

7.1.3
Quality Audit
on
Environment
and
Energy
regularly Undertaken
By the Institution

The institutional environment and energy initiatives are confirmed through the following

- 1. Green Audit / Environment audit**
- 2. Energy Audit**
- 3. Clean and Green Campus Initiatives**
- 4. Beyond the campus environmental promotion activities**

INDEX
Academic Year 2018- 2023

Sr. No.	Name of Programmes
1	Green Audit/ Environment Audit
2	Energy Audit
3	Clean and Green campus Initiatives
3.1	Appreciation certificate from Janwani
3.2	Award from Pehel 2022
4	Beyond the campus environmental promotion activities
4.1	Cleaning of temple at Bhor (Mohari)
4.2	Environmental Awareness programme
4.3	Plant Conservation and Plantation at Mohari
5	Environment Audit Report

Green Audit Certificate
2022-2023



Archit Venture

Driven By Trusted Services

GST # 27ACDPL3257B1ZY



Certificate No: AV/GA/18-02-2022/254

Green Audit Certificate

This is to certify that

Samaj Bhushan Baburao Alias Appasaheb Jedhe
Arts, Commerce & Science College

425, Shukrawar Peth, Pune – 411002

*has submitted necessary data, evidences and credentials for
scrutiny for Green Initiatives in the institutional premises.*

*The activities and measures carried out by the institution was
verified. The efforts taken by the institute towards environment
& green initiatives is highly appreciated and commendable.*

UDYAM Regd. # UDYAM-MH-26-0018234



MSME
MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम

Audited by (Dr. Priti Kolhe)
Ph.D. (Environmental Science)

Date: 18th February 2022

Valid upto: 17th February 2023

**Green Audit Certificate
2021-2022**



Aarchit Venture

Driven By Trusted Services

GST # 27ACDPL3257B1ZY



Certificate No: AV/GA/10-02-2021/125

Green Audit Certificate

This is to certify that

**Samaj Bhushan Baburao Alias Appasaheb Jedhe
Arts, Commerce & Science College**

425, Shukrawar Peth, Pune – 411002

*has submitted necessary data, evidences and credentials for
scrutiny for Green Initiatives in the institutional premises.*

*The activities and measures carried out by the institution was
verified. The efforts taken by the institute towards environment
& green initiatives is highly appreciated and commendable.*

UDYAM Regd. # UDYAM-MH-26-0018234



MSME
MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम

Audited by (Dr. Priti Kolhe)
Ph.D. (Environmental Science)

Date: 10th February 2021

Valid upto: 09th February 2022

**Green Audit Certificate
2020-2021**



Aarchit Venture

Driven By Trusted Services

GST # 27ACDPL3257B1ZY



Certificate No: AV/GA/28-01-2020/194

Green Audit Certificate

This is to certify that

**Samaj Bhushan Baburao Alias Appasaheb Jedhe
Arts, Commerce & Science College**

425, Shukrawar Peth, Pune – 411002

*has submitted necessary data, evidences and credentials for
scrutiny for Green Initiatives in the institutional premises.*

*The activities and measures carried out by the institution was
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UDYAM Regd. # UDYAM-MH-26-0018234



MSME

MICRO, SMALL & MEDIUM ENTERPRISES

सूक्ष्म, लघु एवं मध्यम उद्यम

Audited by (Dr. Priti Kolhe)
Ph.D. (Environmental Science)

Date: 28th January 2020

Valid upto: 27th January 2021

**Green Audit Certificate
2019-2020**



Aarchit Venture

Driven By Trusted Services

GST # 27ACDPL3257B1ZY



Certificate No: AV/GA/19-01-2019/089

Green Audit Certificate

This is to certify that

**Samaj Bhushan Baburao Alias Appasaheb Jedhe
Arts, Commerce & Science College**

425, Shukrawar Peth, Pune – 411002

*has submitted necessary data, evidences and credentials for
scrutiny for Green Initiatives in the institutional premises.*

*The activities and measures carried out by the institution was
verified. The efforts taken by the institute towards environment
& green initiatives is highly appreciated and commendable.*

UDYAM Regd. # UDYAM-MH-26-0018234



MSME

MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम

Audited by (Dr. Priti Kolhe)
Ph.D. (Environmental Science)

Date: 19th January 2019

Valid upto: 18th January 2020

**Green Audit Certificate
2018-2019**



Aarchit Venture

Driven By Trusted Services

GST # 27ACDPL3257B1ZY



Certificate No: AV/GA/13-01-2018/443

Green Audit Certificate

This is to certify that

**Samaj Bhushan Baburao Alias Appasaheb Jedhe
Arts, Commerce & Science College**

425, Shukrawar Peth, Pune – 411002

*has submitted necessary data, evidences and credentials for
scrutiny for Green Initiatives in the institutional premises.*

*The activities and measures carried out by the institution was
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& green initiatives is highly appreciated and commendable.*

UDYAM Regd. # UDYAM-MH-26-0018234



MSME
MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम

Audited by (Dr. Priti Kolhe)
Ph.D. (Environmental Science)

Date: 13th January 2018

Valid upto: 12th January 2019

Environment Audit Certificate
2022-2023



Archit Venture

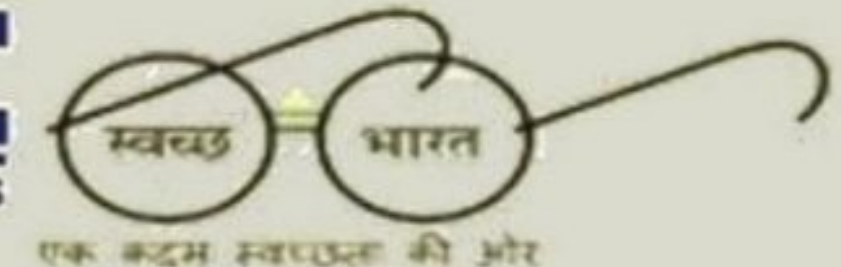
Driven By Trusted Services

GST # 27ACDPL3257B1ZY

UDYAM-MH-26-0018234



MSME
MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम



Environment Audit Certificate

This is to certify that

Samaj Bhushan Baburao Alias Appasaheb Jedhe

Arts, Commerce & Science College

ADDRESS: 425, Shukrawar Peth, Pune – 411002

has submitted necessary data, evidences and credentials for scrutiny for sustainable environmental initiatives in the institutional premises.

The activities and measures carried out by the institution was verified.

The efforts taken by the institute towards environment & sustainability is highly appreciated.

Certificate No: AV/EnA/20-02-2022/308

Date: 20th February 2022

Validity : 19th February 2023

(Dr. Priti Kolhe)

(Manish Maheshwari)

Auditors

**Environment Audit Certificate
2021-2022**



Archit Venture

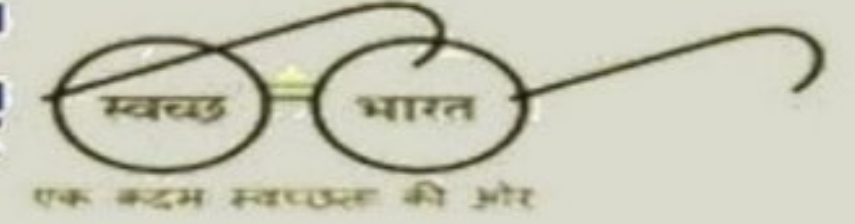
Driven By Trusted Services

GST # 27ACDPL3257B1ZY

UDYAM-MH-26-0018234



MSME
MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम



Environment Audit Certificate

This is to certify that

Samaj Bhushan Baburao Alias Appasaheb Jedhe

Arts, Commerce & Science College

ADDRESS: 425, Shukrawar Peth, Pune – 411002

has submitted necessary data, evidences and credentials for scrutiny for sustainable environmental initiatives in the institutional premises.

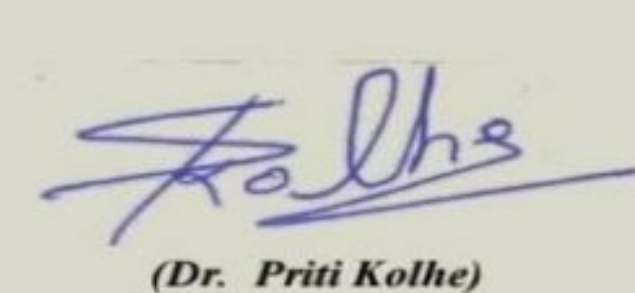
The activities and measures carried out by the institution was verified.

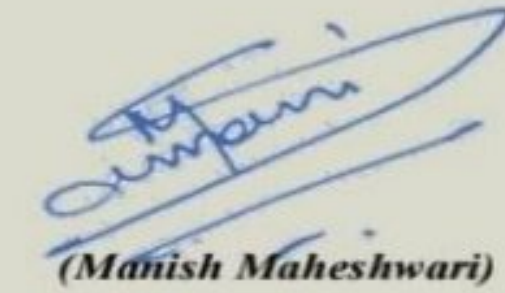
The efforts taken by the institute towards environment & sustainability is highly appreciated.

Certificate No: AV/EnA/16-02-2021/151

Date: 16th February 2021

Validity : 15th February 2022


(Dr. Priti Kolhe)


(Manish Maheshwari)

Auditors

**Environment Audit Certificate
2020-2021**

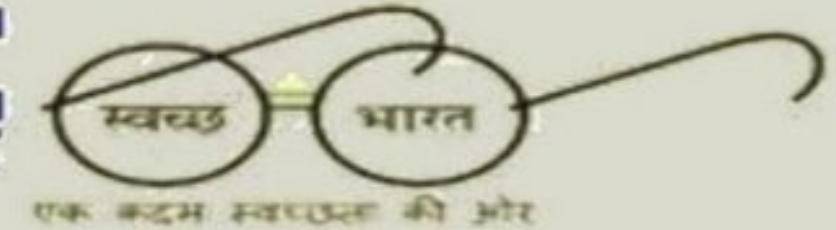


Driven By Trusted Services

GST # 27ACDPL3257B1ZY
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सूक्ष्म, लघु एवं मध्यम उद्यम



Environment Audit Certificate

This is to certify that

Samaj Bhushan Baburao Alias Appasaheb Jedhe
Arts, Commerce & Science College

ADDRESS: 425, Shukrawar Peth, Pune – 411002

has submitted necessary data, evidences and credentials for scrutiny for sustainable environmental initiatives in the institutional premises.

The activities and measures carried out by the institution was verified.

The efforts taken by the institute towards environment & sustainability is highly appreciated.

Certificate No: AV/EnA/20-01-2020/223

Date: 20th January 2020

Validity : 19th January 2021

(Dr. Priti Kolhe)

(Manish Maheshwari)

Auditors

**Environment Audit Certificate
2019-2020**



Archit Venture

Driven By Trusted Services

GST # 27ACDPL3257B1ZY

UDYAM-MH-26-0018234



MSME
MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम



Environment Audit Certificate

This is to certify that

Samaj Bhushan Baburao Alias Appasaheb Jedhe

Arts, Commerce & Science College

ADDRESS: 425, Shukrawar Peth, Pune – 411002

has submitted necessary data, evidences and credentials for scrutiny for sustainable environmental initiatives in the institutional premises.

The activities and measures carried out by the institution was verified.

The efforts taken by the institute towards environment & sustainability is highly appreciated.

Certificate No: AV/EnA/14-01-2019/234

Date: 14th January 2019

Validity : 13th January 2020

(Dr. Priti Kolhe)

(Manish Maheshwari)

Auditors

Environment Audit Certificate
2018-2019



Archit Venture

Driven By Trusted Services

GST # 27ACDPL3257B1ZY

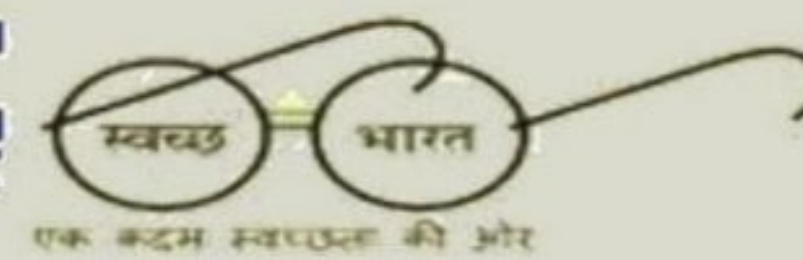
UDYAM-MH-26-0018234



MSME

MICRO, SMALL & MEDIUM ENTERPRISES

सूक्ष्म, लघु एवं मध्यम उद्यम



Environment Audit Certificate

This is to certify that

Samaj Bhushan Baburao Alias Appasaheb Jedhe

Arts, Commerce & Science College

ADDRESS: 425, Shukrawar Peth, Pune – 411002

has submitted necessary data, evidences and credentials for scrutiny for sustainable environmental initiatives in the institutional premises.

The activities and measures carried out by the institution was verified.

The efforts taken by the institute towards environment & sustainability is highly appreciated.

