

GREEN AUDIT REPORT
OF
KALPATARU FIRST GRADE SCIENCE COLLEGE
B.H.ROAD, TIPTUR- 572201



BY
Department of Civil Engineering
Kalpataru Institute of Engineering
Tiptur

GREEN AUDIT TEAM

Team leader:

Arun Kumar A. M.
Associate professor
Head of the Department of Civil Engineering
Kalpataru Institute of Technology, Tiptur

Technical Expert:

Shipashree H.M.
Assistant Professor
Environmental Engineering
Kalpataru Institute of Technology, Tiptur

Chairman:

Dr A.M. Shivanna. MSc, PhD

Coordinators:

G.C.Mallikarjunaswamy.MSc,MPhil, PGDEE.
Associate Professor of Zoology

Prakasha. MSc,MPhil
Associate Professor of Botany

Members:

B.M.Bhyrappa. MSc,MPhil.

Assistant Professor of Botany

Vinod Phadke. MSc,MPhil.

Associate Professor of Electronics

B.C.Vinutha. MA

Associate Professor of English

M.B.Shylaja. MSc

Associate Professor of Chemistry



Kalpataru Vidya Samsthe (R)

Kalpataru First Grade Science College

[Affiliated to Tumkur University and Reaccredited A Grade (CGPA 3.07) from NAAC]

N. H. 206, TIPTUR - 572 201. Tumkur Dist. Karnataka State.

Dr. A. M. Shivanna, M.Sc., M.Phil., Ph.D.,
Principal

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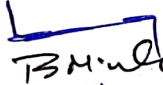
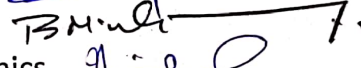
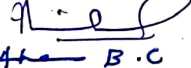
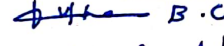
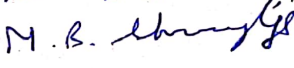
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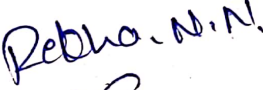

MINUTES OF MEETING

The following members attended the meeting on 23-10-2020 at 4 pm in the principal's chamber.

MEMBERS


Prakasha : Associate Professor of Botany 
B.M.Bhyrappa : Assistant Professor of Botany 
Vinod Phadke : Associate Professor of Electronics 
Vinutha B.C : Associate Professor of English 
M.B.Shylaja : Associate Professor of Chemistry 

Student Representatives.

Rekha N N : Student of III CBZ 
Sharmila : Student of III CBZ 

Minutes of Meeting:

Our College is gearing up for the fourth cycle of NAAC accreditation and decided to go for Green Audit. Arun Kumar A M, Associate Professor, Head of the Department of Civil Engineering, Kalpataru Institute of Technology, Tiptur and Shilpashree H.M, Assistant Professor from the Department of Civil Engineering, have agreed to conduct Green Auditing and submit the report.


Principal
Kalpataru First Grade Science College
TIPTUR - 572201.



KIT-Estd. 1986

Kalpataru Vidya Samsthe ® Estd. 1961

KALPATARU INSTITUTE OF TECHNOLOGY

(Affiliated to Visvesvaraya Technological University & approved by AICTE, New Delhi)
N.H 206, Tiptur – 572 202, Karnataka, INDIA.

Department of Civil Engineering

Ref. No: KIT-CV-57

Date: 24-10-2020

From
Arun Kumar A.M.
Associate Professor
Department of Civil Engineering
Kalpataru Institute of Technology
Tiptur

To
The Principal
Kalpataru First Grade Science College
Tiptur

Dear Sir,

Thank you for inviting me to conduct Green Audit in your college. It's a privilege to assess and submit the report with my colleague Shilpashree H.M. We will inform you the date and time.

Thanking You
Your's faithfully,

Shilpashree H.M.
Assistant Professor

Arun Kumar A M
Associate Professor



KALPATARU FIRST GRADE SCIENCE COLLEGE, TIPTUR

QUALITY INDICATOR FRAMEWORK (QIF)

CRITERION – 7.1.3

**GREEN AUDIT REPORT
2020 -2021**

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About us

Kalpataru First Grade College is one of Karnataka's old and premier institutions, located in the rural area at the Copra Town Tiptur in Tumkur District.

The College is getting ready for the fourth cycle of NAAC accreditation. Under this, the College has to comply with a plethora of criteria. One criterion is an **Environmental Audit or Green Audit** of the campus.

