

BASELINE ENVIRONMENTAL ASSESSMENT

(2022-23)



ADARSH SHIKSHAN SANSTHA BEED'S,
KALIKADEVI ARTS, COMMERCE AND SCIENCE
COLLEGE,
SHIRUR KASAR. TQ- SHIRUR(KA), DIST- BEED,
MAHARASHTRA.

(Affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad)

1. Introduction

COLLEGE INTRODUCTION:

Adarsh Shikshan Sanstha Beed's, Kalikadevi Arts, Commerce and Science College, Shirur Kasar.

Adarsh Shikshan Sanstha is a rural voluntary service organization. It was established by the contribution of authentic members with the motive of "Social Development" in Taluka Shirur Kasar Dist. Beed state Maharashtra. Kalikadevi Arts, Commence and Science College Shirur Kasar, run by Adarsh Shikshan Sanstha Beed was established in January 2002 by Honourable late Kesharbai Sonajirao Kshirsagar Alias Kaku (Ex. Member of Parliament), with noble and foresighted vision to provide higher education to youth of rural areas. The College is affiliated to Dr. Babasaheb Ambedkar Marathwada University Aurangabad. The college provides three programs; at UG level i.e. Arts, Commerce and Science and two programs of PG level M.A. English and M.Com. The college has also introduced, Tourism and Service Industries course from academic year 2019-2020. UGC has recognized the institution with 2(f) and 12(B).

The cardinal objective of the institution is to create good citizens with social, economic and political responsibilities to meet the global challenges. The vision and mission of the college is to empower and elevate the rural community and to promote a unique learning experience. The Principal deeply involves various day-to-day and academic activities for building social responsibilities among the students.

Surrounded by extensive green cover of nature, the college has an aesthetic landscape which is architecturally striking. The institution has a well maintained, user friendly and resilient infrastructure conducive for teaching, learning and comprehensive development of students, faculty and stakeholders. The college provides various facilities like sports, library, canteen; consumer store (Grahak Bhandar), pure drinking water cooler, ICT hall, well-furnished teaching halls, well equipped laboratories indoor game facilities, health care centre and competitive examination coaching classes' centre for students of college and other stakeholders. College arranges study tours to places of historical and geographical importance, visits to various study centres, and industries. College always tries to arrange various Cocurricular and extracurricular activities like elocution competition, essay writing speech events science exhibition etc. Our NSS and Life Long Learning and Extension

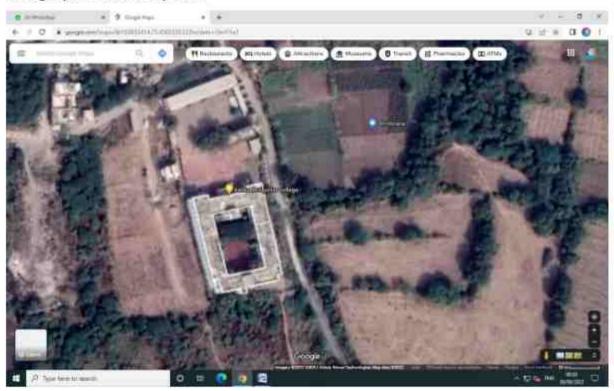
department conducts society oriented programmes like blood donation camps, ecofriendly awareness, rallies, cleanliness camp, national integration camp, tree plantation, literacy programme etc. Student mentoring system is also available in the college to solve the student's personal and social problems.

With a proper Vision and Mission we, as an Institute are striving to give quality Education, Ethics and Morals to our students and looking forward to give as much as we can.

Campus area:

- 1 Total Campus Area-10119.19 SQ.M.
- 2 Built up Area- 3259.76 SQ.M.

Geographical Description:



Maharashtra state is situated in western side of India hence Beed is situated in the Deccan black basalt rock; ranges of Balaghat that constitutes main rang from Ahmednagar in the west, to the border of district Beed in the East. This range divides the district into two parts. The plain area in the north is called as Gangathadi (bank of Ganga-Godavari) and the higher part is called as Ghat at Balaghat. Many hills exceed

2500 feet mark from the sea level. Balabhat range is found in between heights of 2000 and 2200 feet, whereas the plain is called Gangathadi and it has the heights between 1200 and 1500 feet from the sea level.