Certificate No: AV/EnA/08-01-2018/096

Date: 08th January 2018

Validity : 07th January 2019

(Dr. Priti Kolhe)

(Manish Maheshwari)

Auditors

**Energy Audit Certificate
2022-2023**

Energy Certificate No: AV/EA/13-02-2022/259

Energy Audit Certificate

This is to certify that

**Samaj Bhushan Baburao Alias Appasaheb Jedhe
Arts, Commerce & Science College**

425, Shukrawar Peth, Pune – 411002

*has submitted necessary data, evidences and credentials for scrutiny for
Energy Audits in the institutional premises.*

*The audit in which the study of energy flow for the purpose of conservation
is examined & verified at the institute. Our team checked out all efforts
taken by the institute towards conservation of energy. It is highly
appreciated and commendable.*

This certificate is valid upto 12th February 2023

UDYAM Regd. # UDYAM-MH-26-0018234



MSME
MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम

Auditor (Manish Maheshwari)

Date: 13th February 2022



Aarchit Venture

Driven By Trusted Services

GST # 27ACDPL3257B1ZY

**Energy Audit Certificate
2021-2022**

Energy Certificate No: AV/EA/10-02-2021/310

Energy Audit Certificate

This is to certify that

Samaj Bhushan Baburao Alias Appasaheb Jedhe
Arts, Commerce & Science College

425, Shukrawar Peth, Pune – 411002

*has submitted necessary data, evidences and credentials for scrutiny for
Energy Audits in the institutional premises.*

*The audit in which the study of energy flow for the purpose of conservation
is examined & verified at the institute. Our team checked out all efforts
taken by the institute towards conservation of energy. It is highly
appreciated and commendable.*

This certificate is valid upto 09th February 2022

UDYAM Regd. # UDYAM-MH-26-0018234



MSME
MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम

Auditor (Manish Maheshwari)

Date: 10th February 2021



Aarchit Venture

Driven By Trusted Services

GST # 27ACDPL3257B1ZY

**Energy Audit Certificate
2020-2021**

Energy Certificate No: AV/EA/24-01-2020/164

Energy Audit Certificate

This is to certify that

Samaj Bhushan Baburao Alias Appasaheb Jedhe
Arts, Commerce & Science College

425, Shukrawar Peth, Pune – 411002

*has submitted necessary data, evidences and credentials for scrutiny for
Energy Audits in the institutional premises.*

*The audit in which the study of energy flow for the purpose of conservation
is examined & verified at the institute. Our team checked out all efforts
taken by the institute towards conservation of energy. It is highly
appreciated and commendable.*

This certificate is valid upto 23th January 2021

UDYAM Regd. # UDYAM-MH-26-0018234



MSME
MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम

Auditor (Manish Maheshwari)

Date: 24th January 2020



Aarchit Venture

Driven By Trusted Services

GST # 27ACDPL3257B1ZY

**Energy Audit Certificate
2019-2020**

Energy Certificate No: AV/EA/21-01-2019/207

Energy Audit Certificate

This is to certify that

Samaj Bhushan Baburao Alias Appasaheb Jedhe
Arts, Commerce & Science College

425, Shukrawar Peth, Pune – 411002

*has submitted necessary data, evidences and credentials for scrutiny for
Energy Audits in the institutional premises.*

*The audit in which the study of energy flow for the purpose of conservation
is examined & verified at the institute. Our team checked out all efforts
taken by the institute towards conservation of energy. It is highly
appreciated and commendable.*

This certificate is valid upto 20th January 2020

UDYAM Regd. # UDYAM-MH-26-0018234



MSME
MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम

Auditor (Manish Maheshwari)

Date: 21st January 2019



Aarchit Venture

Driven By Trusted Services

GST # 27ACDPL3257B1ZY

**Energy Audit Certificate
2018-2019**

Energy Certificate No: AV/EA/10-01-2018/149

Energy Audit Certificate

This is to certify that

**Samaj Bhushan Baburao Alias Appasaheb Jedhe
Arts, Commerce & Science College**

425, Shukrawar Peth, Pune – 411002

*has submitted necessary data, evidences and credentials for scrutiny for
Energy Audits in the institutional premises.*

*The audit in which the study of energy flow for the purpose of conservation
is examined & verified at the institute. Our team checked out all efforts
taken by the institute towards conservation of energy. It is highly
appreciated and commendable.*

This certificate is valid upto 09th January 2019

UDYAM Regd. # UDYAM-MH-26-0018234



MSME
MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम

Auditor (Manish Maheshwari)

Date: 10th January 2018



Aarchit Venture

Driven By Trusted Services

GST # 27ACDPL3257B1ZY

Clean and Green Campus Initiative (E-Waste)





पुणे, महाराष्ट्र, भारत

295, व्हाईट हाऊस रस्ता, सुभाष नगर, शुक्रवार पेठ,

पुणे, महाराष्ट्र 411002, भारत

Lat 18.506784°

Long 73.856964°

21/10/22 12:10 PM GMT +05:30



Administrative Office
Flat No. 2.2, MCCIA, Hadapsar
Post No. 7, A/3, Near Janwani Police
Station, Hadapsar Industrial Estate,
Hadapsar, Pune,
Maharashtra - 411013
E-mail : director@janwani.net
Web : www.janwani.org

Registered Office
A Wing, 10th Floor, MCCIA Trade Tower,
International Convention Center
Sungate Market Road,
Pune - 411 016 India

Date: 05/11/2022

Certificate

To,
The principal,
SIBS alias Appasaheb Jadhav Arts, Commerce & Science College,
Shukrawar Peth, Pune- 411 002

This is to certify that "SIBS alias Appasaheb Jadhav Arts, Commerce & Science College",
Shukrawar Peth, Pune, has donated the following items to Janwani on 21/10/2022 during Our E-
waste & Plastic waste awareness and collection drive.

Sr. No	Item Name	Qty
1	Keyboard	10
2	Monitor	1
3	CPU	1
4	UPS	1

This E-waste has been sent for recycling at our authorized recycler.

We are very much thankful to you and all your staff for their full-hearted Cooperation.

We look forward for such co-operation between us, in future also.

Thanking you,

Sincerely Yours,

(Mangesh Kharasagar)
Sr. Project Officer

Chairman
Jay Kelkar, M.C.

Members :
(Nimbalkar | Aduna Bagchae | Arun Firodia | Pratap Pawar | Ramesh Jha | S. B. (Rev) Pandit | Vishal Jain

Office Members :
Dhir Mehta, President, MCCIA | Prashant Girbanik, Deputy General, MCCIA

Director :
Anish G. Pandya

Supported by
Maharatta Chamber of Commerce, Industries and Agriculture

mccia
ISO 9001 Organisation

Appreciation Certificate



Scanned with OKEN Scanner

Scanned with OKEN Scanner

Award from Pehel 2022





FOR THE PULFMENT OF THE MASSES
SHRI SHIVAJI MARATHA SOCIETY'S
SAMAJ BHUSHAN BABURAO alias APPASAHEB JEDHE
ART, COMMERCE & SCIENCE COLLEGE
425, SHUKRAWAR PETH, PUNE-411002.OFF.:(020)24477335
Email:Jedhe_c@rediffmail.com visit our website: www.jedhecollege.ac.in



Criteria- 7.1.6.5 (Beyond the campus environmental promotional activities)



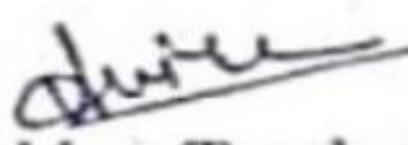
During N.S.S Camp , Students went for cleaning the temple at Bhor (Mohari) village

Environmental Awareness

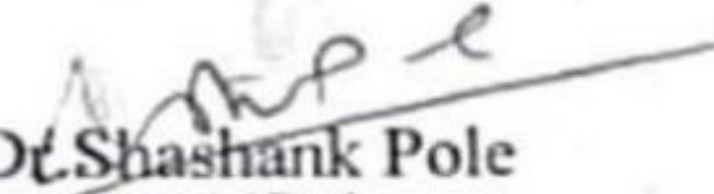
Notice

S.B.B.alias Appasaheb Jedhe Arts, Commerce and Science College, Pune – 02

In relation to Environment awareness programme all the S.Y.B.Sc (Botany) students are informed to remain present at Shubhkalyan Society, Nanded city, Sinhgad Road, Pune on 25th October 2018 at 10:00 am. Being Botany students it is expected to aware lay man about importance of plants in the environment.


Subject Teacher
Athire Uttara


Mrs. Sunita Sakure
Head
Dept. of Microbiology


Dr. Shashank Pole
PRINCIPAL
Samaj Bhushan Baburao alias Appasaheb
Jedhe Arts, Commerce & Science College,
Pune-411 002.



Report

S.B.B alias Appasaheb Jedhe Arts, Commerce & Science College organized an Environment awareness programme in Shubhkalyan Society, Nanded City, Sinhgad Road, Pune. All the students of S.Y.B.Sc (Botany) and staff participated enthusiastically. Students furnished valuable information about plants to lay man. In addition they explained well about different plants and their medicinal uses. After observing more number of ornamental and exotic plants in that society, students elucidated the importance of native and indigenous plants over exotic plants. Further they explained how exotic plants are harming indigenous plants.

Sakure

DR. SUNITA S. SAKURE

HEAD

Dept. of Microbiology

S.B.B. alias Appasaheb Jedhe College,
Shukrawar Peth, Pune-411002.

20

25/10/18

Awareness Programme Regarding to Medicinal Plant.

S.Y.B.Sc. Botany Students Attendance. 2018-2019.

Sr No	Student Name	Roll NO	Signature
1.	Bondre Shital Baburav	4351	<u>Bondre</u>
2	Balvi Krutika Dallabray	4365	<u>Krutika</u>
3.	Pokere Akonsha Pokere	4345	<u>Akonsha</u>
4.	Nigade Shivani Lalaso	4338	<u>Shivani</u>
5	Sukhada Shekhar Ukey	4362	<u>Sukhada</u>
6	Namrata Vilas Mankar.	4310	<u>Namrata</u>
7.	Diksha Umakant Barode	4323	<u>Diksha</u>
8.	Frajakta P. Chaudhary	4322	<u>Frajakta</u>
9.	Peroria N. Ahalap	4309	<u>Peroria</u>
10	Kelaki Bomve	4337	<u>Kelaki</u>
11	Sayali Taware	4352	<u>Taware</u>
12	Sakshi Ramesh	4305	<u>Sakshi</u>
13	Bandal Subit	4304	<u>Bandal</u>
14	Eknath Pandhane	4314	<u>Eknath</u>
15	Susmit B. Khadake	4373	<u>Susmit</u>
16	Rashmi J. Vishwakarma	4368	<u>Rashmi</u>
17	Jyotwanti Ganesh	4330	<u>Jyotwanti</u>
18	Sonnet Gadade	4378	<u>Sonnet</u>
19	Akash Pisal	4317	<u>Akash</u>
20	Trakare Rashmi.	4358	<u>Trakare</u>
21	Randhave Pratiksha	4359	<u>Pratiksha</u>
22	Pratiksha Yachar	4364	<u>Pratiksha</u>
23	Nazul Pralib	4373	<u>Nazul</u>
24	Vaibhav Shingate	4370	<u>Vaibhav</u>
25	Sutanu Lale	4353	<u>Sutanu</u>
26	Namrata Shinde	4354	<u>Namrata</u>

DR. SUNITA S. SAK
HEAD
Dept. of Microbiology
S.B.B. alias Appasaheb Jeehe
Shakrawar Peth, Pune-411

Environment Awareness Programme 2018-19

Name of person	Signature.
① Mr Dinesh C Jain	<u>Dejain</u>
② Mrs. Ashwini P. Dadye	<u>Adege</u>
③ Mr. Ashok L. Kekan	<u>Kekan</u>
④ Mr. Uday G. Geokhale	<u>Geokhale</u>
⑤ Mr. Gajanan P. Patil	<u>Patil</u>
⑥ Mr. Amit R. Surve	<u>Surve</u>
⑦ Mr. Arneya S Dhorje	<u>Dhorje</u>
⑧ Mr. Amar V Oak	<u>Amar Oak</u>
⑨ Mr. Bhalechandra S. Desai	<u>B.S. Desai</u>
⑩ Mrs. Maya S. Shingade	<u>Shingade</u>
⑪ Mrs. Vimal V. Londge	<u>Londge</u>
⑫ Mrs. Shilpa Kotwal	<u>Kotwal</u>
⑬ Mrs. Sheetal V. Kamble	<u>Kamble</u>
⑭ Mr. Tanaji D Balkawade	<u>T. Balkawade</u>
⑮ Mr. Uthas N. Joshi	<u>Joshi</u>