The campus is located on sprawling 36 acres of land shared by the sister institutions run by the KVS. The College has maintained lush greenery on its expansive campus.

This Environmental Audit Report includes various issues of Environmental concern. The report addresses essential topics such as water, wastewater, energy, biodiversity, students' activities through clubs such as ECO-CLUB, NSS, NCC, Scouts and Guides, Management initiatives and support for sustainable environmental development.

The College Management is very proactive and supports all the initiatives drawn by the college authorities to implement green initiatives and conservation measures for a sustainable environment.

ENERGY AUDIT

Kalpataru First Grade Science College is one of the reputed institutions of KVS (R), Tiptur, for academics. Thus it attracts many rural students both at the undergraduate level. This increases the energy requirements as well as energy demand on the campus.

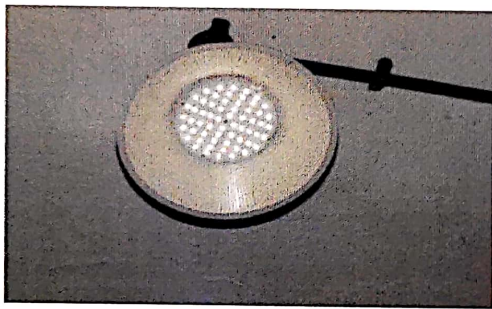
CFL, LED and Fluorescent lamps

All the electric lights within and outside the buildings are CFL, LED and Fluorescent lamps. From this, they can achieve around a 30% monthly reduction in energy bills. One of the corridors of the Main building is presented.



COLLEGE CORRIDORS WITH CFL /LED LAMPS

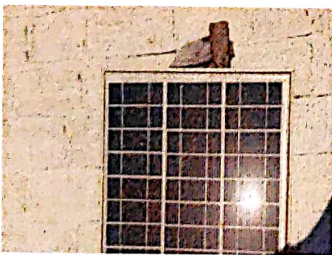
The LED lamps are used in the college Hostel Blocks of both boy's and girl's hostels. Shows one such fitting in the girl's hostel corridor.



LED LIGHT FITTING IN GIRL'S HOSTEL BLOCK

SOLAR PANELS, SOLAR HEATERS AND SOLAR LIGHTS

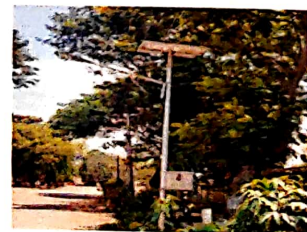
The College authority has installed a few Solar Panels for Hostel Blocks. The hostel has 16 units of solar heaters. As a result, there is a considerable energy cost reduction. This project has significantly reduced CO₂ emissions. The campus also installed solar lights at key places



SOLAR PANEL



**SOLAR WATER HEATERS
AT GIRL'S HOSTEL**



SOLAR LIGHT



BOYS HOSTEL BLOCK



LADIES HOSTEL BLOCK

COLLEGE AUDITORIUM

The College has an excellent and well-furnished Auditorium with CFL lamps illumination. This also saves a lot of energy, and the monthly Electricity Bill reasonably gets reduced.



INSIDE & FRONT VIEWS OF THE AUDITORIUM WITH LED LAMPS

ECO-FRIENDLY DIESEL GENERATOR

The College has a provision for Emergency Power Supply. They have an eco-friendly Diesel Generator of capacity 36KV on the campus.



ECOFRIENDLY CAPTIVE POWER GENERATING STATION

TRANSPORT FACILITY FOR STUDENTS

It is interesting to note that a significant percentage of students use public transport to come to the College. This reduces the burning of fossil fuels, thus reducing CO₂ emissions. Students would also be safe since they avoid using their two-wheelers.

Members of the Faculty (Professor) are promoting Energy Conservation through a two-wheeler which runs on electricity.

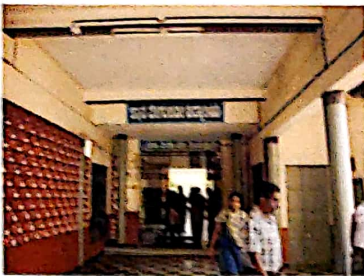
KVS launched a College bus facility for Degree students, which covers from KSRTC bus stand and railway station, thereby avoiding using two-wheelers from the students. This reduces the burning of fossil fuels.



COLLEGE BUS

CLEAN AND GREEN CAMPUS INITIATIVES

It is appreciable to note that the Management and the staff are highly proactive and support any new initiative that adds to the institution's Environmentally Sustainable Development.