ShirurKasar is a Tehsil in the Beed subdivision of the Beed district, in the Indian state of Maharashtra. The town is situated on the southern bank of the river Sindafana, a tributary of the Godavari River. ShirurKasar obtained Tehsil status in 1999. Prior to that it was part of the Tehsil Patoda, which is also a subdivision of the Beed district. Rainfall-

Shirur Kasar Tehsil is situated in draught prone area of Maharashtra in the Balaghat mountain ranges. In Shirur Kasar Tehsil the average annual temperature is 25.40C and the average rainfall is 498 mm

Geographical Location-

ShirurKasar is one of the important Tehsil in Beed District. In Beed District total number of Tehsil is 11 in that Shirur Kasar is made in 1999 divided from Patoda Tehsil. Total population of Shirur Kasar is 128583. There are 26642 houses in the Tehsil. Geographically Shirur Kasar tehsil is located between 1904, 30, N latitude and 75045,54,, E Longitude.

1. COLLEGE VISION & MISSION:

VISION

The institution has a right aim, which leaves no room for covetousness or indulgence but encourages everybody for developement or self and society...

MISSION

- To mentor and inculcate social moral values in students and empower them towards nation a building activity.
- To cultivate feeling of social bonding and development among students through different intervention and entrepreneurship program of college.
- To promote an environment of academic excellence through development of human potentials.
- To inspire and ignite young minds creative thinking and innovative ideas with proper livelihood earned by pure and honest means that would help them to succeed in their career.
- To create a platform student to feel free to point out their problems general drawbacks and limitations.

1.1 OBJECTIVE OF THE COLLEGE:

Following are the objectives of the college:

- To Improve Satisfaction And Engagement Level Of Students
- To Promote Use Of ICT For Formal And Informal Education.
- To Equip Students With Participatory And Partnership Role In Higher Education.
- To Inculcate Team Spirit And Provide Environment To Work As A Team With Right Efforts Avoiding Evil Thoughts.
- To Bring About Improvement In Teaching Learning Process And Promote Research Environment Among Faculty And Students.

1.2 Perspective Plan

- To Establish MOUs and Linkages with National and International Institutes.
- To Submit Minor/Major Projects to UGC and Other Funding Agencies.
- To Develop Smart Class Rooms.

- To Introduce Vocational And Skill Based Add On Courses.
- To Develop Green Campus.
- To Increase Student Placement Rate.
- To Organize National / International Seminar / Conference.
- To Introduce PG Courses In Science Faculty.

Adarsh Shikshan Sanstha Beed's, Kalikadevi Arts, Commerce and Science College, Shirur Kasar. demonstrates its commitment to implement sustainable solutions in different ways. It has taken a number of positive steps to reduce possible environmental impact. The management is keen on accepting new ideas of resource management.

The environmental assessment of an educational institute being carried out in different phases.

- To establish a baseline of existing environmental scenario
- To provide basis for improved sustainability
- To promote environmental awareness through the assessment process
- To create an educational document for future use

In view of making green and eco-friendly campus the organization has taken an important step to understand the environmental parameters within the campus. This report serves to highlight, the efforts towards greener campus. The first step taken in this direction is establishing a baseline of existing condition.

The different environmental criterias with their current status, action being taken by an institution and effective ways to improve the actionable points being highlighted in this report. Sensitization of all the stakeholders of an institution towards eco-friendly campus is very crucial at this juncture.

2. Environmental criteria's

2.1. 'Know green and think green' there is promoted on the campus

Governance and Leadership

The college has clear policies, principles or goals that provide direction for staff, administrators, and other members of the campus community. Clear decision-making power and reporting mechanisms with responsibilities to monitor, report, give advice about, and promote action and awareness around environmental sustainability.

