांच अवश्य कराएं.

पिछले पांच दिनों में मुख्य रूप से कलेक्टर निवास, कचहरी पारा, सिंधी कालोनी, गंजपारा, पुराना बस स्टैंड, कंडरा पारा, कृष्णा विहार, अशोका विहार कालोनी, समृद्धि विहार कालोनी में लगभग पांच हजार से अधिक लोगों को घर-घर जाकर काढ़ा का वितरण किया गया और जागरूकता हेतु पर्चे भी वितरित किये गए. न्यायधीश संजय अग्रवाल के निवास में भी काढ़ा पिलाया गया. महामारी के दौरान लॉक डाउन के सभी नियमों का पालन करते हुए काढ़ा वितरण के इस सेवा कार्य में मुख्य रूप से सिंधी समाज के अध्यक्ष प्रकाश शितलानी ने सिंधी कालोनी में वितरण में घर-घर जाकर वितरण में सहयोग किये. अभियान में अवधेश पटेल, पार्षद नीतू कोठारी, वर्षा गौतम, किरण जैन, डेनिम सेन, ताराचंद माहेश्वरी, प्रतुल वैष्णव, संदीप साहू, पीतांबर झा, मेघु जायसवाल, बसंत डहरे, राजेश सिंघानिया, नलेश्वर साहू, रमन अग्रवाल, लक्ष्मीनारायण साहू, नवीन वैष्णव, देवव्रत कश्यप ने वितरण कार्य मे सहयोग किये. 19 सितंबर को वार्ड 7 में वितरण किया जाएगा.

कृष्णा विहार व सुंदर नगर के 800 लोगों को पिलाया गया सर्वज्वरहर का काढ़ा

पत्रिका न्यूज़ नेटवर्क
patrika.com

बेमेतरा . जिला मुख्यालय में कोविड़ 19 महामारी को देखते हुए नगर के समाजसेवी ने आज रोगप्रतिरोधी आयुर्वेदिक औषधि सर्वज्वरहर चूर्ण से बने काढ़े को कृष्णा विहार और सुंदर नगर में घर-घर जाकर काढ़ा पिलाए। साथ ही लोगों को जागरूक करने हेतु कोरोना संक्रमण से बचने और संक्रमण से ठीक होने के बाद की आयुष मंत्रालय भारत सरकार के गाइडलाइन को पालन करने से संबंधित पर्चे भी वितरित किए और अपील किए कि इस गाइडलाइन का पालन अवश्य करें। कृष्णा विहार और सुन्दर नगर के लोगों ने सभी समाजसेवी का आभार जताया और वितरण में सहयोग भी किए।

इस भयावह महामारी के दौरान लॉकडाउन के सभी नियमों का पालन करते हुए काढ़ा वितरण के इस दैवीय सेवा कार्य में मुख्य रूप से आज इस वार्ड की सक्रिय पार्षद नीतू कोठारी, समाजसेवी वर्षा गौतम, विविड स्कूल की संचालिका किरण जैन, डेनिम सेन, ताराचंद माहेश्वरी, प्रतुल वैष्णव, आरक्षक संदीप साहू, कृष्णा विहार कॉलोनी के अध्यक्ष सुरेश पटेल, विश्व हिन्दू परिषद बेमेतरा के अध्यक्ष आदित्य राजपूत, गणेश अग्रवाल, अनिल शर्मा, समृद्धि विहार से सुजीत चैधरी, पीताम्बर झा, सतीश सिंह, अभिषेक वर्मा, बसंत डेहरे, अवधेश पटेल, संतोष हरिहरनो, तथा दिनेश सिन्हा ने वितरण कार्य में सहयोग किए।

काढ़ा बनाने में संतराम साहू व धर्मपाल का विशेष सहयोग रहा। नगर के अधिवक्ता बलराम साहू ने अपने वार्ड में काढ़ा वितरण केकिया गया । 16 सितम्बर को गंजपारा में वितरण किया जाएगा।