ISSUES OF ENVIRONMENTAL CONCERN ADDRESSED

WASTE MANAGEMENT

The college authorities have taken specific measures to reduce the waste (both liquid and solid) on the campus.

Good waste minimization practices have been developed to reduce waste or abuse of water, plastic, paper, or other materials. They have a systematic procedure in place to collect, store and dispose of such wastes from classrooms, laboratories, hostels, cafeterias, administrative block, library block etc., The College also has made arrangements to collect the agricultural residue, tree trimmings, lawn trimmings etc., regularly and put them in a couple of residue pits to generate organic manure, which will be used on the campus for greenery development.

The picture below shows the collection of campus bio waste, using them to generate organic manure and the location of solid waste collection bins on the campus. Collection bins are placed at all vantage points in the College for effective collection of solid waste and litter.



COLLECTIONS OF CAMPUS AGRI RESIDUE & LOCATION OF TRASH COLLECTION BINS

A portion of campus agri residue is also used as soil conditioner for more enormous trees such as coconut and other trees. One such soil-conditioned coconut tree is shown below.



COCONUT & SANDALWOOD TREES WITH AGRI RESIDUE AS SOIL CONDITIONER

Interestingly, the entire campus is made less **PLASTIC ZONE**. This has reduced the solid waste generation on the campus tremendously. Not only reduction of solid waste, but it also helps prevent the age of **DIOXIN**, a well-known **CARCINOGENIC**, from very thin plastic wastes due to UV and IR radiation of Sunlight. On-site segregation is being practised, and recyclable trash is collected frequently by the local municipality for further processing.

VERMICOMPOSTING:

The leaf litter from the campus is collected from a different location from Eco club members and put into vermicomposting pits to get vermicompost. The vermin compost is eco-friendly and very chief organic manure. Thereby reducing the use of fertilizers and, at the same time, keeping them clean.



Vermicompost pit in the college campus

COLLECTION OF TOXIC AND E-WASTES:

According to the information provided by the college authorities, there is a remarkable decrease in waste on the campus, and its Management is very effective and efficient. The College has also made a separate arrangement to collect toxic and hazardous wastes, e-wastes and other such wastes that are appropriately stored for disposal.

HOUSEKEEPING

The housekeeping and the maintenance of laboratories are excellent and appreciable. All the laboratories, though old, are kept clean and neat. Safety features such as First Aid Box, Exhaust fans, separate gas chamber, fire safety systems etc., are in place.



THE AUDIT TEAM GOES AROUND THE LABORATORIES



Some of the laboratory safety features

BIODIVERSITY CONSERVATION

Laboratories also promote the biodiversity conservation culture amongst students. One such promotion is shown in the Zoology laboratory.



ENVIRONMENTAL AWARENESS PROMO IN ZOOLOGY LABORATORY

E-Communication:

The Principal's Office, all the departments of the College, the examination cell, the Office, and the laboratories are well connected with an excellent and efficient network; hence all the inter-office correspondence is done through emails and WhatsApp. This reduces the usage of paper.

DUST BINS:

Dust bins have been kept at crucial places where solid waste and other waste are dumped. Wastes are segregated, organic leaf litter is used for vermicomposting, and the waste is transported by municipal transport to the dump yard.



DUST BIN FOR COLLECTING WASTE

WATER FILTRATION UNITS

The College has two water sources, namely the Tiptur Town Municipal Supply, while the other is the bore wells on the campus.

The quality of both the water sources is potable. The College has established an advanced Water Treatment Plant in the Girls' Hostel premises. From here, drinking water will also be supplied to the college campus. The authorities are using bore well water for gardening and cleaning purposes.



ADVANCED WATER TREATMENT PLANT AT GIRLS' HOSTEL PREMISES

PAPERS ON WATER QUALITY OF ANALYSIS

Faculty have published papers on water quality analysis of Tiptur Lake, Eachnur Lake Bore well water and also Water quality analysis of Municipal water in National and International journals to create awareness on surface water quality affecting soil quality and, in turn, on food production.

Rainwater harvesting

Institutional efforts for rainwater collection are reasonable. The College has implemented Rain Water Harvesting system for all the blocks on the campus. By this, the College has an additional source of water to be used for gardening, cleaning, flushing and other purposes. This reduces the load on freshwater demand, thus contributing to the conservation of fresh water and savings in water tariffs.

