Janata Shikshan Sangha's

#### SHREE TAMMANNAPPA CHIKKODI

ARTS, COMMERCE, BBA, BCA, BSC College & PG and Research Center, BANHATTI.

(Affiliated to Rani Channamma University, Belagavi)

Tal: Rabakavi-Banahatti

Karnataka

Dist: Bagalkot

Re-Accredited by NAAC at "B++" CGPA 2.81

# GREEN &UDIT 2020-21



Janata Shikshan Sangha's

#### SHREE TAMMANNAPPA CHIKKODI

ARTS, COMMERCE, BBA, BCA, BSC & PG COLLEGE, BANHATTI.

CRITERION-VII

# INTRODUCTION TO GREEN &UDIT

### **Green Audit Report**

#### I) Introduction:

The environmental issue has become a world-wide concern in the last decades being the focus of discussions in a variety of forums both at national and international levels. Accordingly, carrying out environmental audits in addition to the usual official audits has become mandatory. The audits will be carried out on any of the environmental issues facing the country and world at large (including e-waste management, water and air pollution, biodiversity loss, land degradation or impaired ecosystems).

Waste not managed properly affects not only human health but the other aspects of the environment like water, air and biological diversity.

The purpose of this management report/environmental audit report was therefore to make known the findings of the audit regarding the handling, storage and proper disposal.

College and Universities have broad impacts on the world around them, both negative and positive. The activities pursued by colleges can create a variety of adverse environmental impacts. But colleges are also in a unique position as educational institutions to be leaders in pursuing environmentally

sustainable solutions. Our college express its commitment to sustainability in many ways. It has taken a number of positive steps to reduce its environmental impact. But many areas remain in which substantial improvements can be made. The college conducts the Green Audit and strives to maintain eco friendly atmosphere on the campus.

#### **II)** Location Details:

Our college is located in Rabakavi-Banahatti Taluka. which is connected by all weather roads and connected to many cities . which are on State highway No-12

The details of weather of Banahatti are as under.

- \* Latitude is 16.4823° N,
- \* Longitude is 75.1224° E
- \* Weather Chart of Banahatti referred in weather chart.
- \* Zone BSh
- \*Average Temperature 29.8 Centigrade.
- \* Banahatti is an industrial area.
- \* Average Humidity is 40% to 45% as per AIR VEDA Device
- \* PM-2.5 30 to 35 which is < 50 as per ISI standards.
- \* PM 10 Around 60 which is < 100 as per ISI standards.
- \* DB level is around 40 to 60 which is < 80 dB as per ISI standards.
- \* Average rainfall is 300mm to 400mm.
- \* Area under Greenery –

To maintain eco-friendly ambience, the following measures are under taken:

- Reuse, Reduce and Recycle (3Rs)
- Go Green and Grow Green
- Water conservation and proper harvesting

- Use of LED bulbs instead of florescent bulbs
- Use of Generator as substitute for electricity
- Say No to Plastic
- Carbon dioxide neutrality is maintained on the campus by developing greenery
- Energy Sensitization such as turning off lights/fans /monitors after the work.
- Topics such as Global warming, bio-diversity and pollution are incorporated in the curriculum.

Our management is very supportive and conscious about the environmental issues. They have taken additional interest in constituting college level Eco-club and conducting Green Audit by inviting the Experts Team which comprises of Dr. B. V. Bavache, Rtd Prof in Physic , RL Science institute Belagum (Advisor Green Audit Team). Shri Suresh Teli , Assistant Conservator Forests Department of Forest, Jamkhandi (Member ). Shri S C Changri , SRA PU College, Banahatti (Member)

The initiatives taken by the college to make the campus Eco-friendly-

- Energy Conservation
- > Rain water harvesting
- Efforts for Carbon neutrality
- > Plantation
- E-waste Management
- > Protecting plant wealth
- Caring of Rare plants.