Action:

The College currently has an Environmental Advisory Committee (ECC), which is composed of members each from different stake holders of the college. It is co-chaired by a student and by the head of facilities. The ECC has been very active in discussing and advising the College on campus sustainability issues.

Environmental Conciosness Committee (ECC) - (2022-2023)

SN	Name of the Committee Member	Designation
1	Dr. Gholap P. N.	President, (Principal)
2	Dr. Tupe S. K.	Coordinator
3	Dr. Sawate S. R.	Member
4	Dr. Lomte S. B.	Member
5	Mr. Vitthal Tupe	Non-Teaching representative
6	Miss. Bharti Sanika Bhagvat	Student representative
7	Miss. Ayesha Riyaj Shaikh Stude represent	
8	Mr. Uddhav Ashok Sable	Parent representative

Since commencement, the committee has discussed such topics as campus energy use, recycling of plastic, reduce use of plastic, composting of dining hall waste, saving

water and sustainable use of resources.

2.2 Dining

The college campus accommodates 900 members including students and staff. The

college authorities have appointed food supply vendor within the campus area. On an

average approximately 881 students and staff utilizing campus area for dining purpose

on working days.

Action: The garbage being properly collected through well designed network of

garbage collection bins throughout campus. The waste dumping site has been created

and then it is being collected by local Municipal system of garbage collection to collect

this organic waste from dining facilities on daily basis. Any occasion/college functions

the snacks items being served in paper plates. Plastic being avoided strictly.

Vermicomposting pit is maintained well.

2.3 Water conservation and prevention of water wastage

The source of water for the college is open Bore well water supply for drinking & other

uses. The college has 1 water filters & cooler with 100 LPH capacity and filter water

supplied within the premises for drinking purposes. Water supplied within the premises

for laboratories, departments, washrooms purposes through pipelines. The water

quality monitoring is being done regularly. The water consumption within the campus

is controlled by campus authority. The storage tanks are as follows

Underground tanks: NA

Overhead tank 5: Capacity - 2000 x 2 lits and 1000 x 3 lits

So total water storage capacity 7,000 Litters

8

Green Audit

The approximate water uses on any working day during working hours can be summarized as follows

S.No	Activity	Utilization (Student + staff)	Total lits(Approx.)
1	Drinking	700 x approximately 1 lit	700
2	Toilet	800 x approximately 3lit	2400
3	Laboratories		500
3 4	Watering plants		1000
5	Spraying on play ground		500
6	Canteen area		1000
			6100

Action:

- Awareness on minimum and adequate water use.
- Regular water quality monitoring. (Water & Waste water).
- Well planned experimental schedule of different classes. Laboratory waste water discharged into soak pit.
- 4) The design of urinals Indian & western Washrooms, Urinals & Latrines- 16 (Girls, Boys & staff) was made in such way that it causes minimum wastage of water. Drainage water from urinals discharged into Municipal drainage system.
- Watering to plants being done by manual sprinklers.
- Ensuring the implementation of water saving devices and techniques.
- 7) Sewage water of campus being collected and discharged into municipal sewer line which is further processed to sewage treatment system of Municipal Corporation.

2.4 Solid waste management

The college working hours are from 7.00 am to 4.00 pm. There are different activities and projects being implemented in different departments. The number of students in the campus along with staff members goes to approximately 900.

The daily solid waste being generated in the camps categorized in the following way.

S.No	Activity	Utilization (Student + staff)	Total kg.
1	Classroom 14 + Seminar Hall 1 + Staffroom 1 + Girls & Boys common room 2 + Exam section 1 +Reception area1+ Sport complex Auditorium)	25 Dustbin x 300gms	7.5 kg approximately
2	Laboratories 5 + Chemical store 1	Labs x 250 gms	1.5 kg approximately
3	Canteen/snaks/meal	Students & staff used for snacks or meal	5 kg approximately
4	Sweeping and cleaning	Campus	10 kg approximately
5	Admin block	All offices	2 kg approximately
			26 kg approximately

Action:

- Usage of recycled paper bags was promoted among students by displaying boards like 'Say No to Plastic'
- Reduce Reuse Recycle methods are followed Different type of chemicals from different laboratories and chemical stores being returned to respective vendor after expiry date.
- Office paper waste being collected and given to vendor for recycling on annual basis.
- 4) Examination paper being retained in the institution for 3 years and then given to vendor for shredding which in turn being sent for pulping for generating recycle paper.
- The collection bins are made for specific types of waste.
- The number of printouts has been reduced from admin blocks and computer laboratories

Hazardous waste management

The college authorities are well aware about the monitoring and management of chemical-intensive process. This process considers toxicity, downstream impacts, staff safety, cost and packaging.