Department of Chemistry, Botany and Zoology uses harvested rainwater for distillation. The distilled water is being used for laboratory experiments, and they're saving in expenditure for the purchase of Distilled water.

The campus rainwater harvesting structures are presented below.



THE AUDIT TEAM INSPECTING THE RAINWATER HARVESTING STRUCTURES

Few drain water pipes are shown. These are directed towards the open area quadrangle to use the drained water for lawns and plants around that area.



DRAIN WATER PIPES IN THE MAIN BLOCK

The College has adopted newer methods of water utilization in gardening. It has sprinkler irrigation systems. This system significantly optimizes the use of water for lawns, green bushes and individual trees etc.,

It was observed that according to the prescribed syllabus, no hazardous chemicals are used in the Department of Chemistry, Botany and Zoology.

BIODIVERSITY RICHNESS

The beauty of the campus is reflected only through the rich biodiversity the campus possesses and protects. In this regard, Kalpataru First Grade Science College has made appreciable efforts to develop and maintain excellent and pleasing greenery on and around the campus.

The biodiversity not only provides beauty to the campus, but it significantly contributes to the sustainability of the environmental concerns. This rich greenery acts as an Oxygen pool, can sequester CO₂ emissions, and provides shade and lush green touch to the vicinity

The well-manicured lawns, the arboriculture on both sides of the roads with rare species of horticultural, and the giant trees within the campus have all contributed to the richness of biodiversity on the campus. This also provides a soothing shade for the employees, visitors and students to relax, study, play, eat, meditate, talk & walk.

BIODIVERSITY RICHNESS IN AND AROUND THE COLLEGE CAMPUS.



GLIMPSES OF LUSH AND BEAUTIFUL GREENERY



WELL-MANICURED FRONT LAWNS

The college campus also conserved a rare variety of trees, including Sandal Wood trees which have added unique beauty to the surroundings.



WELL-GROWN & CONSERVED RARE SPECIES OF TREES

VEHICLE PARKING AREA

One of the vehicle parking areas on the college campus with giant trees as shade for the vehicles.



CAR PARKING FACILITIES WITH SHADING TREES

The College is lucky to have many tree shadows during the day, providing a very relaxed and cosy ambient on the campus.

Students use these shadows to study, discuss, play, relax and enjoy the serenity of the campus without any classroom janjaat.



GLIMPSES OF STUDENTS USING THE TREE SHADES FOR THEIR STUDY ON THE CAMPUS

To sustain and maintain the rich biodiversity of the campus, the college authorities have developed a small Nursery and a Green House in which a variety of horticulture plants

and saplings are being cultured and planted on the campus. Green House can be seen along with a small nursery.



GREEN HOUSE WITH FEW NURSERY PLANTATIONS INSIDE

The Department of Botany of the College has brought out charming, beautifully printed, highly informative documents, books and articles on the variety of trees, shrubs and rare species they have on their campus. They have shown interest in displaying the boards containing the botanical names and species names to which the plant belongs. One such plant with a name board is shown in the picture.



BOARDS WITH DETAILS OF BOTANICAL NAMES OF THE TREE

MEDICINAL PLANTS DIVERSITY:

Large numbers of plant species are available on the campus, which the Department of Botany identified in association with the Zoology Department. The importance of medicinal plants is often taught to students in various combinations.

A bird's eye view of the MEDICINAL PLANTS of the college campus is represented below

Sl No	Name of the plant	Common Name in the kannada language	Name of the Family	Habit	Parts used.	Medicinal uses
1	Abrus precatorius	Gulagangi	Fabaceae	Twine	Seeds roots, leaves.	Purgative, cough, cold
2	Adathoda vesica	Adusoge	Acanthaceae	Shrub	Leaves	Cold, to control