#### **INDEX**

- 1. Echo Club of the College
- 2. Green Audit Report
- 3. Green Audit Questionnaire
- 4. Green Stretch Lawn of the College
- 5. Tree species in College Campus
- 6. Number of Trees in College Campus
- 7. Medicinal plants in Ayurvedic Garden
- 8. Rare Plants in College Campus
- 9. Fruit bearing Trees in College Campus
- 10. College Map
- 11. Average Rainfall and Rainy Days in Banahatti
- 12. Maximum and Minimum average temperature in Banahatti
- 13. Average and Maximum Wind Speed and Gust in Banahatti
- 14. Average Pressure in Banahatti
- 15. Average UV Index in Banahatti
- 16. Average Visibility in Banahatti
- 17. Air Quality Index(AQI)
- 18. Pollution in Major Indian cities
- 19. About Urine Colours and Health and Action to be taken
- 20. Photos showing various facilities in the Campus

#### **Eco-Club of the College**

1. Dr. G. R. Junnaykar

2. Dr. B.B.Bavache

3. Dr. M.N. Bennur

4. Shri. Shri Suresh Teli

5. Dr. M.N. Shirahatti

6. Shri. S C Changri

7. Dr. R. S. Gajakosh

8. Shri V. Y. Patil

- Principal/President

-Retd Prof of Physics, KLE's R.L

Science Institute, Belagavi.

- IQAC Co-ordinator

- Assistant Conservator,

Forests Department of Forest

Jamkhandi

- N.S.S. Officer

- SRA PU College

Banahatti

- Female Scouts and Guides Officer.

-Male Scouts and Guides Officer.

#### **GREEN AUDIT REPORT**

#### **Observations:**

- 1. C.C. TV surveillance
- 2. Computer Lab is provided with Server unit.
- 3. Spacious and well equipped Labs
- 4. Separate Store Room for Office, NSS, NCC, Sports, etc.
- 5. Pigeon holes in the staff room

#### **Best Practices**

- 1. NSS Office is built out of Voluntary Contributions made by NSS Volunteers.
- 2. Vehicle Parking Shed for staff.
- 3. Vehicle Parking Shed for Students is built out of contributions made by NSS volunteers.
- 4. The open area meant for common prayer has teak and almond trees.

#### **Suggestions/Recommendations**

- 1. Number of rare plants and sacred plants may be increased.
- 2. Rain water harvesting methods may be installed.
- 3. Green manicured lawns may be extended.
- 4. Exhaust fans to be installed in sanitary rooms.
- 5. Arrangements for anti-chamber in ladies' room.
- 6. 24x7 Ladies' Counselor post be appointed
- 7. Mobile jammers to be installed
- 8. Noise arrestors in Indoor Sports complex to be installed.

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website: www.stccollegbanaham.org email: xtccollegeban.a.yahoo.com

Janata Shikshan Sangha's SHREE TAMMANNAPPA CHIKKODI

ARTS, COMMERCE, BBA, BCA, BSC & PG COLLEGE, BANHATTI. ලි ෙන්ත්තුන් සත්ලයේ ජනා, සහේතු, සහය, සහය, සහය, සහනු නැමත්ලෙල්ට ස්ස්ක ජාතාකයල්ටෙත්, නස්ත්ල

(Affiliated to Rani Channamma University, Belagavi) Tal: Rabakavi-Banahatti

Karnataka Dist: Bagalkot Re-Accredited by NAAC at "B++" CGPA 2.81

Ref: STC/2020-21/

Date:

Sign

#### **Green Audit Team**

S.I No	Name of the Member	Position
01	Dr. B. B. Bavache Rtd Prof in Physic RL Science institute Belagum	Advisor Green Audit Team
02	Shri Suresh Teli Assistant Conservator	Member &

Forests Department of Forest

Jamkhandi

Shri S C Changleri 03 Lecturer, Department of Botany SRA PU College Banahatti

Jamkhandi Sub-On- Jamkhandi

Member



STC Arts & Commerce College **BANHATTI-587 311** 

# GREEN &UDIT QUESTIONERY

#### Section - I

#### **General Information**

 Name and Address of the College with contact numbers Janata Shikshan Sangha's
SHREE
TAMMANNAPPA
CHIKKODI
ARTS, COMMERCE,
BBA, BCA, BSC College
& PG and Research
Center, BANHATTI.