15

DR. SUNITA S. SAKU
HEAD
Dept. of Microbiology
S.B.B. alias Appasaheb Jadhav Coll

Plant list:-

Botanical Name	Common Name
1) <u>Justicia adhatoda</u>	Adulga
2) <u>Azadirachta indica</u>	Neem
3) <u>Ziziphus jujuba</u>	Bee
4) <u>Prunus dulcis</u>	Badam
5) <u>Aloe vera</u>	Kotpad
6) <u>Ocimum sanctum</u>	Tulsi
7) <u>Dracena Babydoll</u>	-
8) <u>Dracena Victoria white</u>	-
9) <u>Citrus limon</u>	Nimbu
10) <u>Mangifera indica</u>	Amba
11) <u>Psidium guajava</u>	Pera
12) <u>Ficus elastica</u>	Indian rubber tree
13) <u>Ficus religiosa</u>	Pimpal
14) <u>Bauhinia racemosa</u>	Apta leaf
15) <u>Nephrrolepis exaltata</u>	Sword fern
16) <u>Caryota urens</u>	Fishtail palm
17) <u>Phoenix canariensis</u>	canary island date palm
18) <u>Eucalyptus globulus</u>	Nilgiri
19) <u>Averrhoa carambola</u>	Star fruit
20) <u>Annona squamosa</u>	Sitopal

W



Nephrolepis exaltata



Dracaena Babydoll



Justicia adhatoda



Bauhinia racemosa



Psidium guajava

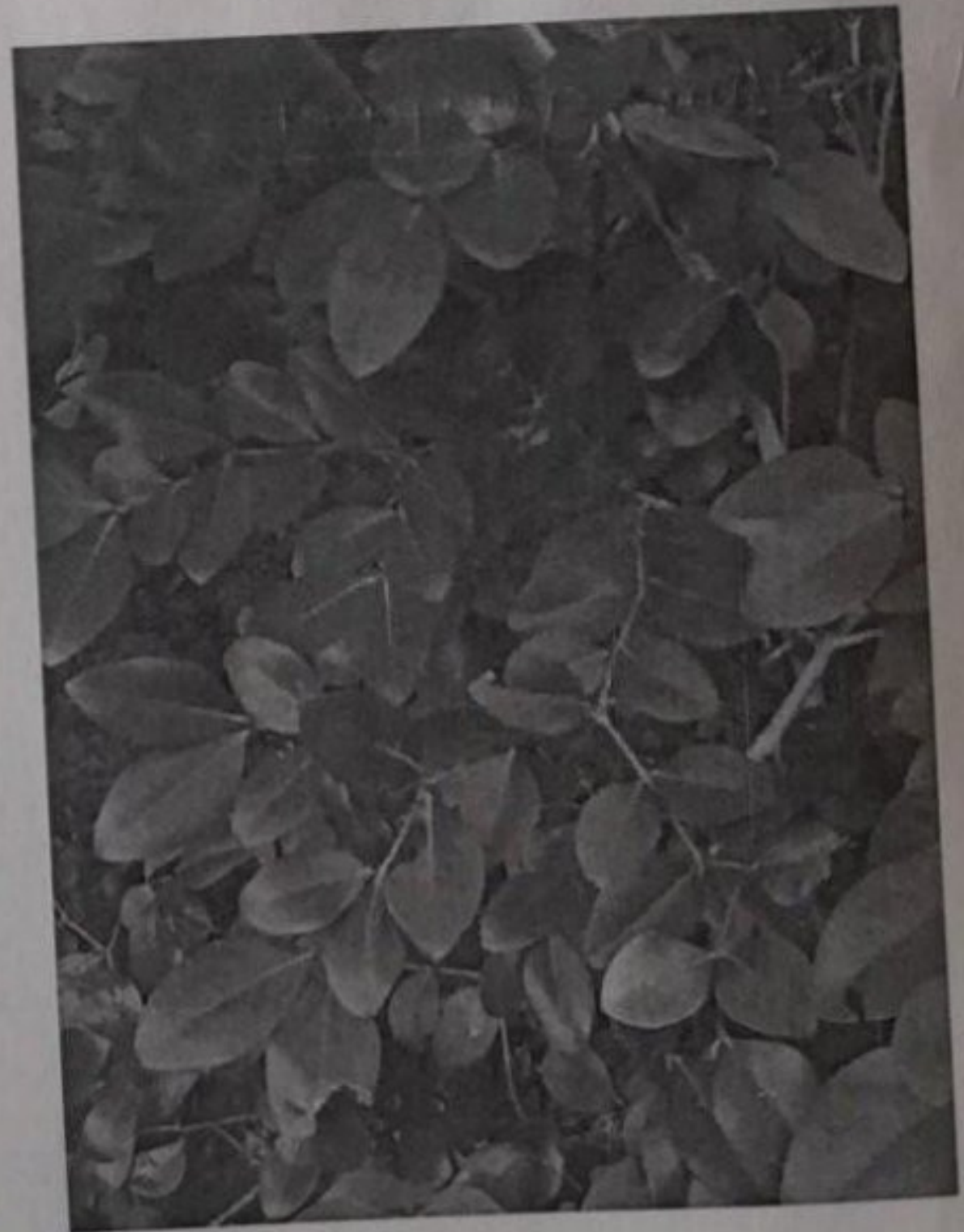


Dracaena fragrans





Ficus elastica



Citrus lemon



Avicennia canabola

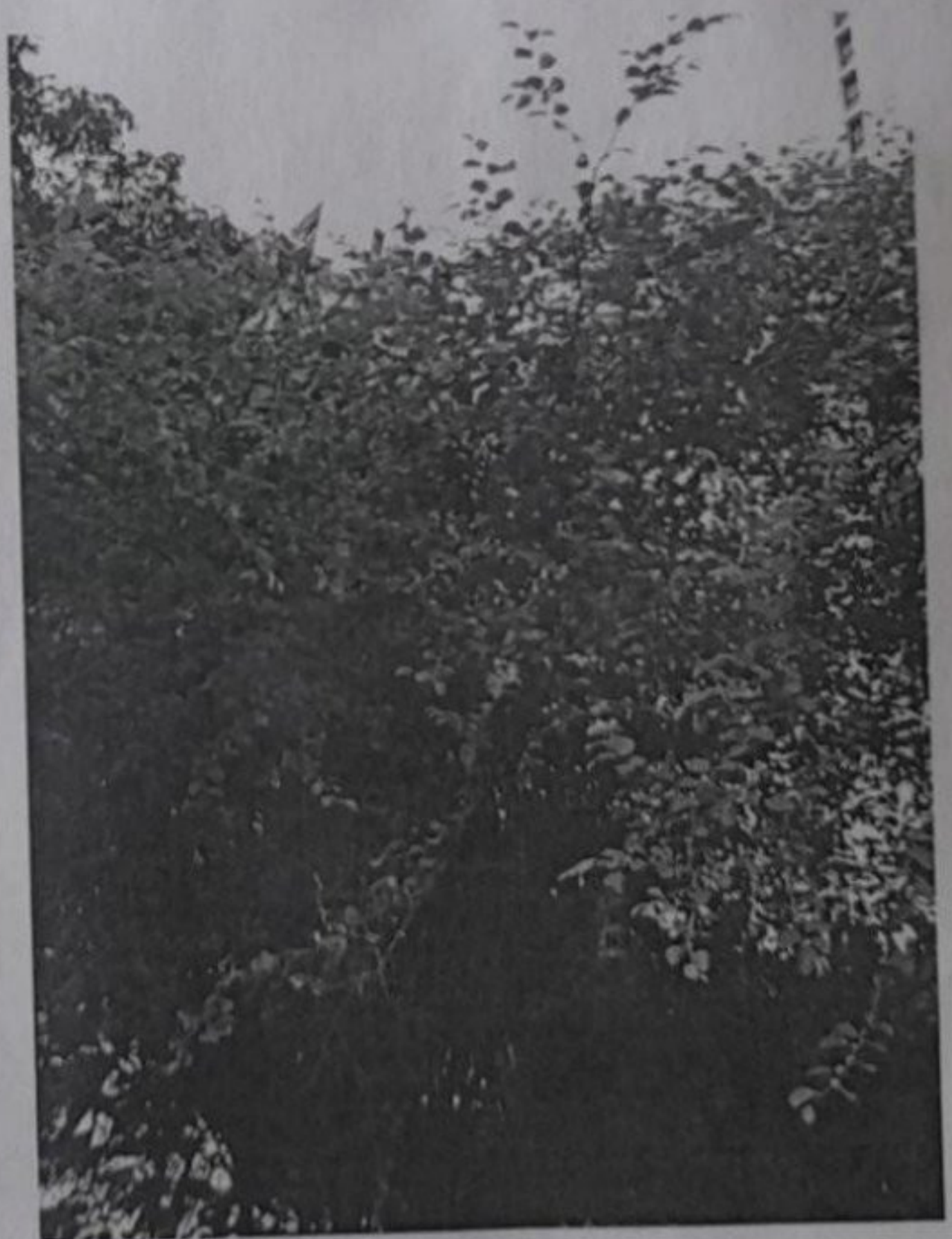


Annona squamosa



Mangifera indica

platanus indica



Ziziphus jujuba

platanus indica



Eucalyptus globulus



Caryota urens



Phoenix canariensis

57

Plant Conservation and Plantation



बहुजन हिताय । बहुजन सुखाय ॥
श्री शिवाजी मराठा सोसायटीचे

समाजभूषण बाबुराव उर्फ अप्पासाहेब जेधे कला, वाणिज्य व विज्ञान महाविद्यालय
४२५, मुकुंदनर पेठ, पुणे- ४११००२. ऑ. : ०२०-२४४७७३३५, फॅक्स (०२०) २४४५०९३६
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डा. डी. दिपाली पाटील
(एम.ए.एम. पीव.पी.एच.डी.)

मार्क द्वारा प्रमाणित पी. वॉड

स्थापना १९८४ सावित्रीबाई पुणे पुणे विद्यापीठाची संलग्न-अपडेन्टीफिकेशन नं. पी.यु./पी.एन./एस.सी.एस./०६३/१९८४ कलम क्र.२ (F) व १२ (B) बंदगीत पु.जी.सी. मान्यता

जाचक क्र.

दिनांक : ०१ / ११ / २०२२

राष्ट्रीय सेवा योजना - वनसंवर्धन दिन

सूचना

१४

राष्ट्रीय सेवा योजना विभागातील सर्व विद्यार्थ्यांना सुचित करण्यात येते की दिनांक ११ नोव्हेंबर २०२२ रोजी सकाळी ११:०० वा "वनसंवर्धन दिन" मुक्काम.पोस्ट मोहरी बुद्रुक, तालुका भोर, जिल्हा पुणे, येथे आयोजित करण्यात आला आहे. त्याकरिता सर्व विद्यार्थ्यांनी यरील ठिकणी वेळेवर उपस्थित राहावे .

डॉ. शिवाजी पाचारणे.

कार्यक्रम अधिकारी

राष्ट्रीय सेवा योजना

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सावित्रीबाई फुले पुणे विद्यापीठ, पुणे
स. भू. बा. उर्फ आप्पासाहेब जेधे महाविद्यालय पुणे, राष्ट्रीय सेवा योजना
भूगोल विभाग व राष्ट्रीय सेवा योजना

उपक्रम- ~~पुणे-मुंबई विद्यापीठ संलग्न मुंबई अभियान-दुर्गेश्वरी~~ वृक्षारोपण

दिनांक-

~~मुंबई-पुणे~~

11/11/22

~~सावे-सावे~~

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पुणे-४११००२.

वृक्षारोपण



दत्तक गावामध्ये वृक्षारोपण करताना राष्ट्रीय सेवा योजना विभागातील स्वयंसेवक 26
स्वयंसेवकांनी २६ रोपे लावली

Environment Audit Report

Shri Shivaji Maratha Society's
Samaj Bhushan Baburao
alias Appasaheb Jedhe
Arts, Commerce & Science College,



Prepared By

Aarchit Venture

Bharekar State Near NandedCity Nanded Goan Pune 411041

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Acknowledgment

We at Aarchit Venture, Pune wish to express our sincere gratitude to the management of **Shri Shivaji Maratha Society's S.B.B. Alias Appasaheb Jedhe College 425 Shukrawar Peth Pune 411002** for assigning the work of Environmental Audit of college campus.

We appreciate the co-operation and support extended to our team members during the entire tenure of field study.

We are also thankful to various Head of Departments & other Staff members for helping us during the field measurements.

We are also thankful to all other staff members who helped us during the Measurements at the field and for giving us the necessary inputs to carry out this vital exercise.



Executive Summary

After the Field measurements & analysis, we present herewith important observations made and various measures to reduce the dependency on Natural resources & reduce the pollution.

Shri Shivaji Maratha Society's S.B.B. Alias Appasaheb Jedhe College 425 Shukrawar Peth Pune 411002 consumes various resources for day to day operations, namely: Air, Water, Electrical Energy & LPG.

Various Pollution due to College Activities:

- Air pollution: Mainly CO₂ on account of Electricity & LPG Consumption
- Solid Waste: Bio degradable Kitchen Waste, Garden Waste
- Liquid Waste: Human liquid waste

Present Level of CO₂ Emissions:

Calculate the annual energy consumption for each type of equipment based on its quantity and typical usage.