						asthma
3	Aloe Veera	Lolesara	Liliaceae	Herb	Leaves	Cold skin diseases
4	Aegle mermelos	Bilvapatre	Rutaceae	Tree	Leaves and fruits	Cold, anti dandruff
5	Azadiracta Indica	Bevu	Meliaceae	Tree	Leaves, seeds, resin	Stomach pain, skin diseases
6	Asparagus racemose	Shatavari	Liliaceae	Herb	Root for rheumatism	Rheumatism, constipation, kidney pain and swelling
7	Acacia farnesiana	Sampige dally	Mimosa	Shrub	Resin	Treat bleeding gums to treat cough.
8	Bauhinia sp	Dasavanpada	Caesalpinaceae	Small tree	Seed	Aphrodisiac, dysentery
9	Boerhaavia diffusa	Boerhaavia	Chenopodiaceae	Creeper	Leaves and stem	For rheumatism
10	Bamboo	Biduru (Bamboo)	Poaceae	Large shrub	Tender shoot	As food, birth-to-death plant
11	Calotropis gigante	Yakka	Aselepiadaceae	shrub	Latex	Bronchitis, asthma, leprosy eczema,
12	Cassia auriculata	Tangadi	Caesalpinaceae	shrub	Leaves	Sugar Control
13	Centella Asiatica	Ondelaga	Umbelliferae	Herb	Leaves	To improve mental IQ
14	Citrus reticulate	Lemon	Rutaceae	Shrub	Fruits	Vitamin C
15	Cymbopogon	Lemongrass	Poaceae	Herb	Leaves	Wormicide, diuretic, mosquito repellent.
16	Coccinia cordifolia	Tonde	Cucurbitaceae	Creeper	Fruits and leaves	Skin problem
17	Cuminum cyminum	Jeerige (Cumin)	Umbelliferae	Herb	Fruits	Stomach pain
18	Cynodon dactilon	Garike	Poaceae	Herb	Leaves and stem	Fever
19	Cycas revoluta	Cycas	Cycadaceae	Tree	Seeds	Source of sagograin as food
20	Clerodendro innermost	Vishama dhari	Verbinaceae	Shrub	Leaves	To treat fever, venereal infections, rheumatism
21	Caryota urens	Bhagani	Palmae	Tree	Juice from inflorescence cutting	Toddy
22	Datura metal	Ummatti	Solanaceae	Herb	Seeds, leaves and	Leprosy, insanity

					roots	
23	Euphorbia Tirupati	Kolgalli	Euphorbiaceae	Shrub	Latex	Antifungal
24	Ficus racemosa	Atti mara	Moraceae	Tree	Latex, fruits	Piles pulmonary diseases
25	Hibiscus rosa sinensis	Dasavala	Malvaceae	Shrub	Leaves	Dysentery
26	Jatropha curcus	Marangle (Jatropha)	Euphorbiaceae	shrub	Latex, seeds	Dental ache
27	Lawsonia inermis	Mehandi (Henna)	Lythraceae	Shrub	Leaves	As cosmetics
28	Moringa oleifera	Nugge (Drum stick)	Moringaceae	Tree	Leaves	Rich in iron, vegetable leaves
29	Michelia champaka	Sampige. (Magnoliaceae	Tree	Flowers and seeds	Ornamental and sacred
30	Monihot esculanta	Mara genasu. (Cassava)	Euphorbiaceae	Shrub	Tuber root	As food
31	Morinda citrifolia	Noni	Rubiaceae	Shrub	Fruits	As a health drink beverage
32	Ocimum sanctum	Tulasi	Labiatae	Herb	Leaves	Cold
33	Ocimum basilicum	Kamakasturi	Labiatae	Herb	Leaves and seeds	Cold
34	Plectranthus amboinicus	Doddapatre	Labiatae	Herb	Leaves	Allergy treatment
35	Phyllanthes niruri	Nelanelli	Euphorbiaceae	Herb	Leaves	Lever treatment
36	Phyllanthes emblica	Nelli kaya	Euphorbiaceae	Tree	Fruits	Vitamin C
37	Piper betel	Veelya dele (Betel leaves)	Piperaceae	Climber	Leaves	Cold, rich in minerals
38	Plumaria alba	Deva ganagale (Temple tree)	Euphorbiaceae	Tree	latex	Summer cold
39	Psidium guava	Sibe	Myrtacea	Tree	Fruits	Rich in vit c, oral care
40	Roystonea regia	Royal palm	Palmae	Endangered Tree	Seeds	Source of oil used for livestock
41	Rawolfia tetra folia	Sarpagandh	Apocyanaceae	Herb	Leaves	To control Bp
42	Sapindus saponaria	Antuvala	Sapindaceae	Tree	Fruits	As detergent
43	Syzigium cumin	Nerale	Myrtaceae	Tree	Fruits, seeds, tree bark	Source of Vit, minerals, sugar control
44	Tylophora	Adumuttada balli	Asclepiadaceae	Twine	leaves	Bronchial

	indica					Asthma
45	Tinospora cordifolia	Amrithballi	Menispermaceae	climber	Leaves, roots	Fever, sugar control
46	Terminalia chebula	Taremara	Combretaceae	tree	Fruits	Triphala churna, laxative, diuretic, homeostatic
47	Vinca rosea	Sada Pushpa	Apocyanaceae	Herb	Leaves and roots	Diabetic control
48	Vitex negundo	Lake	Verbinaceae	shrub	Leaves	Joint Pain killer
49	Vitis quadrangularis	Nagele	Vitaceae	Herb	Stem	To treat pain and swelling of various types
50	Withenia somnifera	Ashwagandha	Solanaceae	Herb	Root	Indian ginseng