Area of the Campus (acres)

6 Acres (24281.1 Sq. mtrs.)

• Building area (in Sq.m)

4112 Sq. mtrs.

• Area already under Green covers (in Sq.m)

2579.12 Sq. mtrs.

• Area of Gardens (in Sq. mts.)

1440.16 Sq. mtrs.

Number of trees in the campus

126

• Number of fruit bearing trees in the campus

5

• Number of medicinal plants

10

Number of sacred plants

4

Number of rare/endangered plants

03

Number of shade houses	01
Number of vermin compost units	01
Is there any Eco-club/Green club?	Yes
Are there any plant nurseries? If yes, what is the number of units	NO
Section- II	
<b>1.</b> Energy Conservation:  What are the steps taken by the college to conserve	energy?
* Use of CFL bulbs	Yes √ No
* Use of LED bulbs	Yes √ No
* Use of energy efficient tube lights	Yes √ No
* Use of energy efficient fans	Yes √ No
* Is there Thin Client Technology in the computer lab. to save electricity?	Yes √ No
2. Use of diesel:	15 KWH
* Number of generators and capacity	Yes √ No
* Is maintenance and service of generator regular?	Yes √ No
* Who maintains generator? By a technician appointed by College	Yes √ No
	Yes √ No

* Steps to minimize dependence upon Generators 1. Manual observation	
* Cost of diesel consumption per year during Year Cost of diesel 2020-21 Rs. 3000/-	
3. L.P.G. in Canteen:	
<ul> <li>What steps are taken to minimize the wastage of gas due to short term leakage?</li> <li>Use of Gas Safety Device Installation of Net Burner to stoves</li> </ul>	Yes √ No
* Use of Gas lighter	Yes √ No
<ul> <li>L.P.G. in Laboratory:</li> <li>What steps are taken to minimize the use of L.P.G?</li> <li>Use of Gas Safety Device</li> </ul> * Is there any fire extinguishing arrangement made in laboratories?	Yes √ No
5. Water harvesting:	
<ul><li>Sources of water needed in the campus</li><li>1. Bore wells</li><li>2. Public water supply</li></ul>	
<ul> <li>Are there any water saving techniques followed in the Manual?</li> </ul>	
<ul> <li>Is there any water harvesting facility?</li> <li>If yes, what are the methods of rain water harvesting?</li> <li>Rain water is channelized properly near the bore w</li> <li>List the ways that could reduce the amount of water us</li> <li>Spring action taps</li> </ul>	ell
13	

2. Use of sprinklers for Lawn.	
6. Efforts for Carbon neutrality:	
<ul> <li>Steps taken to reduce emission of CO<sub>2</sub></li> </ul>	
* Minimum use of generators	Yes √ No
* Minimization of parking vehicles in the campus	Yes √ No
* Mandatory Carbon emission test for vehicles of staff/students	Yes   √ No
* Using Common transport facility by the staff and students	Yes √ No
* Regular plantation	Yes √ No
<ul> <li>7. Plantations:</li> <li>* Give a list of trees/plants using their botanical names. (scientific names)</li> <li>A Separate enclosed (and a separate potential names)</li> </ul>	list is nexure) (`126 Plants <mark>)*</mark>
* What are the efforts made to go organic? By using vermin compost	Yes √ No
* What is the quantity of compost used in the garden Whatever vermin compost produced is used in the garden	
8. Waste Management :	
9. Hazardous waste management	
* Do you use hazardous chemicals for Academic P If yes, Name them	urpose? <b>No</b>
Hazardous chemicals are not used.	

\* How do you dispose of the used hazardous chemicals for academic purposes?

NA

\* Do your reuse hazardous chemicals for academic purposes?

NA

\* What are the precautions taken while using hazardous chemicals for academic purposes?

NA

\* What are the precautions taken in storage of the hazardous chemicals?

NΔ

Is there any bath room with shower in Chemistry Department.