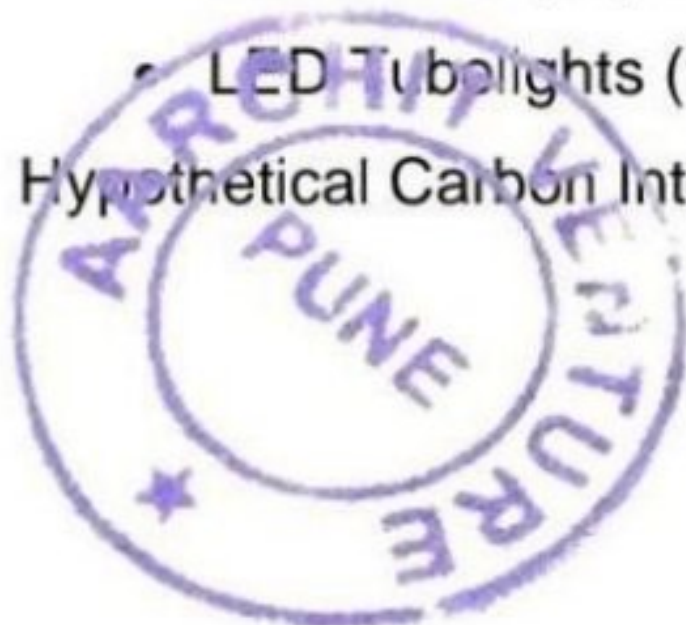
1. Determine the carbon intensity of electricity generation in your region (kg CO₂/kWh).
2. Multiply the annual energy consumption for each type of equipment by the carbon intensity to estimate the CO₂ emissions for that equipment.
3. Sum up the CO₂ emissions from all the equipment to get the total CO₂ emissions.

Here's a simplified example using hypothetical values:

Let's assume:

- Computers (120) consume 150,000 kWh annually.
- Printers (20) consume 10,000 kWh annually.
- Electric Induction (2) consumes 5,000 kWh annually.
- Fridge (2) consumes 2,000 kWh annually.
- Fans (120) consume 40,000 kWh annually.
- Projectors (7) consume 10,000 kWh annually.
- Water Pump/Motor (3) consumes 6,000 kWh annually.
- CCTV Cameras (33) consume 5,000 kWh annually.
- Xerox Machine (3) consumes 3,000 kWh annually.
- LED Bulbs (50) consume 500 kWh annually.
- LED Tubelights (120) consume 1,500 kWh annually.

Hypothetical Carbon Intensity: 0.5 kg CO₂/kWh (for illustration)



Calculations:

- Computers: $150,000 \text{ kWh} \times 0.5 \text{ kg CO}_2/\text{kWh} = 75,000 \text{ kg}$
- Printers: $10,000 \text{ kWh} \times 0.5 \text{ kg CO}_2/\text{kWh} = 5,000 \text{ kg}$
- Electric Induction: $5,000 \text{ kWh} \times 0.5 \text{ kg CO}_2/\text{kWh} = 2,500 \text{ kg}$
- Fridge: $2,000 \text{ kWh} \times 0.5 \text{ kg CO}_2/\text{kWh} = 1,000 \text{ kg}$
- Fans: $40,000 \text{ kWh} \times 0.5 \text{ kg CO}_2/\text{kWh} = 20,000 \text{ kg}$
- Projectors: $10,000 \text{ kWh} \times 0.5 \text{ kg CO}_2/\text{kWh} = 5,000 \text{ kg}$
- Water Pump/Motor: $6,000 \text{ kWh} \times 0.5 \text{ kg CO}_2/\text{kWh} = 3,000 \text{ kg}$
- CCTV Cameras: $5,000 \text{ kWh} \times 0.5 \text{ kg CO}_2/\text{kWh} = 2,500 \text{ kg}$
- Xerox Machine: $3,000 \text{ kWh} \times 0.5 \text{ kg CO}_2/\text{kWh} = 1,500 \text{ kg}$
- LED Bulbs: $500 \text{ kWh} \times 0.5 \text{ kg CO}_2/\text{kWh} = 250 \text{ kg}$
- LED Tubelights: $1,500 \text{ kWh} \times 0.5 \text{ kg CO}_2/\text{kWh} = 750 \text{ kg}$

Total CO₂ Emissions = Sum of the above emissions = 117,500 kg

Please note that these are hypothetical values for illustration, and the actual carbon intensity in your region may vary. You should obtain the specific carbon intensity data for your area for accurate emissions calculations.

Conclusion

Based on the provided energy consumption data and an assumed carbon intensity of 0.5 kgCO₂/kWh, the estimated total CO₂ emissions from energy usage at Jai Shriram College are approximately 66.7 kgCO₂. Efforts to reduce these emissions through energy efficiency measures and the integration of renewable energy sources can significantly contribute to a more sustainable environment.

The various projects already implemented for Environmental Conservation:

- Usage of Energy Efficient BEE STAR Rated AC
- Usage of Natural Day light in corridor
- Usage of Eco friendly Vehicle

Notes & Assumptions:

1. **1 kWh** of Electrical Energy releases **0.8 Kg of CO₂** into atmosphere
2. **1 kWp** Solar PV plant generates **5 kWh/day** Electrical Energy for 300 days in an year.



Abbreviations

AC : Air conditioner

PES : Progressive Education

SocietyCFL : Compact Fluorescent

Lamp FTL : Fluorescent Tube Light

LED : Light Emitting Diode

kWh : kilo-Watt Hour

Qty : Quantity

W : Watt

kW : Kilo Watt

PF : Power Factor

M D : Maximum Demand

PC : Personal Computer

MSEDCL : Maharashtra State Electricity Distribution Company Ltd



Introduction

1.1 Important Definitions:

1.1.1 Environment: Definition as per environment Protection Act: 1986

Environment includes water, air and land and the inter-relationship which exists among and between Water, Air, Land and Human beings, other living creatures, plants microorganism and property

1.1.2. Environmental Audit: Definition:

An audit which aims at verification and validation to ensure that various environmental laws are complied with and adequate care has been taken towards environmental protection and preservation

According to UNEP, 1990, "Environmental audit can be defined as a management tool comprising systematic, documented and periodic evaluation of how well environmental organization management and equipment are performing with an aim of helping to regularizethe environment

1.1.3. Environmental Pollutant:

Means any solid, liquid and gaseous substance present in the concentration as may be, or tend to be, injurious to Environment.

1.1.4. Relevant Environmental Laws in India: Table No-1:

1927	The Indian Forest Act
1972	The Wildlife Protection Act
1974	The Water (Prevention and Control of Pollution) Act
1977	The Water (Prevention & Control of Pollution) Cess Act
1980	The Forest (Conservation) Act
1981	The Air (Prevention and Control of Pollution) Act
1986	The Environment Protection Act
1991	The Public Liability Insurance Act
2002	The Biological Diversity Act
2010	The National Green Tribunal Act

1.1.5. Some Important Environmental Rules in India: Table No-2:

1989	Hazardous Waste (Management and Handling) Rules
1989	Manufacture, Storage and Import of Hazardous Chemical Rules
2000	Municipal Solid Waste (Management and Handling) Rules
1998	The Biomedical Waste (Management and Handling) Rules
1999	The Environment (Siting for Industrial Projects) Rules
2000	Noise Pollution (Regulation and Control) Rules
2000	Ozone Depleting Substances (Regulation and Control) Rules



2011	E-waste (Management and Handling) Rules
2011	National Green Tribunal (Practices and Procedure) Rules
2011	Plastic Waste (Management and Handling) Rules

1.1.6 National Environmental Plans & Policy Documents: Table No-3:

1.	National Forest Policy, 1988
2.	National Water Policy, 2002
3.	National Environment Policy or NEP (2006)
4.	National Conservation Strategy and Policy Statement on Environment and Development, 1992
5.	Policy Statement for Abatement of Pollution (1992)
6.	National Action Plan on Climate Change
7.	Vision Statement on Environment and Human Health
8.	Technology Vision 2030 (The Energy Research Institute)
9.	Addressing Energy Security and Climate Change (MoEF and Bureau of Energy Efficiency)
10.	The Road to Copenhagen; India's Position on Climate Change Issues (MoEF)

Objectives

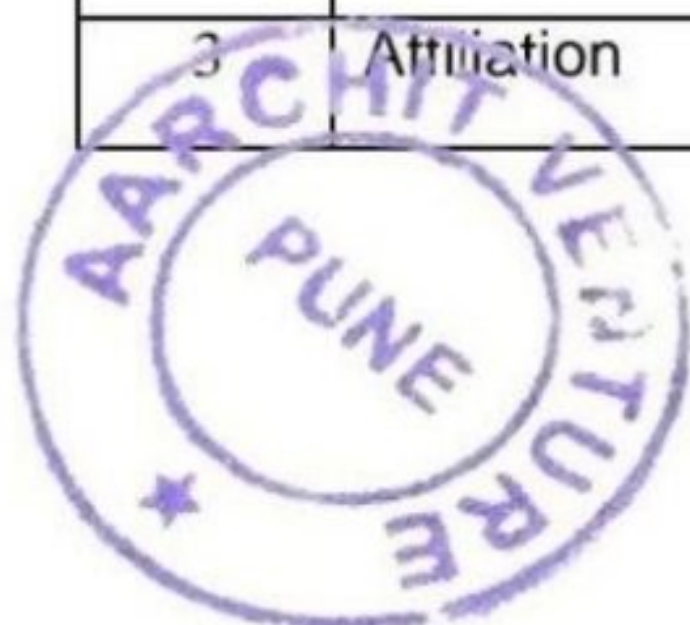
1. To study present usage of Natural resources the College is consuming
2. To Study the present pollution sources
3. To study various measures to make the campus Self sustainable in respect of Naturalresources
4. To suggest the various measures to reduce the pollution: Air, Water, Noise

Audit Methodology:

1. Study of College as System
2. Study of Electrical Energy Consumption
3. Study of CO2 emissions
4. Suggestions on usage of Renewable Energy

General Details of College

No	Head	Particulars
1	Name of Institution	Shri Shivaji Maratha Society's S.B.B. Alias Appasaheb Jedhe College
2	Address	425 Shukrawar Peth Pune 411002
3	Affiliation	Savitribai Phule Pune University



Study of Consumption of Various Resources

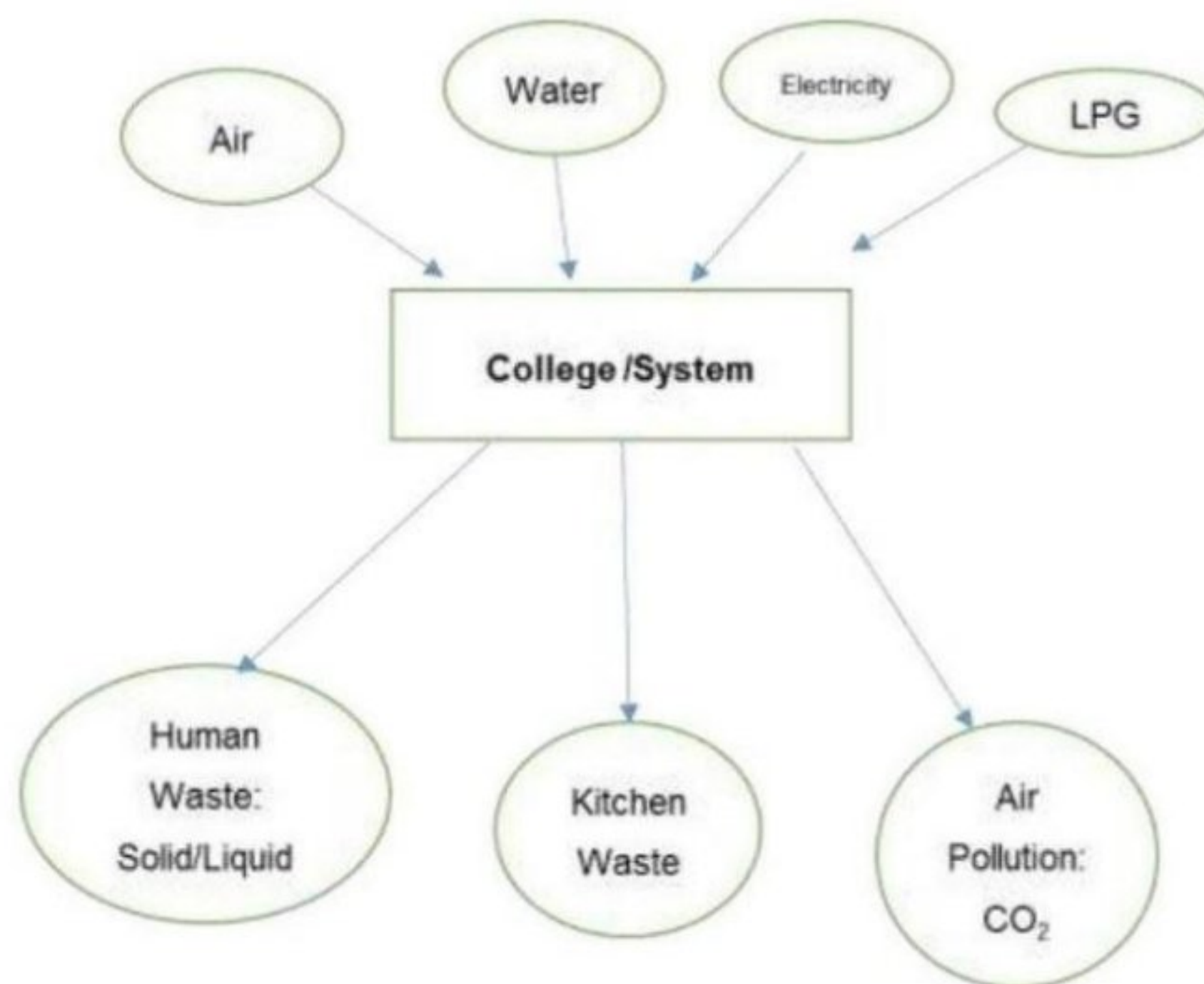
The Institute consumes following basic/derived Resources:

1. Air
2. Water
3. Electrical Energy
4. Liquefied Petroleum Gas

Also, college emits following pollutants to environment

1. Human Waste: Solid/ Liquid
2. Kitchen waste
3. Air pollution

We try to draw a schematic diagram for the College System & Environment as under.