Action:

- The college performs well in terms of custodial chemical use, monitoring their use, minimizing their impact, and keeping employees and others safe.
- 2) All the chemicals are bought from chemical supply vendors, by contracting on annual basis. The college reduces costs, limits inventory, limits overuse, and help maintain consistent chemicals (consistency helps keep workers safe).

E-waste management

The college has a system to collect e-waste separately in specially designated bin.

The Jadhav computer which is authorized vendor, has been contracted for collection and disposal.

2.5 Carbon dioxide neutrality

Carbon dioxide neutrality has been maintained on the campus by developing greenery with available plants. The 10 to 40 % area is occupied by greenery by different type of plants. The list attached with its significance.

This includes the plants, greenery and sustainability of the campus to ensure that the buildings conform to green standards. This also helps in ensuring that the Environmental Policy is enacted, enforced and reviewed using various environmental awareness programme.

Campus is located in the vicinity of various (species) trees. Various tree plantation programs are being organized during the month of July and August at college campus and surrounding villages through NSS unit. This program helps in encouraging eco-friendly actions in the environment which provides pure oxygen within the institute and awareness among citizens. The organization is keen on providing hands on experience to students by providing opportunity to participate in various government initiatives. Students are in real sense being connected to the community at large. The organization has decided to adopt certain villages and to work for rural development purpose.

Action:

- The campus is situated in such an area that there is no any other type of disturbance.
- An indoor atmosphere is designed to be well ventilated that airflow mixing of fresh/outdoor air is continuous.
- Specific strategies and plans in place in order to reduce transportation impacts.
 - a) Parking slot for students maintained at the main entrance to restrict the traffic movement in the campus.
 - b) Awareness among the students was increased to use public transport.
 - c) The layout of the campus is relatively open with much green space, thus keeping the amount of impermeable surface area below 50%
 - d) The college has a canopy of trees and plants that make the environment healthy.
- e) Plants were selected with low maintenance requirements and that otherwise fit the local ecosystem (i.e. provide habitat for native species of insects and birds).

f) At present the indigenous trees are dominant all over the campus. The medicinal plants planted and maintained in the campus. Some plants mentioned in list of medicinal plants are really important.

2.6 Campus Culture and Environmental Awareness

The college has aim to educate all students in the area of environmental studies in an interdisciplinary framework, and provide adequate training for those students who wish to pursue environmental research in accordance with engineering or environmentally-related career choices.

Action:

- College has developed a clear assessment of the environmental studies curriculum for faculty, students, and administration.
- 2. The college undertakes various activities through effective use of ongoing schemes like N.S.S., through Earn and Learn Scheme. In these schemes students work for beautification of campus, water and power management, the biodegradable and non-biodegradable waste segregation. To create eco-friendly awareness among the students, college arranges special programmes by inviting the eminent personalities, who in turn train and educate stake holders. Students are encouraged to participate in eco-friendly activities by making the activities of eco-club part of the curriculum.
- College authorities have created an atmosphere of awareness and sense of responsibility within the campus regarding environmental issues. Engaged students, faculty, staff and administration in cooperative analysis and response to these issues.
- College has developed its own environmental policy for the campus and displayed it everywhere.

Environment Policy

We are committed to protect Environment, Occupational Health and Safety of all through our work and activities. We Endeavour to...

Adarsh Shikshan Sanstha Beed's, Kalikadevi Arts, Commerce and Science College, Shirur Kasar is committed to reduce its impact on the environment. We will strive to improve our environmental performance over time and to initiate additional projects and activities that will further reduce our impacts on the environment.