बीस हजार लोगों को पिलाया रोगप्रतिरोधी काढ़ा

डरिभूमि न्यूज ▶▶ बेमेतरा

सभी जानते हैं कि कोविड–19 महामारी की कोई दवा अभी तक नहीं बनी है। अतः इस रोग से बचने के लिए रोगप्रतिरोधक क्षमता बढ़ाने के उपाय करना ही बेहतर है। कोरोना महामारी की भयावह परिस्थिति को देखते हुए नागरिकों की सुरक्षा व रोग प्रतिरोधक क्षमता को बढ़ाने हेतु नगर के लोगों ने विभिन्न स्थानों पर काढ़ा का वितरण किया।

समाजसेवी ताराचंद माहे,वरी, नले,वर साहू, पार्षद डेनिम सेन, किरण जैन, समाजसेवी वर्षा गौतम, आरती साहू, देवव्रत कश्यप, चन्दाराव जाधव, मेघु जायसवाल, आरक्षक संदीप साहू, अयोध्या प्रसाद, अवधेश पटेल, पिताम्बर झा, राजेश सिंघानिया, बसंत डहरे, संतराम, धर्मपाल आदि सेवाभावी भाईयों एवं बहनों के सहयोग से बेमेतरा नगर के विभिन्न वार्डों में स्थानीय वार्ड पार्षद घनश्याम देवांगन, पार्षद देवराम [illegible] पार्षद सोमनाथ ध्रुव, पार्षद सजनी यादव, पार्षद आशीष राम ठाकुर भद्रकाली मंदिर, वार्ड नं. 18, नयापारा, गंजपारा, सुदर नगर, कृष्णा विहार, पंजाबी पारा, प्रोफेसर कॉलोनी, रायपुर रोड, कंडरा पारा, अशोका विहार, सिंधी पारा, शांति विहार, बैंक कॉलोनी, सदर रोड, पिकरी, सिंघौरी, जिला अस्पताल के सहयोग से पिछले 15 दिनों में लगातार रोगप्रतिरोधी औषधि सर्वज्वरहर काढ़ा घर–घर जाकर पिलाया गया। सर्वज्वरहर चूर्ण का फार्मूला ए,नागराज द्वारा समाजहित में सर्व सुलभ कराया गया है, जिसे राजस्थान सरकार स्वास्थ्य विभाग ने मान्यता प्रदान किया गया है। वहीं, छत्तीसगढ़ के मुख्यमंत्री भूपेश बघेल ने भी इसी फार्मूले से वन विभाग एवं गरियाबंद स्वसहायता समूह के सहयोग से निर्मित कराकर छत्तीसगढ़ मुख्यमंत्री निवास में लांच किया। घर में काढ़ा बनाने की विधि भी पर्चे के माध्यम से प्रदान की गई है। साथ आयुष मंत्रलय स्वास्थ्य विभाग द्वारा कोरोना सुरक्षा हेतु दिए गये गाइडलाइन पर्चे के माध्यम से वितरित किया गया व इस गाइडलाइन को पालन करने का आग्रह किया गया।