Yes

\* What are the precautions taken in storage of the hazardous chemicals?

NA

Do you have any non usable chemicals? If yes, what do you

- \* intend to do with them?
  - 1. Chemicals are purchased as per the needs only.
- \* What are the steps taken to prevent chemical accidents?
  - 1. Students use aprons
  - 2. Hand gloses are used while opening of new chemical bottles

Provision for bath room (with a shower) is made very nearby chemistry Department

- \* Is there any first aid facility?First aid boxes are provided in critical locations
- \* Is there any fire extinguishing arrangement in the labs? Fire extinguishers are provided in critical locations.
- \* If yes, give details?
  - 1. Library
  - 2. Chemistry lab
  - 3. Physics lab

<ul><li>4. Administration Office</li><li>5. Computer lab</li><li>6. Canteen</li><li>7. staff Room</li></ul>
e-waste management:
<ul> <li>* What are the measures taken for the scientific disposal of e-waste or Reutilization of e-waste?</li> <li>1. Agreements are made with venders during the purchase of new computers to buy-back out dated irreparable computers</li> </ul>
Effluent management :
* Domestic effluent management Is it treated Let off directly Reused for gardening Discharged into drains  *   √
Plastic waste management :
* Have you banned the use of plastic bags in the campus? Yes $\sqrt{}$ No Plastic bags less than 40 micron are banned.
Solid waste disposal or Management :
How solid waste is disposed?
Solid waste is handed over to Panchayat waste collectors
10. Pollution:
* Noise pollution
<ul> <li>* What are the steps taken to reduce noise pollution to tolerance limits?</li> <li>1. Sound Level tests(decibel measurement) are done in the campus at prime locations in the campus</li> <li>2. By plantation along the compound border</li> </ul>
* Is there ban on the use of Dolby sound system? Yes $\sqrt{}$ No
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* Is there any silence zone in your campus?	Yes √ No
* Air Pollution :	
<ul> <li>* What are the efforts made to minimize air pollution?</li> <li>1. By Planting more number of trees every year</li> <li>2. Quality of air is tested All the parameters are within the safe limits</li> <li>10. Are there drinking water purifying plants?</li> </ul>	n Yes √ No
If yes, purifiers are RO or simple systems	RO √ Non RO
17	

# GREEN STRETCH LAWN OF THE CAMPUS

# SMAT'S SHIVANAND COLLEGE, BANAHATTI NUMBER OF TREES IN COLLEGE CAMPUS

Sl. No	Common Name	Botanical Name	No. of Trees
1	Ashoka Tree	Saraca-indica	10
2	Teak Trees	Tectona-grandis	41
3	Coconut Trees	Cocus-nucifera	22
4	Almond Trees	Terminalia-catappa	09
5	Gowri Plants	Impatiens- balsameva	07
6	Atti Gida	Ficus -racemosa	03
7	Tamrinda Tree	Tamrindus -Indica	02
8	Kadulimb Tree	Murraya -Koenigii	04
9	Niligiri Tree	Eucalyptus-globulus- Labill	01
10	Kavate Tree	Zanthoxylum-rhesta	01
11	Peru Tree	Psidium-guajava	03
12	Pipari Tree	Long-Peppar	01
13	Jambos Trees	Syzygium-jambos	01
14	Lemon tree	Cituslimon –Burn	04
15	Mango plant	Margifero-indica	02
16	Awla or Amla	Phyllanthus-Emblica	02
17	Sacred Plants	Flowering Plants	15
		Leaf-using plants	06
18	Ber	Zizipers-mauritiana	01
Total Number of Trees			237

#### RARE PLANTS IN IN COLLEGE CAMPUS

Sl.No.	Common Name	Botonical Name	Picture
1	Guggal	Commiphora wightii Bhan	F4HG+82V, Rabkavi Banhatti, Karnataka 587311, India 04 Feb 2022 08:38 am
2	Sweet Leaf	Stevia rebaudiana Bertoni	