Now we compute the Generation of CO₂ on account of consumption of Electrical Energy & LPG as under.

The calculation of electrical energy consumption by college can be given as,



Table 2.1: Electrical Energy Consumption

No	Month	Energy (kWh)
1	Jul 2023	820
2	Jun 2023	1,329
3	May 2023	934
4	Apr 2023	1,326
5	Mar 2023	1,125
6	Feb 2023	1,385
7	Jan 2023	1,223
8	Dec 2022	1,710
9	Nov 2022	1,129
10	Oct 2022	651
11	Sep 2022	918
	Total	13207
	Maximum	1710
	Minimum	651
	Average	1100



Variation of Monthly Electrical Energy Consumption

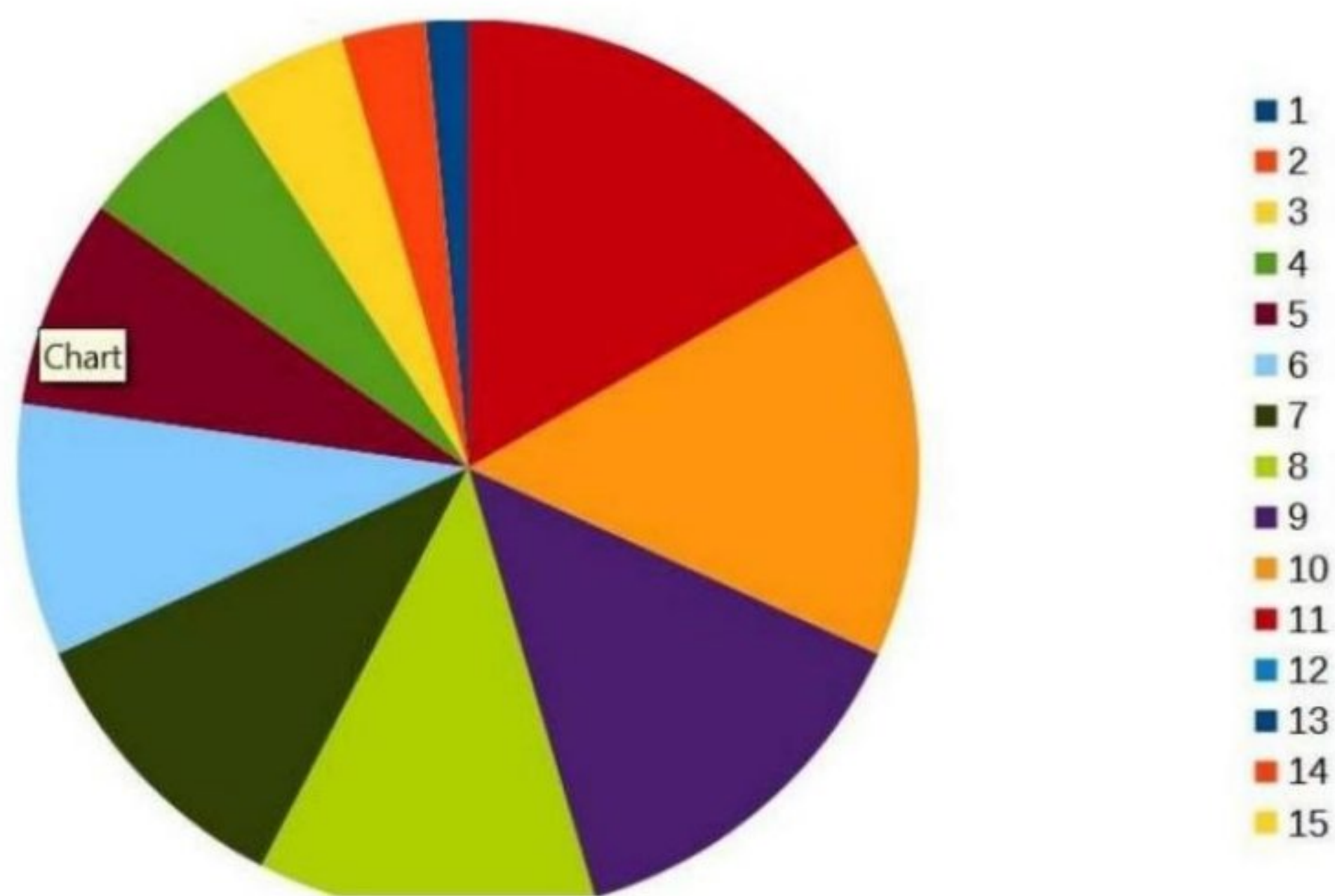


Figure 2.1 : Monthly Electrical Energy ConsumptionKey Inference drawn



From the above analysis, we present following important parameters:

Table 2.2: Variation in Important Parameters

No	Parameter/ Value	Energy Consumed, kWh
1	Maximum	1710
2	Minimum	651
3	Average	1100
4	Total	13207



Study of Environmental Pollution

In this Chapter, we present the various types of Pollution as under:

Air Pollution

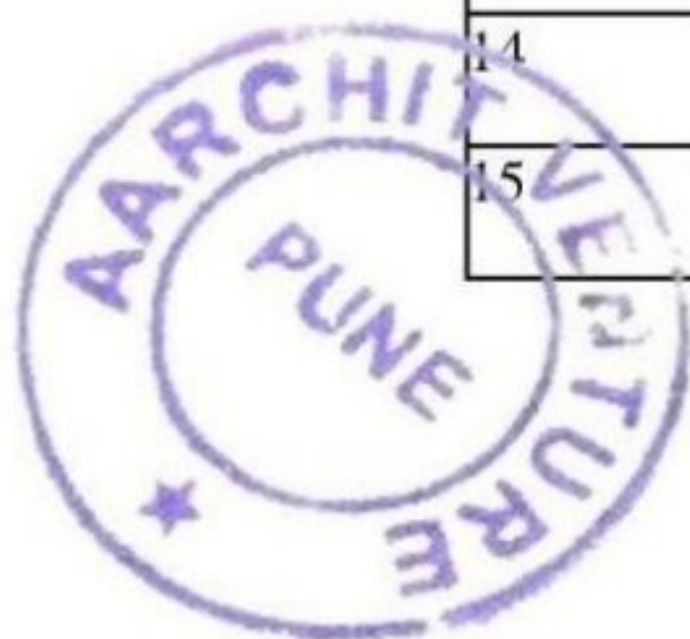
The College is using two forms of Energies, namely: Thermal in the form of LPG and Electrical Energy used for day to day operations of the College. The major pollutant on account of above Energy forms is the Carbon Di Oxide.

- 1 unit (kWh) of Electrical Energy emits 0.8 Kg of CO₂ in the atmosphere
- 1 Kg of LPG emits 3 Kg of CO₂ in the

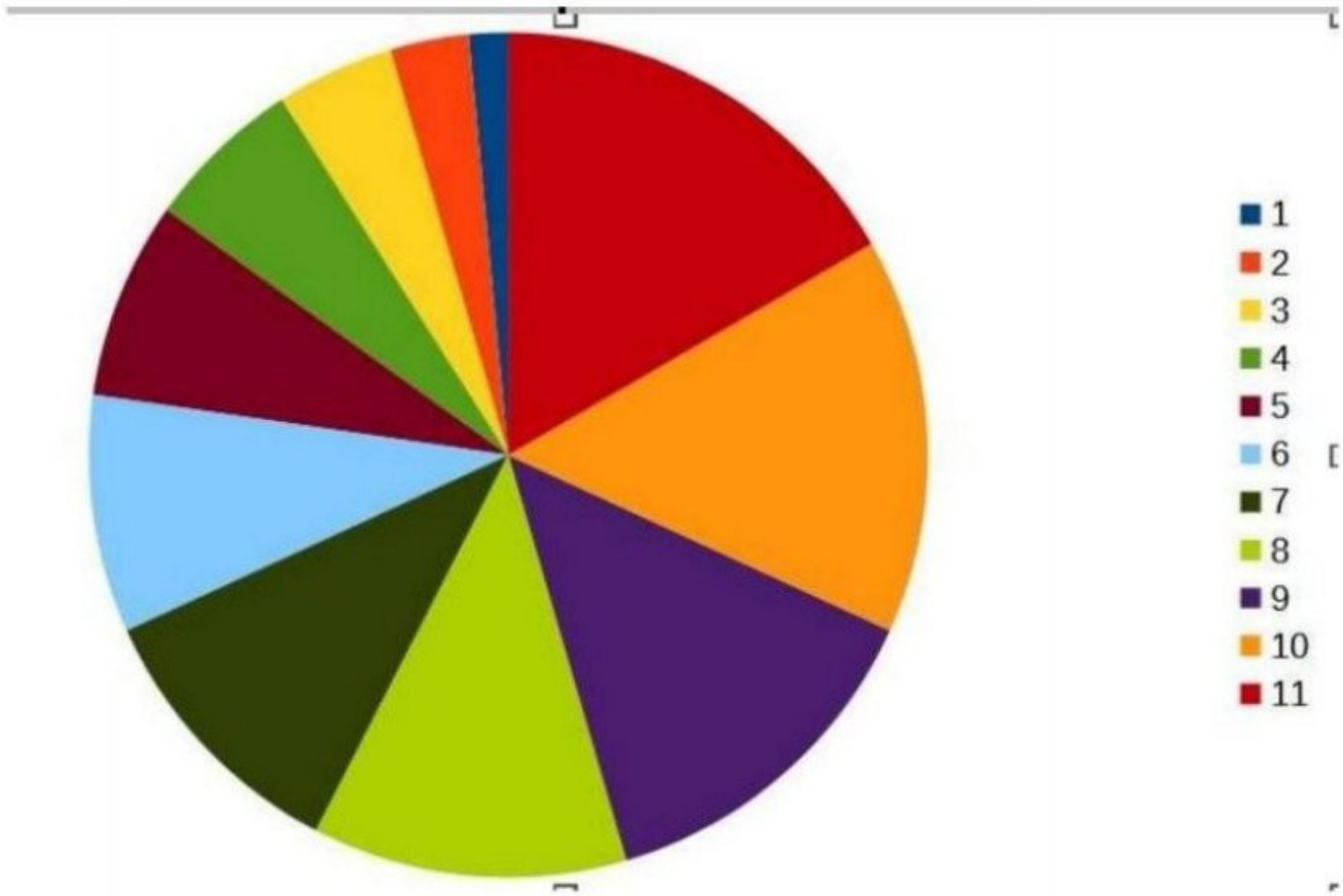
atmosphereIn the following Table, we present the CO₂ emissions.

Month wise Consumption of Electrical Energy & CO₂ Emissions:

No	Month	Energy Consumed, kWh	CO ₂ Emissions, kg
1	Jul 2023	820	410
2	Jun 2023	1,329	664.5
3	May 2023	934	467
4	Apr 2023	1,326	663
5	Mar 2023	1,125	562.5
6	Feb 2023	1,385	692.5
7	Jan 2023	1,223	611.5
8	Dec 2022	1,710	855
9	Nov 2022	1,129	564.5
10	Oct 2022	651	325.5
11	Sep 2022	918	459
12	Total	13207	6,275
13	Maximum	1710	855
14	Minimum	651	410
15	Average	1100	570.45



In the following Chart we present the CO2 emissions due to usage of Electrical Energy.



CO2 emission due to usage of electrical energy.



Study of waste management

The College hand over the waste to authorized waste collecting agent.

Study of e-Waste Management:

The internal communication is through emails and there is hardly any generation of e-Waste in the premises.



Photograph of waste Management



Promoting Public Transport

Students of our college uses public transport like Metro and bus services for the daily commute to the college also staff of our institute uses ebikes for the same.