सेवा करने वाले हाथ अधिक पवित्र व वंदनीय

सदर रोड वितरण में समाजसेवी सुशील शर्मा का सराहनीय योगदान रहा। भद्रकाली मंदिर, सिंघौरी शीतला मंदिर, पुराना बस स्टैंड में स्टॉल भी लगाया गया। समाजसेवी ताराचंद माहेश्वरी ने कहा हमारे बेमेतरा शहर में काढ़ा वितरण में जो आनंद व खुशियां मिली है इसे शब्दों में बोलना कठिन है। नलेश्वर साहू ने कहा कि सेवा करने वाले हाथ, मंत्र जपते होठ से अधिक पवित्र व वंदनीय हैं। आरक्षक संदीप साहू ने कहा कि जनहित में शहर के विभिन्न वार्ड चौक–चौराहों में काढ़ा पिलाकर सेवा करने वाले बधाई के पात्र हैं। समाजसेवी नीतू कोठारी जो कुछ बहनों के टीम के साथ इस अभियान में शुरू से अंत तक सक्रियता से सहयोगी रहीं उन्होंने कहा कि मानवसेवा का यह कार्य अत्यंत सफल रहा। आने वाले समय में ऐसा सेवा कार्य देशकाल व परिस्थिति को देखते हुए और भी संचालित किया जायेगा। पार्षद डेनिम सेन को इस आयोजन में सराहनीय भूमिका रही। उन्होंने कहा कि यह सेवा कार्य करना मेरे लिए सौभाग्य का विषय है। विधायक निवास में काढ़ा वितरण के दौरान लायस क्लब के अध्यक्ष सुरेन्द्र छाबड़ा ने वितरण में सहयोग कर रहे सभी समाजसेवियों को बधाई व शुभकामना दी व कोरोना काल में इस दैवीय सेवा को सराहनीय पहल बताया। सर्वज्वरहर काढ़ा प्रतिदिन समाधान महाविद्यालय से तैयार होकर आता था एवं सभी समाजसेवी अपने स्कूटी से घर–घर जाकर वितरण करते थे।

विधायक ने बांटी आयुर्वेदिक दवा

कोरोना संक्रमण से बचाव में आयुर्वेद अत्यंत उपयोगी : गुरूदयाल

पत्रिका न्यूज नेटवर्क
patrika.com

नवागढ़. कोविड-19 वैश्विक महामारी से पूरे विश्व में मानव जाति पीड़ित है। ऐसे में शरीर को स्वस्थ्य बनाये रखने में उसके प्राकृतिक रोग प्रतिरोध प्रणाली की भूमिका महत्वपूर्ण हो जाती है। इस रोग में बचाव ही सबसे अच्छी चिकित्सा है। सभी जानते है कि कोविड-19 महामारी की कोई दवा अभी तक नहीं बनी है। अतः इस रोग से बचने के लिए रोगप्रतिरोधक क्षमता बढ़ाने के उपाय करना ही बेहतर है। कोरोना महामारी की भयावह परिस्थिति को देखते हुए नागरिकों की सुरक्षा व रोग प्रतिरोधक क्षमता को बढ़ाने नवागढ़ के विधायक गुरुदयाल सिंह बंजारे, नगर पंचायत अध्यक्ष एवं पार्षदों के माध्यम से आयुर्वेदिक औषधि सर्वज्वरहर चूर्ण का वितरण करेंगे।

सर्वज्वरहर चूर्ण पूर्णतया आयुर्वेदिक हर्बल उत्पाद

बता दें कि यह रोग प्रतिरोधी औषधि सर्वज्वरहर चूर्ण पूर्णतया आयुर्वेदिक हर्बल उत्पाद है जो सभी प्रकार के नए एवं पुराने मियादी बुखार, भूख की कमी, सिर दर्द, श्वाँस पथ में संर मण, दुर्बलता, कफ खासी में लाभदायक है। यह फॉर्मूला व्यक्ति की रोग-प्रतिरोधक क्षमता को बढ़ाकर जीवाणु एवं विषाणुजन्य संर मण से शरीर की रक्षा करता है। सर्वज्वरहर चूर्ण एक एंटीवायरल फॉर्मूला है। यह औषधि भारत सरकार आयुष मंत्रालय द्वारा दिये हुए संस्तुत दिशा-निर्देशों का पालन करता है। इसे गांधी विद्या मंदिर की सह शाखा सेठ भंवरलाल दुगड़ आयुर्वेद विश्व भारती द्वारा आयुष मंत्रालय के निर्देशानुसार अभी 2,25,000 लोगों को सरदार शहर, राजस्थान में