ECO CLUB

The College supports and encourages extracurricular and co-curricular activities to involve youngsters. In this direction, the College is nurturing the Eco club, which is very active with interested students as its members. The activities are coordinated and guided by one Faculty as convener, and there is a Committee to manage the club's activities.

Eco Club meets twice a semester and is actively involved in various programmes to promote and imbibe environmental concerns amongst the student community and employees.

The club, with its student executive committee, plans, designs and implements activities such as awareness camps, educating students through guest or invited talks by experts, taking students on eco-tours, arranging competitions to motivate students to participate and win prizes, organizing workshops, conferences, organizing on-campus activities such as tree plantation, clean campus Abhiyan, etc., Every year eco club plants saplings and nurture them and members of the club have taken up cleaning of Tiptur lake and created awareness regarding the importance of tanks among public and students.

Eco-club organizes a few activities.



Swacha Bharath Abhiyan



Tree sapling

Trees are the most effective solution to climate change. The present century is market-oriented, making people think about every aspect of money or its equivalent. As a result, natural resources are dwindling, particularly bio-resources. Our College sensitizes students toward environmental issues.

For many years our College has been planting trees to reduce climate change in a small way and increase the number of trees in and around the campus. **Eco-club presents a sapling to CBZ students every year.** They plant and nurture the saplings. Students are taught the benefits of planting trees, how they reduce ozone levels and provide habitat for birds and other wildlife, an alternative to air conditioners, trees act as carbon sinks and many more benefits. Every student knows that tree reduces pollution and benefit the people while decarbonizing the atmosphere. It is a legacy that has to be passed on from generation to generation.

There is over-exploitation of air, water, and land, so retrieving, reviving, and reclaiming them is the only option to protect and conserve the environment.

Eco-club regularly conducts awareness programmes to sensitize students about environmental issues. Organizing lectures by eminent environmentalists/academicians, tree-planting programmes, and celebrating World Environment Day, Forest Day, Water Day, and Vanamahotsava Day create an environmental consciousness among the students. This practice is practised throughout the year in the College.



Planting tree saplings, Tiptur Lake cleaning



Tree sapling distribution

GIRLS' HOSTEL GENERAL HYGIENE

The visiting team also discussed the quality of food, general hygiene and other facilities provided by the Warden.



INSIDE VIEWS OF GIRLS' HOSTEL



Different views of the kitchen, cooking area & vegetable cutting area

The cooks of the hostel are dedicated to a sense of personal hygiene and public hygiene. They maintain the kitchen, cooking, serving, cutting, and washing areas well.

Sewage treatment plant

A sewage treatment plant is a type of wastewater treatment that aims to remove contaminants from sewage to produce an effluent suitable to discharge to the surrounding environment or an intended reuse application, thereby preventing water pollution from raw sewage. KVS authorities have constructed a Sewage treatment plant on the college campus to reduce water pollution and reuse treated sewage for gardening purposes. The sewage treatment plant can process one lakh litres of sewage water daily.



UPCOMING SEWAGE TREATMENT PLANT

ABOUT US

Kalpataru First Grade College is one of Karnataka's old and premier institutions, located in the rural area at the Copra Town Tiptur in Tumkur District.

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The College Management is very proactive and supports all the initiatives drawn by the college authorities to implement green initiatives and conservation measures for a sustainable environment.



Beyond the campus, Environmental promotion activities

PHYSICO-CHEMICAL ANALYSIS OF WATER:

Water analysis is regularly done in the chemistry lab to test the suitability of water quality. Students bring a sample of water from their homes and test potability and whether it is safe for drinking or not.