Environmental Initiatives

Enlightening Initiatives:

- **The Verdant Vanguard:** Nestled within the hallowed halls of S.B.B. Alias Appasaheb Jedhe College resides the illustrious Green Club. This dynamic association fervently fosters environmental consciousness, kindles the flames of sustainability, and orchestrates symphonies of eco-friendliness that resonate through the hearts of students and staff.
- **Rain's Resplendence:** The college has adorned its edifices with the artistry of rainwater harvesting. It is not merely a system; it's a testimony to our reverence for nature. It captures the celestial nectar, a gift from the heavens, and cradles it in reservoirs, for here every drop is a pearl, and every pearl, a promise to conserve water and rejuvenate the Earth.
- **The Green Oasis:** Amidst the bustling campus, there lies a "mini oasis" – a sanctuary for serenity. Here, nature's kaleidoscope unfurls, offering not just a visual delight but a habitat for the whispers of local flora and fauna, where life thrives in peaceful coexistence.
- **Verdant Haven:** The college dons a mantle of green splendor, a resplendent green



campus where gardens and greenery sway in harmony. It's a manifestation of our devotion to environmental excellence, where nature is the canvas, and every tree, a stroke of art.

- **Earth's Embrace:** The college has embraced the Earth in degradable pots, a nurturing cradle for plant life. These pots bear the legacy of eco-consciousness, leaving behind no scars, only flourishing blooms.

The Symphony of Potential Initiatives:

- **Waste's Transformative Dance:** We aspire to choreograph the ballet of waste, segregating it with precision and recycling its essence. Our goal is to transform the chaos of waste into a dance of renewal, where landfill waste is but a forgotten refrain.
- **Solar Rhapsody:** On our horizon, we envision a symphony of solar panels adorning our structures. These celestial harbingers of renewable energy will compose a melody of sustainability, reducing our carbon footprint and harmonizing with the cosmos.
- **Cycle of Freedom:** The winds of change bring with them a bicycle-sharing program. Wheels of eco-consciousness shall spin across the campus, as we invite students and faculty to embark on a journey of sustainable mobility, shedding the shackles of motorized dependence.
- **Wisdom in the Whispers:** The campus will resonate with wisdom as we convene environmental symposiums and workshops, where the tales of eco-friendliness shall be penned in hearts and etched in minds, nurturing the seeds of conservation.
- **Rooted in Home Soil:** Our gardens shall be sown with the seeds of native plants, a tribute to our indigenous biodiversity. As we embrace the flora that has graced this land for eons, we reduce the burdens of maintenance and nourish our heritage.
- **The Festival of Ecology:** Our events shall be a celebration of nature, where every detail is a brushstroke on the canvas of sustainability. These gatherings shall be harmonious with the environment, leaving behind only cherished memories and no ecological footprint.



AARCHIT VENTURE

Green Audit

Shri Shivaji Maratha Society's

Samaj Bhushan Baburao

alias Appasaheb Jedhe

Arts, Commerce & Science College,



Prepared By

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Bharekar Estate Nanded Gaon

Near Nanded City Pune 411041

Green Audit Report

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1. Introduction



The rapid environmental degradation at local, regional and global level is leading us to global “Environmental poverty”. Stabilization of human population, adoption of environmentally sound and sustainable technologies, reforestation and ecological restoration are crucial elements in creating an equitable and sustainable future for all humans in harmony with nature and natural resources. The main objective to carry out green audit is to check green practices followed by university and to conduct a well formulated audit report to understand where we stand on a scale of environmental soundness. Green audit is the procedure of systematically identifying, quantifying, recordings, reporting and analyzing the environmental diversity components of any organization. It aims to analyze the environmental practices inside and outside of the relevant place, which will have an impact on the environment. Focus was given to assess the consumption of energy, electricity, water as well as disposal of liquid waste, solid waste, hazardous waste, e-waste and an inventory of trees on campus is also prepared to check how much CO₂ is sequestered and O₂ is released. It is an important tool for universities to determine their consumption of energy, water, or other resources; and then consider and planned to implement changes and make savings. It can create health awareness and promote environmental awareness and ethics. It allows faculty, students and other staff to better understand the impacts of green activities on the premises.

Self-inquiry is a natural and expected development of quality education. Therefore, the institute must evaluate its contribution towards a sustainable future. An environmental sustainability has become an increasingly crucial issue for the every nation; the role of higher education institutions in environmental sustainability has become more important. The rapid urbanization and economic development at the regional and global levels have led to several environmental and ecological problems. In this context, it is necessary to adopt a green campus system for the institute, which will lead to sustainable development while reducing the large amount of atmospheric carbon emissions in the environment.

Government of India through its National Environment Policy (2006) has made mandatory for every organization to have green audit / environmental audit in their



organization. The process of environmental audit was formalized by Supreme Audit Institution (SAI) according to the guidelines given in Manual of Standard Orders (MSO) issued by Authority of the Controller and Auditor General of India 2002. University Grants Commission has mentioned “Green Campus, Clean Campus” mission mandatory for all higher educational institutes. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent. Accordingly, realizing the need of being responsible towards environment, NAAC (National Assessment and Accreditation Council), an autonomous body under UGC has also added the concept of Environmental Audit in accreditation methodologies of State and Central Universities as well as colleges. Accordingly, Shri Shivaji Maratha Society’s **S.B.B. Alias Appasaheb Jedhe College** has also initiated a Green/Environmental Audit/Energy Audit of its campus at 425 Shukrawar Peth Pune 411002

2. About the College

S.B.B. Alias Appasaheb Jedhe College, located in the heart of Shukrawar Peth, Pune 02, is a beacon of education and innovation in its vibrant urban setting. This institution is dedicated to providing a nurturing environment that encourages academic excellence, personal growth, and community engagement. With a rich history and a commitment to sustainability, the college is not only focused on academic achievements but also places a strong emphasis on its environmental responsibilities. The college's location in the bustling Shukrawar Peth area adds to its unique charm, making it a center of learning and cultural diversity in the heart of Pune.

3. College Vission

At S.B.B. Alias Appasaheb Jedhe College, Shukrawar Peth Pune 02, our vision extends beyond academic excellence. We are dedicated to fostering a culture that values environmental sustainability. Our commitment to the environment is a fundamental part of our vision, as we aim to inspire eco-conscious individuals and promote responsible practices within our college community and beyond.



4. College Mission

S.B.B. Alias Appasaheb Jedhe College, Shukrawar Peth Pune 02, is on a mission to integrate environmental consciousness into every aspect of education and community engagement. Our mission is to nurture environmentally responsible citizens who understand the importance of sustainability and actively contribute to a greener, more sustainable future.

6. Objectives

The main objectives of Environmental Audit in Academic Institution are:

- To encourage students in general and girls in particular.
- To encourage students to learn modern techniques and methodologies.
- To develop the competencies among students to face global challenges.
- To inculcate a scientific temper and a humanitarian approach among society.
- To address global and local needs towards national development.
- To sensitize students with a sense of belongingness, integrity, and grattitudeness.

7. Scope and Goal of Environmental Auditing

Government of India through its National Environment Policy in 2006 has made mandatory for every organization to conduct green audit / environmental audit in order to ensure a clean and healthy environment within and outside the organization. Further, it also helps in effective learning and provides a conducive learning environment. Efforts are taking place around the world in order to address various environmental issues. Green auditing or environmental auditing is one among them for educational institutions. Green auditing helps organization to understand various environmental issues of the organization and identify existing lacuna or gap towards meeting the objective of National Environmental Policy and thus, to plan accordingly.

8. Methodology

An environmental audit has three phases - pre-audit stage, audit stage and post-audit stage, accordingly the environmental audit was conducted



Pre-Audit Stage

Pre-audit stage involved the identification of target areas for environmental auditing.

Accordingly following target areas were identified:

- Land Use System
- Biodiversity Status
- Climatic Conditions
- Air Quality
- Noise Pollution
- Water Resources and Management
- Energy Consumption
- Waste disposal and management
- Environmental Awareness
- Mitigation and Management practices

Audit Stage

(A). Collection of data, observation and interaction: This stage of the Audit involved the activities relating to collection of data, observation, interactions and discussion with the concerned stakeholders i.e., faculty, administration and staff members from different departments and sections of the university. A mixture of open ended and closed ended questionnaires were developed and used for data collection. Meetings with specific stakeholders of different target groups identified in the pre-audit stage were conducted for getting the desired information. Detailed discussions on some specific topic were also held.

(B). Review of previous records and policies: This was carried out in order to understand the various initiatives taken by the university towards sustainable environmental



conservation and amelioration. For the purpose, office registers, visitor's book, purchase registers, office communications, policy level documents of AC/ EC were also examined. Further, the published material such as prospectus, university annual reports, bulletins, and other magazines were also studied by the audit team for getting information / data on the target aspects.

(C). Inspection of departments/sections/various sites: The audit team also visited the various departments, sections, offices and its premises in order to have an idea of various activities carried. Campus greenery and gaps were identified. Team also had a visit to play ground, canteen, library, office rooms and parking area.

(D). The stakeholders: The stakeholders included were teaching staff from different schools, people from administration, water supply and maintenance, electricity department and ICT. The committee set up for the purpose discussed the issues related with key target areas. Questionnaires were prepared for getting information and accordingly meeting with concerned stakeholders were conducted. Data on water and energy use was collected from maintenance department.

Post-Audit Stage

The Post-Audit Stage includes the production of the final report, prepare action plan to overcome the flaws and to keep a watch on the action plan.

9. Audit Report

(A) Land Use System

The land utilization assessment of S.B.B. Appasaheb Jedhe College in the heart of Pune 02 unveils a captivating tapestry of architectural splendor. Various structures gracefully occupy the landscape, each telling a unique story through its area allocation:

- On the ground floor, an elegant expanse spans 170.09 square meters, serving as the foundation of academic pursuits.



- Ascending to the first floor, an area of 172.69 square meters stands as a testament to the institution's commitment to knowledge and progress.
- The second floor unveils itself with grandeur, showcasing an expansive 657.897 square meters, a sanctuary of higher learning.
- Ascending to the third floor, a sprawling 676.892 square meters reigns supreme, embodying a pinnacle of intellectual exploration.

Adding to this grand tapestry, on the western horizon of the campus stands a building of declared heritage status, a majestic sentinel to the college's rich history and tradition. Moreover, a dedicated floor within the school building is set aside exclusively for the nurturing of the Arts, where the echoes of creativity and inspiration resonate throughout its hallowed halls.



MAP- S.B.B. Alias Appasaheb Jedhe College



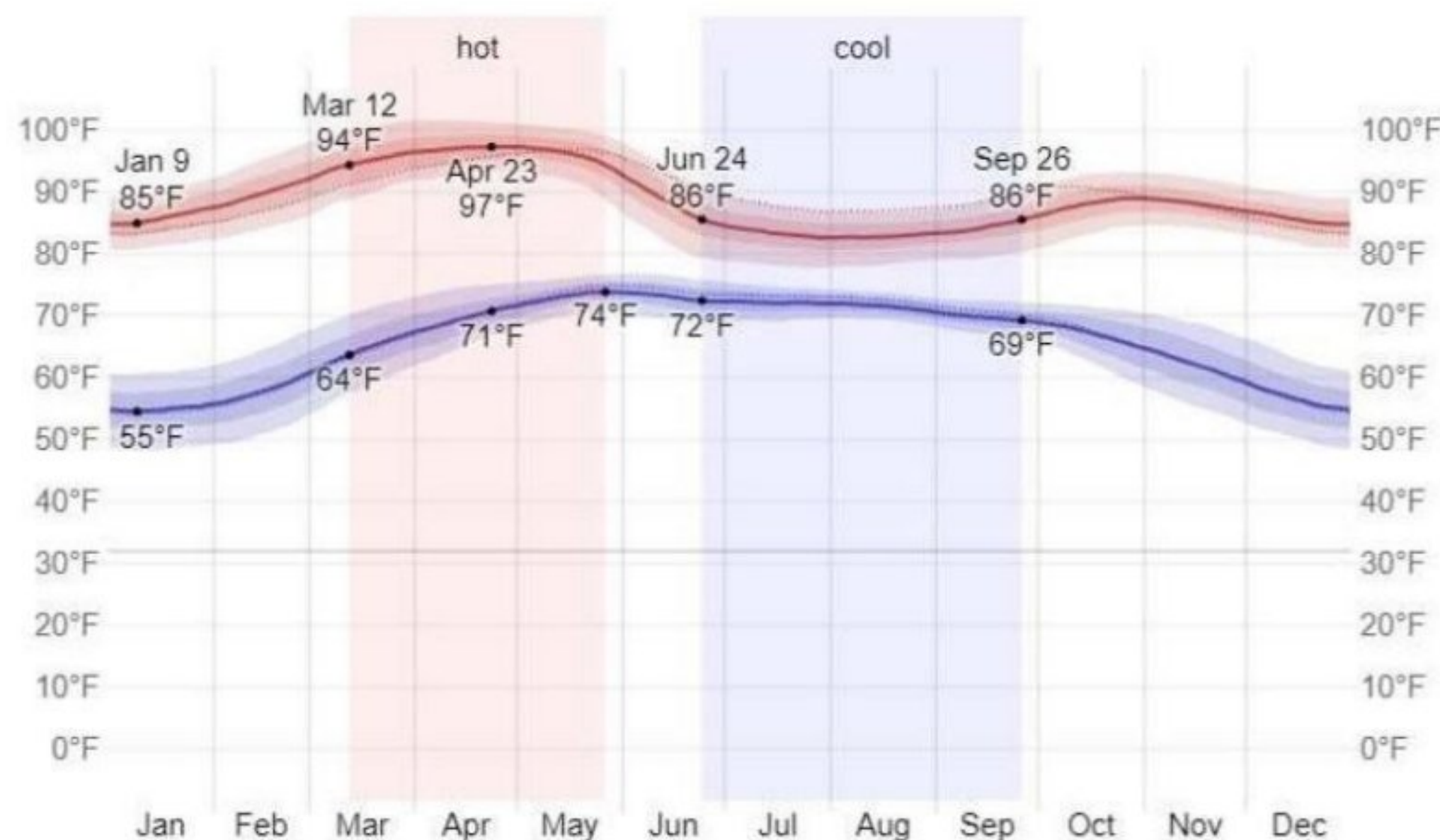
(B) Climate and Average Weather Year Round in Pune

In Pune, the wet season is oppressive, windy, and overcast; the dry season is mostly clear; and it is hot year round. Over the course of the year, the temperature typically varies from 55°F to 97°F and is rarely below 48°F or above 102°F.

i) Average Temperature

The hot season lasts for 2.5 months, from March 12 to May 26, with an average daily high temperature above 94°F. The hottest month of the year in Pune is May, with an average high of 96° and low of 73°F.