3	Malabar nut	Justicia adathoda	
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# COLLEGE M&P



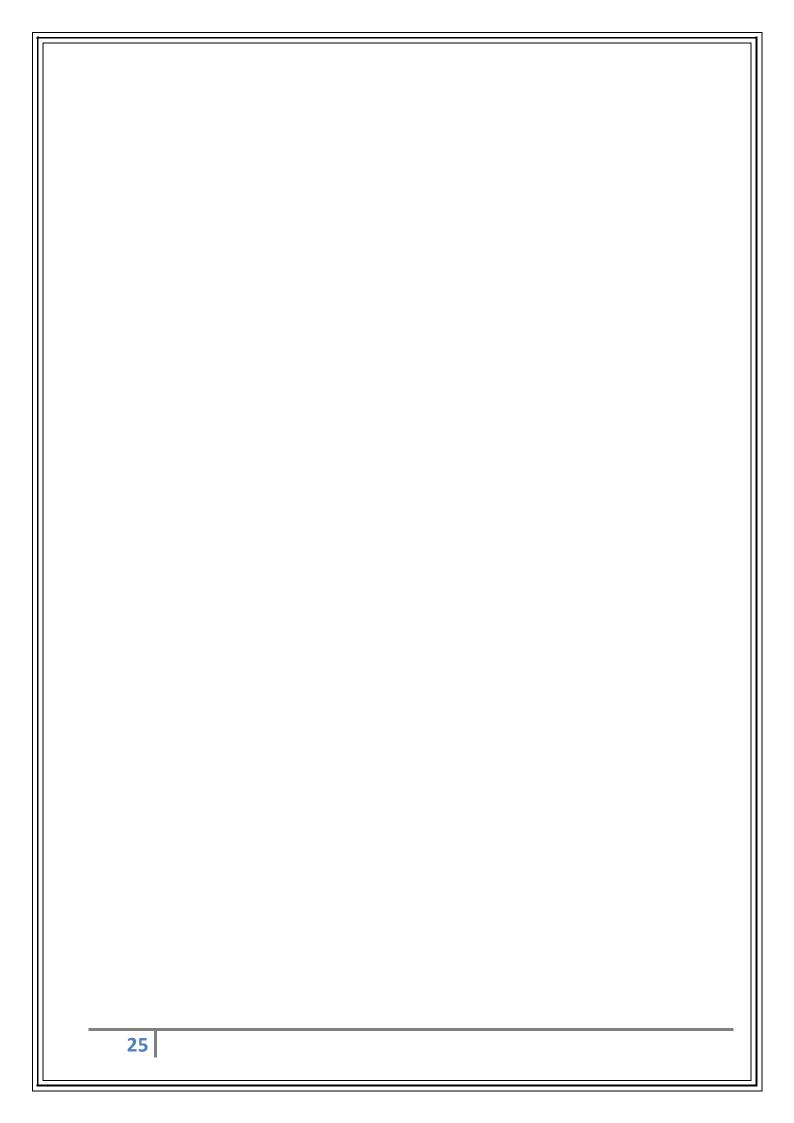
#### Air Quality Index (AQI)



#### The AQI is divided into six categories:

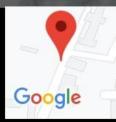
Air Quality Index (AQI) Values	Levels of Health Concern	Colors	Meaning
0 to 50	Good	Green	Air quality is considered satisfactory, and air pollution poses little or no risk.
51 to 100	Moderate	Yellow	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution
101 to 150	Unhealthy for Sensitive Groups	Orange	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
151 to 200	Unhealthy	Red	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
201 to 300	Very	Purnle	Health alert: everyone may experience more