Our commitment to the environment extends to our students, our staff, and the community in which we operate. We are committed to:

- Comply with all applicable environmental regulations.
- 2) Prevent pollution whenever possible.
- Minimizing waste by reviewing purchasing practices and segregating waste for reuse and recycling.
- 4) Purchase and use environmentally responsible (recyclable, refurbished, etc.) products from environmentally responsible suppliers (i.e. suppliers who emphasize the need for renewable energy supplies).
- Train all of our staff on our environmental program and empower them to contribute and participate.
- Continually improve over time by striving to measure our environmental impacts and by setting goals to reduce these impacts each year.

As per the policy guidelines the institution is implementing

- College is implementing Environmental Module as prescribed by the Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- 2) Organization of various seminars & workshops on regular basis

3. General Recommendations:

- The College should improve its monitoring and reporting of energy, water and other resource usage.
- To reach the goal of a 30% recycling rate, which some institutions have achieved, college should compost food waste and be more vigorous about recycling education.
- College should continue to work towards composting post-consumer food waste generated by the dining areas.
- The college should continue to stay with current chemical products that may have a minimal environmental impact and make this an explicit formal goal.
- Any future increases in servers should be consolidated in one "machine room," rather than building another on campus with the same high maintenance requirements.
- The ECC should make decisions with respect to continuous input, interests and commitments of the students, participating faculty, and administration.
- College should develop a mechanism of monitoring and information dissemination of various environmental parameters. As have problems with accurately and consistently monitoring electrical usage (especially in terms of individual buildings) and water usage.
- College should take efforts by putting Environment awareness slogans on the walls to inculcate values on student's mind
- Chemistry department should encourage "Green Chemistry" program.
- Maintain rain water harvesting system effectively.
- Environment Awareness programmes and Environmental field visits should be arranged on more frequent basis for Hands on Experience.

4. Conclusions

The findings of this report show that the college performs fairly well on sustainability issues. The college does consider the environmental impacts of most of its actions and makes a concerted efforts to act in an environmentally responsible manner. In conversations with faculty, staff administration at the college, shows improvements made over the last few years to enhance environmental awareness.

Even though the college does perform fairly well, the recommendations in this report highlights many ways in which the college can work to improve its actions and become a more sustainable institution.

In this section, the recommendations are ranked in terms of priority.

4.1 The high priority recommendations are:

- Continue working towards worm composting the post-consumer food waste generated by the dining halls.
- Adopt the proposed Environmentally Responsible Purchasing Policy, and work towards creating and implementing a strategy to reduce the environmental impact.
- With regards to the concerns mentioned in this report, the College should consider adopting specific goals and targets in its pursuit of sustainability.

4.2 The medium priority recommendations are:

- Look towards meeting different environmental standards.
- Continue to stay with chemical products that may have a minimal environmental impact and make this an explicit formal goal.
- Develop explicit policies concerning the impact of new construction on impervious surface area and runoff.
- Continue to support the work of the ECC and should ensure that its recommendations are considered carefully and in a timely manner through the appropriate chain of command.

4.3 The minor and future concerns are:

- Encourage student project on environmental footprint for College.
- Continue expanding research program to better educate students about natural history and college role in preserving biodiversity and optimum utilization of natural resources.
- Apply fees/charges for parking and implement it across all types of employees, faculty, and students in order to encourage use of public transport.
- > Should formulate "Environmentally Responsible Purchasing Policy" for college

List of Plants available at college:

Medicinal plants in Botanical Garden				
Sr. No.	Local Name	Botanical Name	No of plants	
01	Adulsa	Justiciaadhatoda	2	
02	Jaswand	Hibiscus rosa-sinensis	1	
03	Mehandi	Lawsoniainermis	1	
04	Aawala	Phyllanthusemblica	2	