पिलाया गया। इसका अत्यंत सकरात्मक परिणाम रहा। इसे नित्य चाय-कापी अथवा अन्य पेय पदार्थो में या सीधे शहद में मिलाकर भी उपयोग में ले सकते है। इस औषधि में मुख्यतः भारतीय रसोई में पाये जाने वाले दैनिक उपयोग के सामान्य आयुर्वेदिक मसालों सौंठ, काली मिर्च, पीपली, लौंग, छोटी ईलायची, बड़ी ईलायची, दाल चीनी, जायफ्ल, जावित्री एवं तुलसी पत्र का औषधीय योग है। इसका सेहत पर कोई प्रतिकूल प्रभाव नहीं पड़ता। इसे सब्जी में डालकर भी उपयोग कर सकते है। विशेष लाभ व रोग प्रतिरोधक क्षमता बढ़ाने के लिए एक स्वस्थ्य आदमी इसका काढ़ा बनाकर सुबह-शाम खाली पेट तीन दिन सेवन करें। एक व्यक्ति को 10 ग्राम का एक पैकेट दिया जा रहा है। जो तीन दिन के लिए पर्याप्त है। यह नुस्खा नागराज (प्रणेता मध्यस्थ दर्शन सह-अस्तित्ववाद) का सर्वशुभ के लिए दिया गया है। यह उनके 800 वर्ष पुरानी आयुर्वेद की परिवार परम्परा से मिला है।

फॉर्मूला पुस्तक आरोग्य शतक में दिया हुआ

यह फॉर्मूला ए. नागराज द्वारा लिखित पुस्तक आरोग्य शतक में दिया हुआ है। आरोग्य शतक पुस्तक फ्री डाउनलोड करने के लिए लिक httpÑ//bit.ly/fever-v~ में सम्पर्क कर सकते हैं। ए. नागराज की पुत्री डॉ. शारदा शर्मा, शिष्य साधना भट्टाचार्य, मानव तीर्थ किरीतपुर एवं अन्य शिष्यों द्वारा निःशुल्क वितरण किया जा रहा है। आज मानव तीर्थ के सदस्य अवधेश पटेल ने नवागढ़ विधायक गुरुदयाल सिंह बंजारे को मानव तीर्थ के तरफ से नवागढ़ विधानसभा क्षेत्र में वितरित करने 2000 पैकेट सर्वज्वरहर चूर्ण सौंपा। जिसे विधायक द्वारा नवागढ़ में कोरोना वारियर्स को वितरित कराएंगे। विधायक ने कहा कि आयुर्वेदिक औषधि कोरोना से बचाव व रोगप्रतिरोधक क्षमता बढ़ाने में अत्यंत उपयोगी है। यह औषधि निःशुल्क प्राप्ति के लिए विधायक कार्यालय नवागढ़ एवं अवधेश पटेल संचालक, समाधान महाविद्यालय, समृद्धि विहार से सम्पर्क किया जा सकता है। इस अवसर पर नवागढ़ ब्लॉक कांग्रेस कमेटी अध्यक्ष शकिधर दीवान, नगर पचायत अध्यक्ष तिलक घोष, वसीम खान, पत्रकार राहुल साहू, सूरज सिन्हा, देवेन्द्र साहू उपस्थित थे।

समाधान कॉलेज ने सीएम सहायता कोष में दिया ₹51 हजार का चेक

बेमेतरा. विधायक आशीष छाबड़ा को चेक सौंपते कॉलेज के डायरेक्टर।

बेमेतरा| नोवल कोरोना वायरस के रोकथाम, राज्यों से बाहर फंसे मजदूर व प्रदेश के कमजोर वर्गों के सहयोग के लिए समाधान शिक्षा-संस्कार समिति ने भी अपना हाथ बढ़ाया है।

समाधान महाविद्यालय के डायरेक्टर अविनाश तिवारी, अलका तिवारी, गणेश वर्मा, अवधेश पटेल सहित महाविद्यालय के सहा. प्राध्यापक व सभी कर्मचारियों ने मिलकर 51 हजार रुपए का चेक सीएम सहायता कोष में जमा करने का निर्णय लिया। अविनाश तिवारी ने बेमेतरा विधायक आशीष छाबड़ा को उनके निवास पर इस चेक को सौंपा। इस दौरान अवनीश राघव, मंगत साहू, डोमनदास मानिकपुरी, विजय सिंह राजपूत, फगवा यादव, रामेश्वर निषाद उपस्थित थे। उन्होंने विधायक को ग्राम पंचायत फरी के सरपंच सतरूपा बाई व निरीक्षण टीम की सहायता से अन्य राज्य में फंसे 51 लोगों की सूची सौंपी।