Year	No of Projects	No of Students	Class
2016-17	1	79	III B.Sc
2017-18	1	94	III B.Sc
2018-19	1	95	III B.Sc
2019-20	1	103	III B.Sc
2020-21	1	103	III B.Sc

ECO CLUB

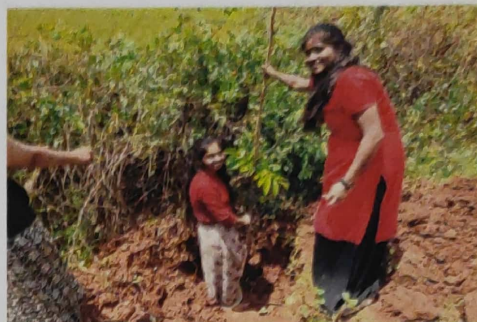
Every year eco club plants saplings and nurture them, and members of the club have taken up the cleaning of Tiptur Lake and created awareness regarding the importance of tanks among the public and students.

Few activities are organized by Eco-club.



Tiptur Lake cleaning

For the past four years, tree saplings have been planted in **the Thimmlapura village** every year, and the villagers maintain it. It has adorned on either side of the road, and the temple garden is full of lush green trees planted by students. With the help of villagers, students have planted around 600 trees. This small initiative developed a bonding between students and villagers and motivated each other to replant a tree if it dried out.



NATIONAL SERVICE SCHEME (NSS) UNIT

The College has three active NSS wings, which are involved in many programmes and activities. These are being conducted on campus as well as outside the campus.

NSS wing of the College.



They also arrange video programmes. The small film shows students and the rural community to make them aware of the things happening around them.

Few of the programmes organized by the NSS wing have been shown in photos





MEMOIRS OF VARIOUS PROGRAMMES BY THE NSS WING

The NSS wing of the College also arranges visits to nearby historical, scientific and ecologically important places. These visits will help the students to understand and appreciate such sites of importance.

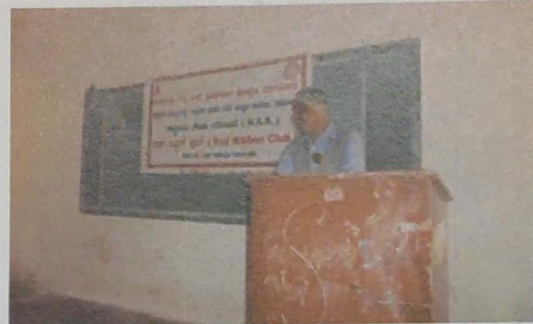
The College is reaching the rural community through the outreach programmes of the NSS wing, such as awareness-building camps, road construction camps, cleanliness camps, health camps, public hygiene camps etc.,

Some of the photos below show the visit to the nearby Gandhi Ashram and the Shramdan activities in one of the nearby villages.



SOCIETAL OUTREACH ACTIVITIES BY NSS

In the special camps, resource persons from departments of horticulture, agriculture, forest etc., are invited to create awareness on soil, organic farming, drip irrigation etc., for villagers every year.



FLOOD RELIEF FUND

During the flood of 2019 in Karnataka, the EXECUTIVE MEMBERS of KVS, Staff members of KFGSC and Students

raised funds from the public of Tiptur on 17 August 2019. Nearly one lakh eighty thousand rupees have been collected. The raised fund is being handed over to the Chief Minister, fund some part of the amount is being handed over to flood-affected victims of Horanadu On 28-8-2019 in the presence Of Dharmadarshani of the temple Horanadu