05	Anjeer	Ficuscarica	1
06	Limboni	Limoniaacidissima	1
07	Idlimbu	Citrus jambhiri	1
08	Nagdaman	Artemisia nilagirica	1
09	Pandhariringni	Solanumsurattense	1
10	Panphuti	Bryophyllumpinnatum	2
11	Mango	Mangiferaindica	1
12	Karipatta	Murrayakoenigii	1
13	Shevga	Moringaoleifera	1
14	Tulas	OcimumTenuifloram	3
15	Dalimb	Punicagranatum	1
16	Gulwel	Tinosporacardifoliya	1
17	Arjun	Terminaliaarjuna	1
18	Korphad	Aloe vera	2
19	Aswagandha	Withaniasomnifera	1
20	Shatawari	Asparagus racemosus	1
21	Tuti/ Shahatut	Morus alba	1
22	Onions	Allium cepa	1
23	Papaya	Carica papaya	3
24	Shitaphal	Annonasquamosa	2
25	Lahasun	Allium sativum	1
26	MakadShindoli	Carallumafimbriata	1
27	Nagwel	Piper betle	2
28	Pudina	Menthapiperita	1
29	Adrak	Zingiberofficinale	1
30	Coconut	Cocosnucifera	4
31	GavatiChaha	Cymbopogoncitratus	1
32	Aaghada	Achyranthesaspera	1

Sr. No.	Local Name	Botanical Name	No of plants
01	Silver oak	Grevillearobusta	4
02	Decoration Fox-Tall Palm	WodyetiaBifurcata	4
03	Boganwel	Bougainvillea glabra	10
04	Indian Christmas		4
05	Ashoka	Saracaindica	4
06	Sita Ashok	Saracaashoka	2
07	Parijatak	Nyctanthesarbortristis	2
08	Kewada	Pandanusodorifer	1
09	Chandipat	Tabernaemontanadivaricata	1
10	Lavang Plant	SyzygiumAromticum	1
11	Bakul	Mimusopselengi	1
12	Cluster Palm	Caryotamitis	2
13	Costal Palm	Allagopteraarenaria	2
14	Areca Palm	Dypsislutescens	2
15	Supari Plant	Areca catechu	2
16	Money Plant	Epipremnumaureum	1
17	Morpankhi plant	Platycladusorientalis	2
18	Cycus	Cycasrevoluta	1
19	Nilikaticoranti	Barleriaprionitis	2
20	Yellow Croton plants	CodiaeumVariegatum	2
21	Krushna kamala wel	Passifloralncarnata	1
22	Kardali	Canna indica	1
23	Ixora Pink plants	Ixorajavanica	2
24	Tagar white double	TabernaemontanaDivaricata Double	2

25	Madhumaltiwel	Combretumindicum	2
26	Iberis Amara white	Iberisamara	2
27	Gaudichaudi (Yellow)	TecomaGaudichaudi/Yellow Bells	1
28	Chafa (Red-yellow)	Plumeriaobtusa	1
29	Kenna		2
30	Oxycardium, Heart leaf plant	Philodendron hederaceum	1
31	Bottle Palm tree	Hyophorbelagenicaulis	4
32	Bonsai Bottle palm with Trunk	Hyophorbelagenicaulis (Bonsai)	1
33	Table/ Umbrella palm	Livistonarotundifolia	2
34	Adenium Pink Bonsai	Adeniumobesum	2
35	Red Espoma Cactus plants	Espoma Cactus	1
36	Henry's red Rhododendron plant	Rhododendron monrovia	1
37	FicusBenjamina plant's	FicusBenjamina	1

Wild plants in Botanical Garden				
Sr. No.	Local Name	Botanical Name	No of plants	
01	Bambu	Bambusa vulgaris	4	
02	Gajga	Caesalpiniabonduc	2	
03	Sheesham	Dalbergiasissoo	4	
04	Sagwan	Tectonagrandis	4	
05	Niltagar		2	
06	Tarwat	Peltophorumpterocarpum	5	
07	Kadu limb	Azadirachtaindica	5	
08	Babhul	Vachellianilotica	2	
09	Aapta	Bauhinia racemosa	1	

10	Karanj	Millettiapinnata	1
11	Hirda	Terminaliachebula	2
12	Mahogany	swieteniamahagoni	2
13	BhediVruksha	Thespesiapopulnia	2
14	Arjun	Terminaliaarjuna	1
15	English Chich	Pithecellobiumdulce	2
16	Chinch	Tamarindusindica	2
17	Badam	Prunusdulcis	5

Annexure No1.