The cool season lasts for 3.0 months, from June 24 to September 26, with an average daily high temperature below 86°F. The coldest month of the year in Pune is January, with an average low of 55° and high of 86°F

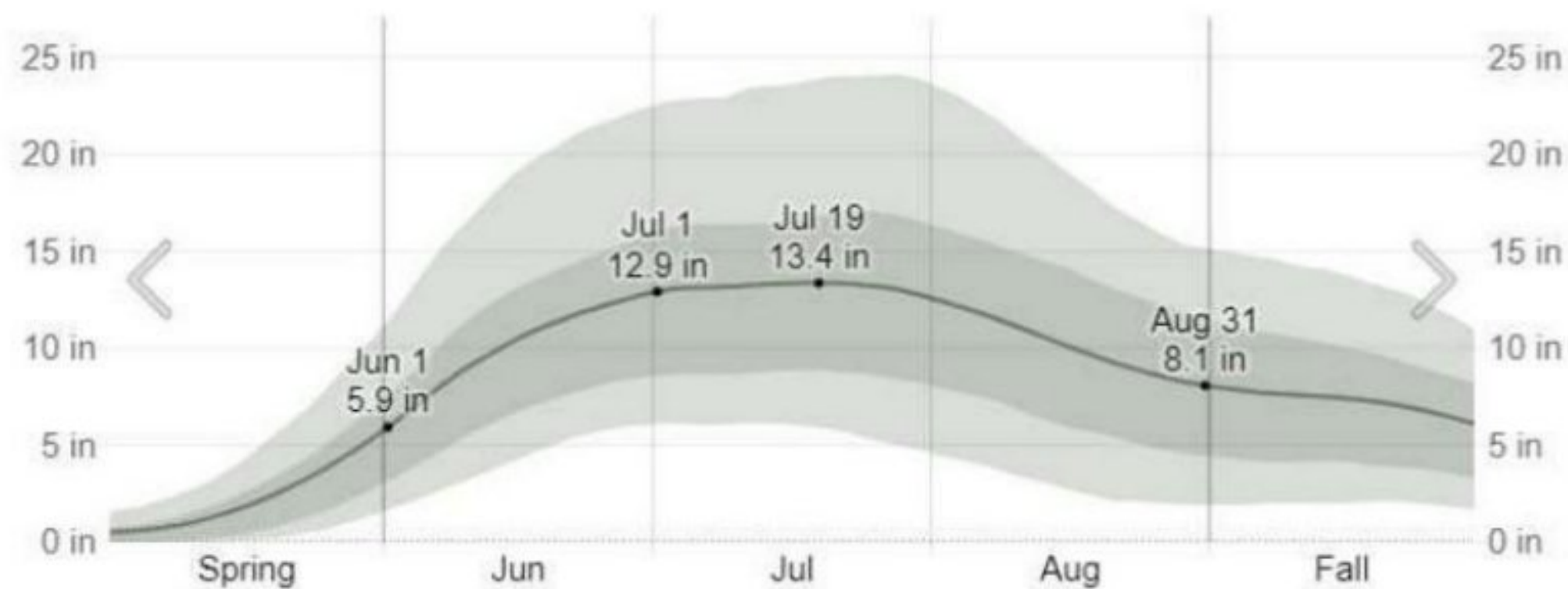


ii. Rainfall:

To show variation within the months and not just the monthly totals, we show the rainfall accumulated over a sliding 31-day period centered around each day of the year. Pune experiences *extreme* seasonal variation in monthly rainfall.

The *rainy* period of the year lasts for *6.8 months*, from *May 1* to *November 25*, with a sliding 31-day rainfall of at least *0.5 inches*. The month with the most rain in Pune is *July*, with an average rainfall of *13.3 inches*.

The *rain less* period of the year lasts for *5.3 months*, from *November 25* to *May 1*. The month with the least rain in Pune is *January*, with an average rainfall of *0.1 inches*.



iii. Humidity:

We base the humidity comfort level on the dew point, as it determines whether perspiration will evaporate from the skin, thereby cooling the body. Lower dew points feel drier and higher dew points feel more humid. Unlike temperature, which typically varies significantly between night and day, dew point tends to change more slowly, so while the temperature may drop at night, a muggy day is typically followed by a muggy night.

The chance that a given day will be *muggy* in Pune is *very rapidly increasing* during the summer, *rising* from 77% to 98% over the course of the season.

The highest chance of a muggy day during the summer is 99% on *August 2*.

For reference, on *August 1*, the *muggiest day* of the year, there are muggy conditions 99% of the time, while on *January 28*, the *least muggy day* of the year, there are muggy conditions 1% of the time.



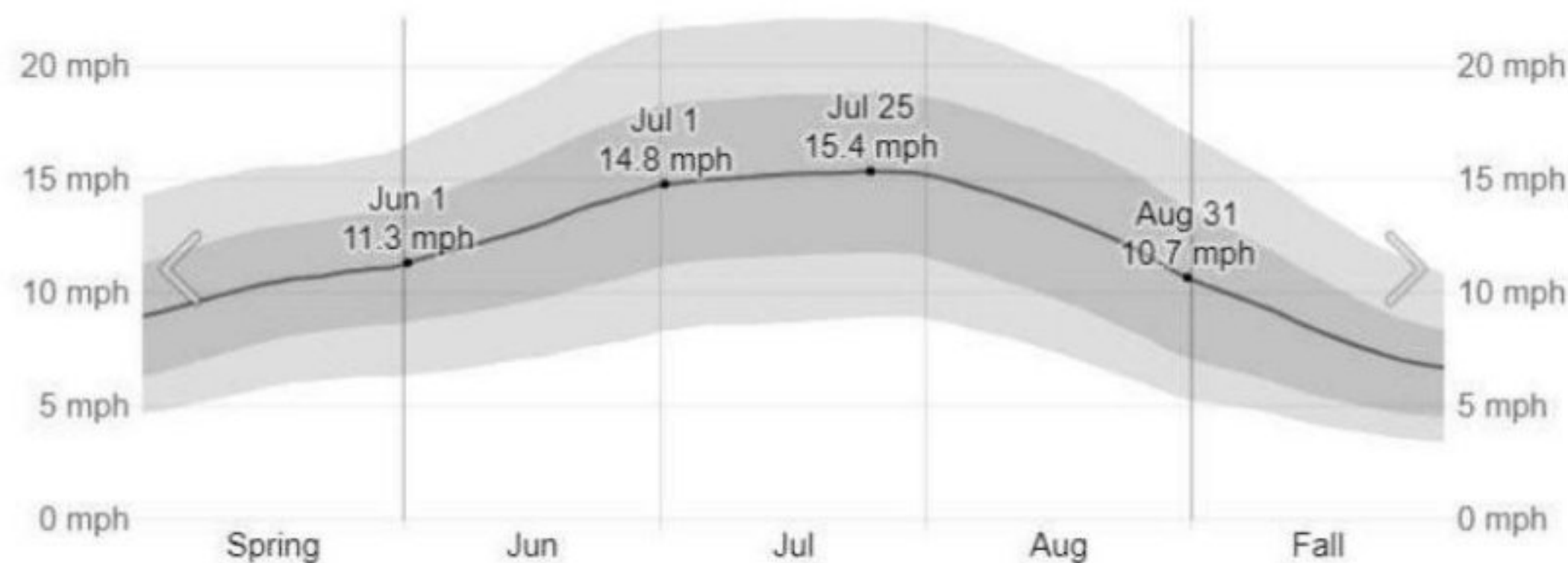
V. Wind:

This section discusses the wide-area hourly average wind vector (speed and direction) at 10 meters above the ground. The wind experienced at any given location is highly dependent on local topography and other factors, and instantaneous wind speed and direction vary more widely than hourly averages.

The average hourly wind speed in Pune is gradually decreasing during the summer, decreasing from 11.3 miles per hour to 10.7 miles per hour over the course of the season.

For reference, on July 25, the windiest day of the year, the daily average wind speed is 15.4 miles per hour, while on October 9, the calmest day of the year, the daily average wind speed is 6.3 miles per hour.

The highest daily average wind speed during the summer is 15.4 miles per hour on July 25



(C) Biodiversity Status

The campus of the College is located at sub tropical climatic conditions. The campus has a patch of natural forest having a major tree species like *Tectona grandis*, *Dalbergia sissoo*, *Mallotus philippinensis*, *Acacia catechu*, *Shorea robusta* etc. Plantation activities are usually undertaken during rainy season and National Festivals like 15th August, World Environment Day etc. Accordingly many new species of economic and medicinal importance such as Amla, Harar, Bahera, Ashoka, Jacrenda, Neem, Ficus etc, have been introduced. Some herbs and shrubs were also planted in the campus. There are some faunal species are also found in the area. Table 2, 3, 4 and 5 shows the status of the Floral and Faunal diversity of the campus

Table 2. List of Tree/Shrubs/Herbs species found in the campus

S. No.	Botanical Name	Common Name
TREE		
1.	<i>Ocimum sanctum</i>	Tulsi
2.	<i>Aloe barbadensis miller</i>	Aloe vera
3.	<i>Saraca asoca</i>	Ashoka Tree
4.	<i>Prunus dulcis</i>	Badam Tree
5.	<i>Syzygium cumini</i>	Jamun Tree
6.	<i>Carica papaya</i>	Papaya
7.	<i>Cocos nucifera</i>	Coconut Tree
8.	<i>Passiflora edulis</i>	Prajakata
9.	<i>Hibiscus rosa-sinensis</i>	Hibiscus
10.	<i>Azadirachta indica</i>	Kaval nimb
11.	<i>Senna tora</i>	Sonmohar
12.	<i>Areca catechu</i>	Areca palm
13.	<i>Ficus glomerata</i>	Umber
14.	<i>Aegle marmelos</i>	Bel





Green Cover of the College Campus.





Plants in the college campus



Table 3. List of Birds & Animal found in and around the Campus

S. No.	Zoological Name	Common Name
15.	<i>Psilopogon haemacephalus</i>	Coppersmith Barbet
16.	<i>Parus cinereus</i>	Cinereous Tit
17.	<i>Cinnyris asiaticus</i>	Purple Sunbird
18.	<i>Pycnonotus jocosus</i>	Red-Whiskered Bulbul
19.	<i>Eudynamys scolopaceus</i>	Asian Koel
20.	<i>Zosterops palpebrosus</i>	Indian White-Eye
21.	<i>Oriolus oriolus</i>	Golden Oriole
22.	<i>Lonchura punctulata</i>	Scaly-Breasted Munia



Birds In the campus



i. Sources of air pollution: It was observed and revealed from data that the only possible sources of pollution in the College campus are as use of diesel / petrol vehicles, air conditioners, power generator, kitchen waste and other biodegradable waste from canteen, use of electronic appliances and other. The campus located in very small village which is rich in greenery. Found no other source of air pollution in the campus.

ii. Sources of noise pollution: It was observed that there is no industrial as well as the sound generating activities near the College campus and it was revealed from that due to limited number of vehicles the chances of noise pollution seems to be quite below of standard limit. There is no other source of noise pollution in the campus.

(E) Water Resource and Management

S.B.B. Appasaheb Jedhe College Pune 02 utilizes water from various sources for different purposes. The college has two potable water tanks with a capacity of 5000 liters each, which are filled up twice a day. This water is primarily used for drinking purposes. In addition to potable water, the college has two domestic water tanks with a capacity of 5000 liters each. These tanks are also filled up twice a day and are used for various purposes such as washing, maintaining gardens and lawns, and cleaning. By efficiently managing water usage and utilizing separate tanks for different purposes, S.B.B. Appasaheb Jedhe College Pune 02 aims to ensure the availability of clean drinking water while also meeting the water requirements for other activities within the campus.