FLOOD RELIEF FUND RAISED BY III BSc STUDENTS IS BEING HANDED OVER TO THE PRINCIPAL, KFGSC, TIPTUR

ವಿದ್ಯಾರ್ಥಿಗಳಿಂದ ₹1.80 ಲಕ್ಷ ಸಂಗ್ರಹ



ಕರ್ನಾಟಕದ ಹಲವು ಭಾಗಗಳಲ್ಲಿ ಭಾರತದ ಅಭಿವೃದ್ಧಿ ಮತ್ತು ಸರ್ಕಾರದ ಅಧಿಕಾರಿಗಳಿಗೆ ಸಹಾಯ ಮಾಡಲು ಕೆಲವು ವಿದ್ಯಾರ್ಥಿಗಳಿಂದ ಸಂಗ್ರಹಿಸಿದ ಒಂದು ಲಕ್ಷ ಎಂಟು ಸಾವಿರ ರೂಪಾಯಿಗಳ ಮೊತ್ತವನ್ನು ಕರ್ನಾಟಕ ಸರ್ಕಾರಕ್ಕೆ ಸಲ್ಲಿಸಿರುವುದು ಸುದ್ದಿಯಾಗಿದೆ. ಈ ಮೊತ್ತವನ್ನು ಸಂಗ್ರಹಿಸಿದ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಸರ್ಕಾರದ ಅಧಿಕಾರಿಗಳಿಂದ ಪ್ರಶಸ್ತಿ ನೀಡಲಾಗಿದೆ. ಈ ಮೊತ್ತವನ್ನು ಸಂಗ್ರಹಿಸಿದ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಸರ್ಕಾರದ ಅಧಿಕಾರಿಗಳಿಂದ ಪ್ರಶಸ್ತಿ ನೀಡಲಾಗಿದೆ. ಈ ಮೊತ್ತವನ್ನು ಸಂಗ್ರಹಿಸಿದ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಸರ್ಕಾರದ ಅಧಿಕಾರಿಗಳಿಂದ ಪ್ರಶಸ್ತಿ ನೀಡಲಾಗಿದೆ.





Flood relief fund of Rs. One Laksh Thirty-Five Thousand is being handed over to flood-affected victims of Horanadu On 28-8-2019 in the presence Of Dharmadarshani of the temple Horanadu.

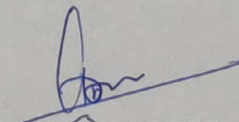
CONCLUSIONS

The following conclusions are drawn based on the visit to the campus and interaction with the Principal and the members of the Faculty of Kalpataru First Grade Science College, Tiptur.

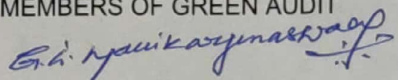

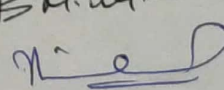
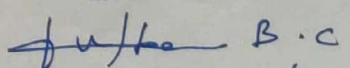
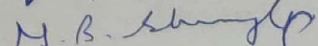
- ❖ The Management is proactive and highly supportive
- ❖ Environmental awareness and concern on the campus are good. The students and the employees are highly cooperative and committed to the conservation and protection of the environment
- ❖ Water abuse is minimal, leading to less wastage of fresh water
- ❖ Sound practices are being adopted effectively to reduce the use of water for gardening and maintenance of trees & lawns
- ❖ A Good Rainwater Harvesting system is in place, collecting a sufficient quantity of water for non-domestic and laboratory use
- ❖ Domestic wastewater management is ok because of the sewer network system in the town. There is also scope and provision for pretreating liquid waste from the laboratories
- ❖ As far as the energy sector is concerned, there is tremendous scope for conserving energy through various means. Measures of energy conservation are planned, approved and are in the pipeline
- ❖ The campus has a good and rich biodiversity and is maintained well. Vermicomposting and greenhouse have added to the richness of biodiversity on the campus
- ❖ The Eco Club, NSS unit, NCC wing and Scouts and Guides are all very active with several initiatives to conserve water, & energy and to address environmental pollution control and prevention aspects
- ❖ The NSS & NCC wings of the college are very actively involved in community outreach programmes along with beneficial activities on the campus as well
- ❖ The initiatives from the members of the faculty, their commitment, involvement and enthusiasm are highly appreciated in sustaining and effectively implementing the Green Campus activities

RECOMMENDATIONS

- ❖ The audit team recommends the following to effectively implement and justify the measures planned for the overall Sustainable Development of the GREEN campus.
- ❖ For further refinement of the Environmental Initiatives, the college has to develop a culture of maintaining all proper documents concerning conservation measures both in water and energy areas
- ❖ To measure the outcome of the initiatives, it is strongly recommended to quantify energy saved; freshwater conserved, increase in groundwater level in bore wells and rainwater harvested
- ❖ Economic Analysis shall be carried out to justify the investments made in the conservation measures
- ❖ Existing Street Lights can be replaced with either LED or Solar powered lighting system
- ❖ It strongly recommended providing pretreatment facilities in Chemistry, Zoology, Botany and Research laboratories to pretreat the liquid waste before its discharge into the public sewer system
- ❖ Eco Club, NCC, NSS and Scouts and Guides activities shall be expanded (like organizing role plays, street plays and dramas) to spread and sustain the measures of conservation both at the college level as well as the community level
- ❖ To significantly reduce CO₂ emissions, the college must declare any day in a week as **CARBON-FREE DAY** or **VEHICLE-FREE DAY**.


GREEN AUDITOR
Shilpaashree Am.

MEMBERS OF GREEN AUDIT



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