बालोद-बेमेतरा हरिभूमि

रायपुर, गुरुवार 6 अगस्त 2020
haribhoomi.com

तीसरे वर्ष भी परिसर में 1800 पौधा लगाये गए

तीन साल में 4 हजार पौधों से हरा-भरा हुआ समृद्धि विहार

हरिभूमि न्यूज ▸▸ बेमेतरा

सर्वतोमुखी समाधान शिक्षा संस्कार समिति द्वारा संचालित समाधान महाविद्यालय और समृध्दि विहार कालोनी के निवासियों द्वारा तीसरे वर्ष भी समृध्दि विहार परिसर में 1800 पौधा लगाये गए। इसके पूर्व दो वर्षों में बेमेतरा के विभिन्न 24 समाज सेवी संगठनों के सहयोग से प्रथम वर्ष 2100 पौधे और द्वितीय वर्ष में 1100 पौधों का रोपण किया गया था। साथ ही दूसरे वर्ष पौधों का जन्मोत्सव भी मनाया गया था।

- रोपे गए 70 प्रतिशत पौधे सुरक्षित है

इसमें आज भी 70 प्रतिशत पौधे सुरक्षित हैं, परंतु इस वर्ष लॉकडाउन के कारण केवल समाधान महाविद्यालय और समृध्दि विहार कालोनी के निवासियों और बच्चों द्वारा पौधरोपण किया गया। इस पौधारोपण में मुख्य रूप से अवधेश पटेल, उमेश राजपूत,

पितांम्बर झा, संतराम साहू, धर्मपाल नोन्हारे तथा समृध्दि विहार कालोनी से अध्यक्ष— रूपेश पांडे, उपाध्यक्ष—विक्रम सोनी, सचिव— डोमेन्द्र पाण्डेय, सदस्य— राजेश गजपाल, अनुपम गोस्वामी, नारायण कौशिक, शशांक ततुवाय, दानेश तिवारी, कपिल शर्मा, संदीप यादव, मेघू जायसवाल, निखिल थानेश्वर, गोपी वैष्णव तथा छोटे बच्चों में पुर्णता पटेल, गम्या झा, शुभम चौधरी, अहम खान, सृष्टि, प्रत्यक्ष राजपूत, बंटी साहू, रिमझिम राजपूत, आर्या, काव्या, संस्कृति, दामिनी समीर और शिवम साहू का महत्वपूर्ण योगदान रहा। इन बच्चों ने लगातार 10 दिन अभियान चलाकर 700 पौधों का रोपण किया।

इस अवसर पर समिति के सदस्यों ने अपने भाव व्यक्त किये। सर्वप्रथम रूपेश पांडेय ने कहा कि— आओं वसुंधरा को सुन्दर बनाये— पेड़ लगाये इस स्लोगन को लेकर समृध्दि विहार परिवार के छोटे—छोटे बच्चे महिलाएं समाधान कालेज एवं समिति के लोगों ने मिलकर पौधारोपण किया। इससे कालोनी की अलग ही पहचान बनेगी।

डोमेन्द्र पाण्डेय सचिव ने कहा वर्तमान में लुप्त होने वाली पौधों की प्रजाति लगाकर हम आने वाली पीढ़ियों को ये संदेश देना चाहते हैं कि हमारे पूर्वजों ने हमे उपहार में ये अनमोल रत्न दिए हैं। उमेश राजपूत कोषाध्यक्ष ने कहा इस वर्ष हमने 2100 पौधे लगाने का लक्ष्य लिया है जो 15 दिनों के अभियान में पूर्ण हो गया। इसकी सुरक्षा की जिम्मेदारी हम सभी ने ली है। कालोनी एवं बेमेतरा को हरा भरा बनाना हमारा संकल्प है जो हम पूरा करेंगे।