(F) Energy Consumption and Management

Electricity is mainly needed for lighting the rooms, cooling the rooms in summer and heating the rooms in winter and running computer systems. The college has a server room which needs electricity all the day and night

(G) Waste Disposal and Management

At S.B.B. Appasaheb Jedhe College Pune 02, the college generates an average of 20kg of dry waste, 25kg of wet waste, and 2kg of plastic waste per day. The college has implemented a comprehensive waste management system to handle these different types of waste. For dry waste, the college has established recycling initiatives to ensure proper disposal and reduce

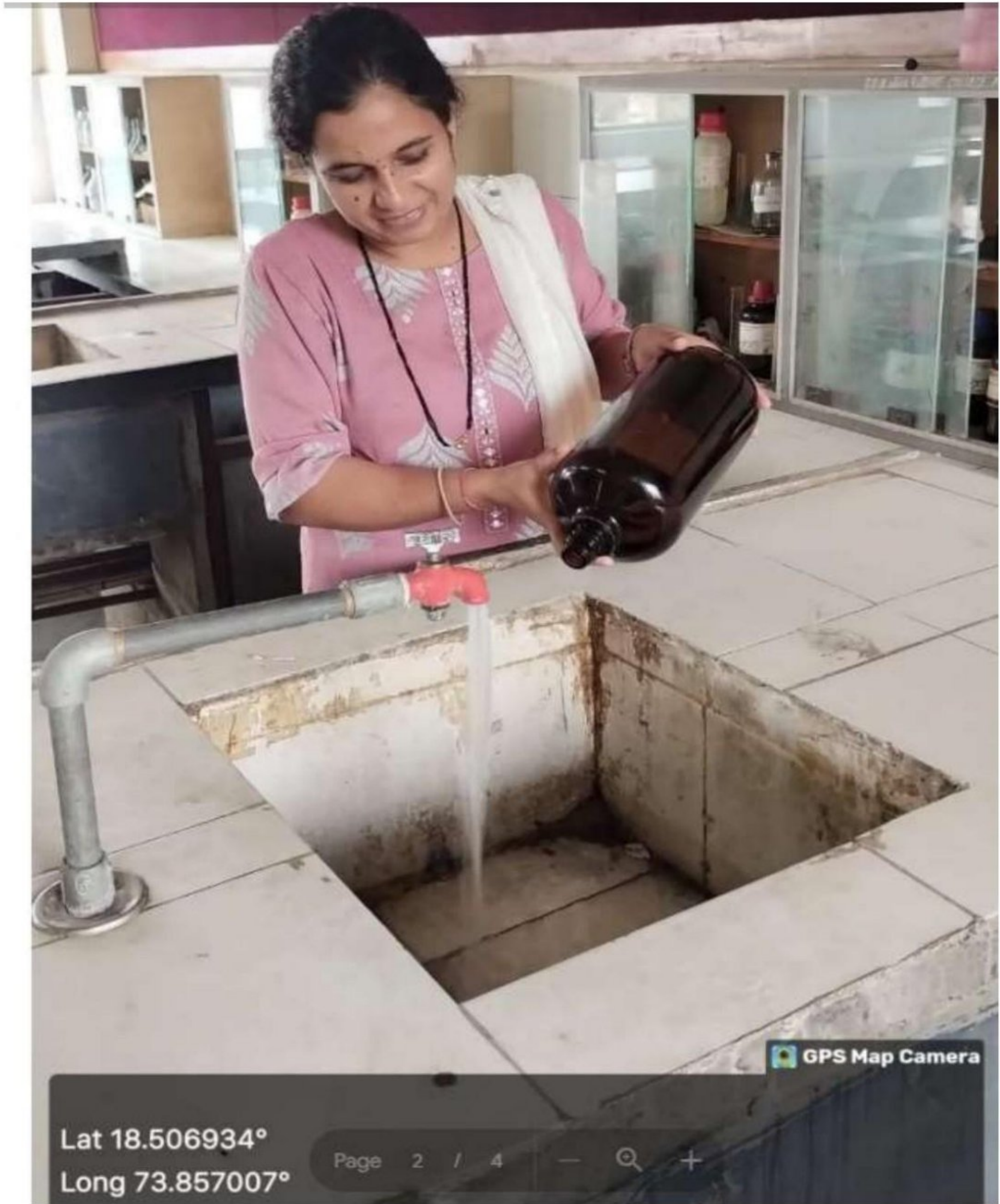


the environmental impact. This includes segregating the waste into different categories such as paper, cardboard, and plastic, and sending them to recycling facilities. To manage wet waste, the college has implemented a composting program. The organic waste, including food scraps and plant materials, is collected separately and processed in compost pits or composting machines. This helps in converting the waste into nutrient-rich compost, which can be used for gardening and landscaping within the college premises. In order to tackle plastic waste, the college promotes the use of eco-friendly alternatives and encourages students and staff to minimize their usage of single-use plastics. Additionally, the college actively participates in recycling programs for plastic waste. These waste management practices at S.B.B. Appasaheb Jedhe College Pune 02 reflect a commitment to environmental sustainability and contribute to the overall goal of reducing waste and promoting a cleaner and greener campus.

i. E-Waste: Besides the above wastes there are another category of waste is E-waste which includes computers, laptops, pen drives, printers, hard discs, CD's and other solid waste, electrical & electronics equipments generated through different department/sections is disposed and managed by the ICT, maintenance and store department of the college and the details are properly maintain in the stocks register. Thereafter in every five year the concerned departments categorize the useless items in to the wastes and disposed through auction and buyback from the authorized buyers as per the Maharashtra Government Rules.







Lat 18.506934°
Long 73.857007°

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GPS Map Camera





(H) Any other good environment friendly or adverse information

Enlightening Initiatives:

1. **The Verdant Vanguard:** Nestled within the hallowed halls of S.B.B. Alias Appasaheb Jedhe College resides the illustrious Green Club. This dynamic association fervently fosters environmental consciousness, kindles the flames of sustainability, and orchestrates symphonies of eco-friendliness that resonate through the hearts of students and staff.
2. **Rain's Resplendence:** The college has adorned its edifices with the artistry of rainwater harvesting. It is not merely a system; it's a testimony to our reverence for nature. It captures the celestial nectar, a gift from the heavens, and cradles it in reservoirs, for here every drop is a pearl, and every pearl, a promise to conserve water and rejuvenate the Earth.
3. **The Green Oasis:** Amidst the bustling campus, there lies a "mini oasis" – a sanctuary for serenity. Here, nature's kaleidoscope unfurls, offering not just a visual delight but a habitat for the whispers of local flora and fauna, where life thrives in peaceful coexistence.
4. **Verdant Haven:** The college dons a mantle of green splendor, a resplendent green campus where gardens and greenery sway in harmony. It's a manifestation of our devotion to environmental excellence, where nature is the canvas, and every tree, a stroke of art.
5. **Earth's Embrace:** The college has embraced the Earth in degradable pots, a nurturing cradle for plant life. These pots bear the legacy of eco-consciousness, leaving behind no scars, only flourishing blooms.

The Symphony of Potential Initiatives:

6. **Waste's Transformative Dance:** We aspire to choreograph the ballet of waste, segregating it with precision and recycling its essence. Our goal is to transform the chaos of waste into a dance of renewal, where landfill waste is but a forgotten refrain.



7. **Solar Rhapsody:** On our horizon, we envision a symphony of solar panels adorning our structures. These celestial harbingers of renewable energy will compose a melody of sustainability, reducing our carbon footprint and harmonizing with the cosmos.
8. **Cycle of Freedom:** The winds of change bring with them a bicycle-sharing program. Wheels of eco-consciousness shall spin across the campus, as we invite students and faculty to embark on a journey of sustainable mobility, shedding the shackles of motorized dependence.
9. **Wisdom in the Whispers:** The campus will resonate with wisdom as we convene environmental symposiums and workshops, where the tales of eco-friendliness shall be penned in hearts and etched in minds, nurturing the seeds of conservation.
10. **Rooted in Home Soil:** Our gardens shall be sown with the seeds of native plants, a tribute to our indigenous biodiversity. As we embrace the flora that has graced this land for eons, we reduce the burdens of maintenance and nourish our heritage.
11. **The Festival of Ecology:** Our events shall be a celebration of nature, where every detail is a brushstroke on the canvas of sustainability. These gatherings shall be harmonious with the environment, leaving behind only cherished memories and no ecological footprint.

10. Recommendations

A green audit of any academic institution reveals, ways by which institute can reduce energy consumption, water use and reduction in emission of carbon dioxide in the environment. It is a



process to look into and ask ourselves whether we are also contributing to the degradation of the environment and if so, in what manner and how we can minimize this contribution and bring down to zero and preserve our environment for future generation. This process of green audit enables us to assess our life style, action and assess its impact on the environment. Green auditing is the process of identifying and determining whether institutional practices are ecofriendly and sustainable. Traditionally, we are good and efficient users of natural resources. But over the period of time excess use of resources, viz., energy, water, chemicals are become habitual for everyone especially, in common areas. Now, it is necessary to check whether our activities are consuming more than required resources? Whether we are handling waste carefully? Green audit regulates all such practices and gives an efficient way of natural resource utilization. In the era of climate change and resource depletion it is necessary to verify the processes and convert it in to green and clean one.

As an outcome efforts will be made to reduce carbon foot prints by using electrical vehicles in the campus, and green computing in the administration and examination.

Focus to assess the consumption of energy, electricity, water as well as disposal of liquid waste, solid waste, hazardous waste, e-waste and an inventory of trees in the campus is also prepared to check how much CO₂ is sequestered and O₂ is released.

- The College will follow No Vehicle Day on first Saturday of every month to saved fuel consumption.
- Various awareness programmes will be helpful to motivate all the staff members for optimized sustainable use of available resources.
- The long term goal of the environmental audit program is to collect baseline data of environmental parameters and resolve environmental issue.
- To prepare an Environmental Statement Report on green practices followed by different departments, support services and administration.
- The Green Audit Report on environment must reach the public so that it would succeed in reducing the environmental issues and its popularization among stakeholders.
- If possible an environmental audit report must be published annually by the college.



- Government can play significant role for environmental legislation and quality adoption of cleaner and environmentally begin technologies in Government organizations like Universities.

11. References

NEP (2006). National Environment Policy, 2006. Ministry of Environment, Forest and Climate Change, Govt.



AARCHIT VENTURE

Report on Green Audit and Energy Audit.

Green Audit and Energy Audit is a systematic identifications, quantification, recording , reporting and analysis of components of environmental diversity , energy usage. The 'Green audit' aims to analyze the environmental practices within the college campus which will help to maintain eco- friendly nature.

The ' Energy audit ' aims to use to established the pattern of energy use, and can identify where the energy can be saved or used in a standard judgement. It consists a detailed examination of how a facility uses energy .

S.B.B alias Appasaheb Jedhe college of Arts, Commerce and Science follows all the norms Affiliated by Savitribai Phule University in maintaing the Green and Energy audit .

In order to perform green audit, the methodology tools are been used by physical inspection of campus, observations and reviews of the documentation present status of following is the Waste Management in campus :-

- I) Solid Waste Management:
 - 1. In laboratories bins are labelled properly for paper plastic and for organic waste.
 - 2. Hazardous chemicals are carefully handled at chemistry , Microbiology, Botany and Zoology laboratories.
 - 3. List of chemicals are available with respective laboratory.
 - 4. Garbage is segregated as dry waste and wet waste, dustbins were provided in different areas in campus.
- II) Plastic waste Management:
 - 1. College is taking initiative by displaying banner about awariness of plastic free campus .

❖ Gas Usage :

Gas usage apparent in Chemistry , Microbiology, Botany laboratories and in canteen.

❖ Healthy Practices in College Campus:

- 1. Sanitary napkin and disposable machines are installed in college.
- 2. Burning of garbage not allowed in campus .
- 3. Regular checking of water leakage is monitored.
- 4. Daily cleaning of washrooms.

In order to perform the Energy audit the methodology tools have been used , here the indicator addresses energy consumption ,energy sources ,energy monitoring, lighting, appliances,natural gas and vehicles .The energy source utilized by the campus is electricity only. The entire campus are equipped with LED tube lights , except few locations.

Besides this , Solar Panel Unit is installed in campus on 27/08/2018

Percentage of power requirement of the college met by the renewable energy sources about 50-75% contribution of solar energy.

❖ Initiatives taken by the college to make the campus eco- friendly .

1. Awareness of environmental issues
2. Science Exhibition related to environmental awareness projects were organized in the college.
3. Extra efforts have been taken by the college to create environment consciousness amongst students.NSS and environmental awareness committees organized 'Tree Plantation' program.
4. Energy conservation- maximizing the use of natural light and solar light .
5. Reduce- Reuse- Recycle methods are followed in the college campus.



Principal

ACTING PRINCIPAL

Samaj Bhushan Baburao alias Appasaheb
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