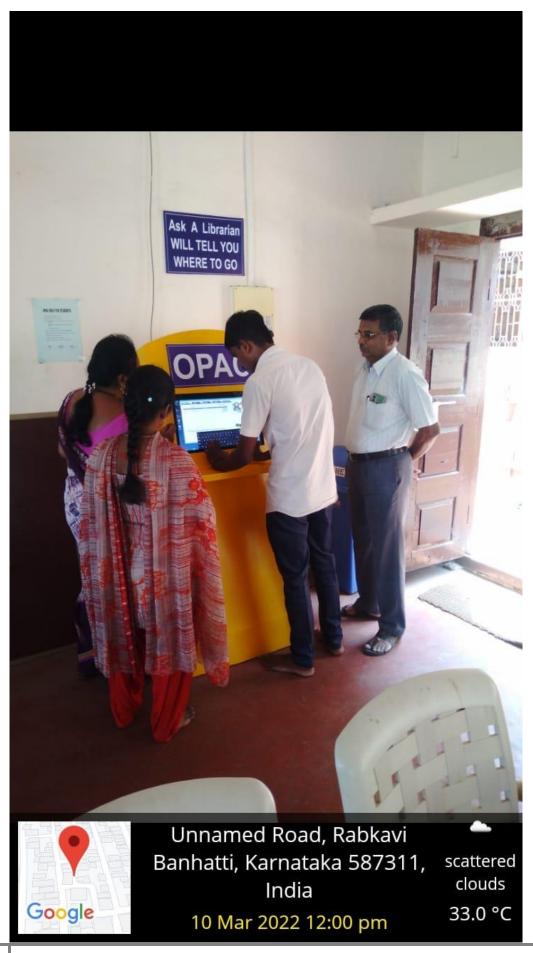


F4GF+VPH, Rabkavi Banhatti, Karnataka 587311, India 10 Mar 2022 12:14 pm

scattered clouds 33.0 °C







#### **LED Bulbs**



#### **Solar Water heaters in Hostels**



# **Solid Waste Management**



### **Bore well**



### Rain water harvesting Pit



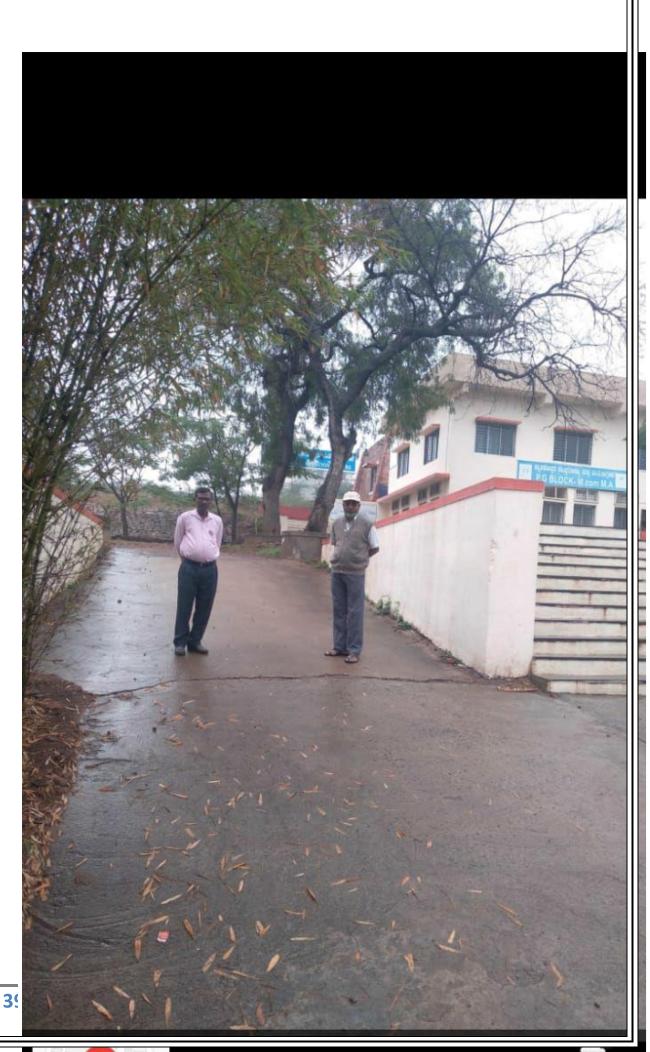
Ban on use of plastic





### **Pedestrian-friendly pathways**





# Landscaping