समाधान महाविद्यालय व कॉलोनी परिसर में लगाए 1800 पौधे

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सर्वतोमुखी समाधान शिक्षा संस्कार समिति द्वारा संचालित समाधान महाविद्यालय और समृद्धि विहार कालोनी के निवासियों द्वारा वृहद स्तर पर पौधारोपण का यह तृतीय वर्ष है. जिसमें फरी जलाशय के किनारे समृद्धि विहार परिसर में 1800 पौधा लगाये गयें. इसके पूर्व दो वर्षों में बेमेतरा के विभिन्न 24 समाज सेवी संगठनों के सहयोग से प्रथम वर्ष 2100 पौधे और द्वितीय वर्ष वर्ष में 1100 पौधों का रोपण किया गया था. साथ ही दूसरे वर्ष पौधों का जन्मोत्सव भी मनाया गया था. जिसमें से आज भी 70 प्रतिशत पौधें सुरक्षित हैं परंतु इस वर्ष लॉकडाउन के कारण केवल समाधान महाविद्यालय और समृद्धि विहार कालोनी के निवासियों तथा छोटे-छोटे बच्चों के द्वारा पौधरोपण किया गया. इस पोधारोपण में मुख्य रूप से अवधेश पटेल, उमेश राजपूत, पिताम्बर झा, संतराम साहू, धर्मपाल नोन्हारे तथा समृद्धि विहार कालोनी से अध्यक्ष रूपेश पांडे, उपाध्यक्ष विक्रम सोनी, सचिव डोमेन्द्र पाण्डेय, सदस्य राजेश गजपाल, अनुपम गोस्वामी, नारायण कौशिक, शशांक ततुवाय, दानेश तिवारी, कपिल शर्मा, संदीप यादव, मेघू जायसवाल, निखिल थानेश्वर, गोपी वैष्णव तथा छोटे बच्चों में पूर्णता पटेल, गम्या झा, शुभम चौधरी, अर्हम खान, सृष्टि, प्रत्यक्ष राजपूत, बंटी साहू, रिमझिम राजपूत, आर्या, काव्या, संस्कृति, दामिनी समीर और शिवम साहू का महत्वपूर्ण योगदान रहा. इस बच्चों ने लगातार 10 दिन अभियान चलाकर 700 पौधों का रोपण किया.इस अवसर पर समिति के सदस्यों ने अपने भाव व्यक्त किये. रूपेश पांडेय ने कहा कि आओं वसुंधरा को सुन्दर बनाये- पेड़ लगाये. इस स्लोगन को लेकर समृद्धि विहार परिवार के छोटे-छोटे बच्चे महिलाएं समाधान कालेज एवं समिति के लोगों ने मिलकर पौधारोपण किया.

24 समाजसेवी संस्थाओं ने मनाया पौधों का जन्मोत्सव

हरिभूमि न्यूज ▶▶ बेमेतरा

समाधान महाविद्यालय परिसर एवं समृद्धि विहार कॉलोनी में हरियर के तहत गतवर्ष 2100 पौधारोपण किया गया था, जिसमें से लगभग 80 प्रतिशत पौधे आज भी सुरक्षित है। एक वर्ष पूर्ण होने पर इन पौधो का संरक्षण व पौधों का जन्मोत्सव कार्यक्रम आयोजित किया गया। इस अवसर पर 1100 नये पौधों का रोपण नगर के विभिन्न समाज सेवी संगठनों, समाधान महाविद्यालय, समृद्धि विहार कॉलोनी के निवासियों एवं नगर प्रभुद्जनों के सहयोग से 4 अगस्त को किया गया।