Solid waste collection bins



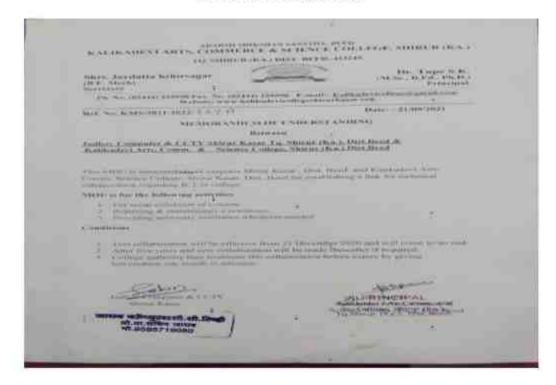


Solid waste disposal to municipal corporation vehicle





E-waste management



Mainataincnace & cleaning work of water storage tanks







Annexure 2

Vermicomposting Pit



Annexure 3

Tree Plantation









Importance of water conservation: Rain water harvesting





Environment awareness slogans



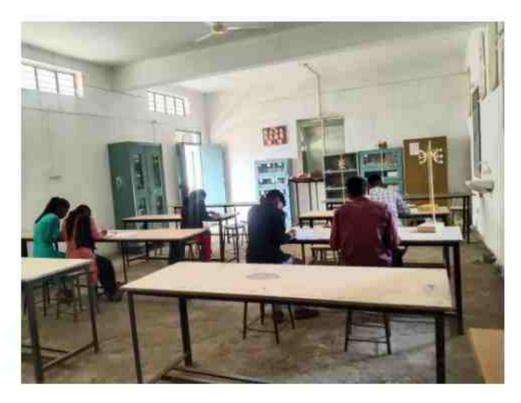




Ventillated Classrooms



Well maintained Laboratories



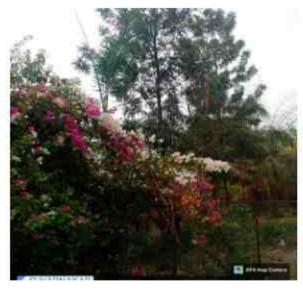
Well maintained computer lab



Annexure 4
Greenery within Campus







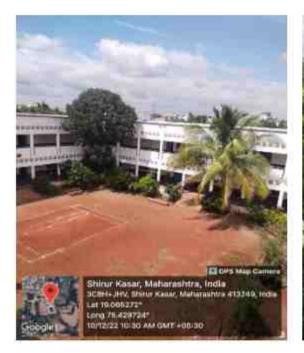




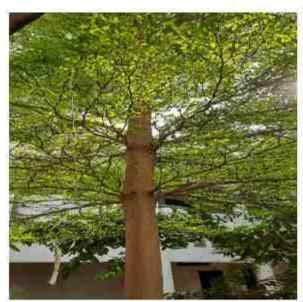


















Shirur Kasar, Maharashtra, India Prete Kentris, Musika asili Shira









Parking Slot



Audit Participants

On behalf of Institute:

Name	Position/Department	
Dr. Dr. Gholap P. N.	Principal, Kalikadevi Arts, Commerce and Science College, Shiru Kasar	
Dr. Tupe S. K	Asst. Professor	
Dr. Sawate S. R.	Asso. Professor	
Dr. Lomte S. B.	Asst. Professor	
Mr. Vitthal Tupe	os	

On behalf of Aditya Envirotech:

sition	Qualification	
ad Auditor	M.Sc. (Environment Science),	
	Lead Auditor ISO 14001:2015,	
- Auditor	M.Sc. (Environment),	
	nd Auditor	ad Auditor M.Sc. (Environment Science), Lead Auditor ISO 14001:2015,



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