पर्यावरण संरक्षण का महत्व व उपयोगिता विषय पर अतिथियों का संक्षिप्त प्रेरणादयी व्याख्यान हुआ। कार्यक्रम का संचालन महाविद्यालय डायरेक्टर अवधेश पटेल के द्वारा किया गया। कार्यक्रम में सर्वप्रथम अतिथियों के द्वारा पंच वृक्ष का पूजन किया गया। कार्यक्रम का संबोधन करते हुए सर्वप्रथम अवधेश पटेल ने वृक्ष के उपयोगिता के बारे में बताया कि किस प्रकार वृक्ष हमारे मित्र की भांति हमारी मदद करता है। हमें प्रदूशण रहित वातावरण प्रदान करता है। ताकि हम सदैव ही स्वस्थ्य एवं निरोग रहे इस कारण प्रकृति के साथ हमें भी मित्र की भांति व्यवहार करना चाहिए और उसका संरक्षण करना चाहिए। इस कार्यक्रम में मुख्य अतिथि विधायक आशीश छाबड़ा विशिष्ट अतिथि नगर पालिका अध्यक्ष विजय सिन्हा , अवधेश चंदेल (पूर्व विधायक) एवं अवनीश राघव (अध्यक्ष, जिला कांग्रेस कमेटी) उपस्थित रहे। आशीश छाबडा ने सभा को संबोधित करते हुए कहा कि बच्चे के जन्म पर प्रमाण पत्र देते है अब राज्य सरकार को नया नियम लाना पडेगा, पहले आप एक वृक्ष लगाओ तब बच्चे के जन्म का प्रमाण पत्र दिया जायेगा। यह हमारे समाज के लिए बहुत अच्छी पहल होगी। 18 सितम्बर 2013 माननीय पूर्व राष्ट्रपति ए.पी.जे अब्दुल कलाम जी ने एक रूद्राक्ष का पौधा बेमेतरा रेस्ट हाउस में रोपित किया था तब से वापसी के समय समाधान महाविद्यालय में छात्रें से मिला तब से मैं जुड़ा हूँ। इस कार्यक्रम में नगर के समाजिक एवं शैक्षणिक संस्थाएं, सहयोग संस्था, युवा संगठन, भारत विकास परिषद्, युथ अवेयर, विश्व हिन्दु परिषद्, गोल्डन बॉयज क्लब, मां कालिका सेवा समिति, लायंस क्लब, नवयुवक मंडल, समर्पित युवा बेमेतरा, सांस्कृतिक विवेकानंद उत्कर्ष परिषद्, वत्सला गुरुप, युवा हेल्पिंग क्लब, अखिल भारतीय विद्यार्थी परिषद, ए.एस.यु.आई., सृजन पब्लिक स्कूल, ज्ञानोदय पब्लिक स्कूल, इंडियन पब्लिक स्कूल, प्रेरणा विद्यालय, समाधान महाविद्यालय परिवार, समृद्धि विहा परिवार एवं अजीम प्रेमजी फाऊण्डेशन सभी उपस्थित रहे और पौधारोपण में अपना सहयोग दिये। इन सभी संस्थाओं को महाविद्यालय के तरफ से प्रमाण पत्र भी दिया गया। कार्यक्रम में महाविद्यालय के सभी प्राध्यापक एवं छात्र–छात्राएं उपस्थित थे।

■ 1100 नयें पौधों का रोपण किया

छात्राओं द्वारा स्वागत गीत एवं मूक अभिनय प्रस्तुत किया गया जो पर्यावरण के महत्व को ऊपर छायांकित था, जिसका शीर्षक था – ''ना काटो मुझे दुखता है'' जो खुमेश सिन्हा (सहा.प्रध्यापक) के नेतृत्व में सम्पन्न हुआ। कार्यक्रम में विशेष रूप से अजीम प्रेमजी फाऊण्डेशन, के सदस्य, आरवी फिटनेस क्लब तथा समाज सेवी ताराचंद माहेश्वरी, सुरेन्द्र छाबड़ा, सुशील शर्मा, सुनील झा, पार्षद सुमन गोस्वामी, पत्रकार पप्पू रवानी, किशोर तिवारी, दिनेश दुबे, योगेश राजपूत अन्य समाज सेवीगण उपस्थित थे।