

Maharashtra Udayagiri Mahavidyalaya Udgir .  
IQAC-Internal Quality Assurance Cell

Assessment Period 2015- 2021  
PART A) FILE SUMMARY SHEET

Name of the File : Green Audit Report ..... IQAC Ref No.....

Name of the In charge Teacher: A.P. R.K. Narikhe .....

Summary of the File: This file contains:

SR	INDEX	PAGE NO
1	Introduction, profile of college	05
2	Objective and methodology adopted	7, 13
3	Observations and Recommendations	14
4	Water Conservation facilities	29
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PART B) SCRUTINY/ VERIFICATION REPORT

- Scrutiny Step I- Authentic Data(5yrs / Current year) with tagging completed-  Yes/ No
- Scrutiny Step II- Supporting documents are enclosed-  Yes/ No
- Scrutiny Step III- Soft copy of the file emailed to iqacnaac21@gmail.com-  Yes/ No
- Scrutiny Step IV- This file is satisfactorily completed-  Yes/ No

Remark: .....

Sahitya  
Sign of the IQAC Member

[Signature]  
Signature and Stamp of the Principal  
M U MAHAVIDYALAY,  
UDGIR (413517)



Maharashtra Education Society's  
**Maharashtra Udayagiri Mahavidyalaya, Udgir**

PIN - 413517 Dist.Latur (Maharashtra)  
(Arts, Science & Commerce)

Affiliated to Swami Ramanand Teerth Marathwada University, Nanded  
NAAC Re-accredited 'A' Grade

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Ref. No.: GREEN/AUDIT/2020-21/ 806

Date: 16.07.2021

To,  
Hon. Dr. Prakash Yerme Sir,  
Environmentalist,  
Udgir.

Respected Sir,

It is my pleasure to offer you Chairmanship for our Mahavidyalaya's Environmental Audit report. We are looking forward in working with you. We believe in huge experience of yours in the field of environmental protection which will give us proper guidance and enlighten our knowledge. So please accept it and oblige.

Thanking you,

Yours faithfully

Ic. Principal

# GREEN AUDIT REPORT

2015-16 TO 2019-20

- ❖ ENVIRONMENT AUDIT,
- ❖ ENERGY AUDIT
- ❖ GREEN AUDIT



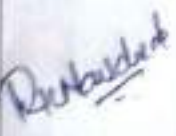


**MAHARASHTRA UDAYAGIRI MAHAVIDYALAYA,  
UDGIR DIST. LATUR, MAHARASHTRA, INDIA**

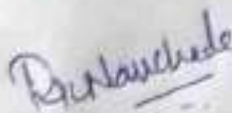


Arial view of college campus

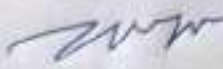
### Environmental Audit Committee

01.	Shri.Prakash Yerne (Chairman)	Environmental Scientist	Chairman	Signature 
01	Asst.Prof. Dr.Patwari J.M.	Head, Department of Environmental Science, Maharashtra Udayagiri, Mahavidyalaya, U dgir, Dist.latur	Member	
02	Asst.Prof. Dr.R.K.Narkhede	Department of Environmental Science, Maharashtra Udayag iri, Mahavidyalaya, Udgir, Dist.latur	Member	

The Green Audit committee conducted the Environment, Green, Energy Audit to examine how and what institutional practices are eco-friendly and sustainable.



In-charge



Head



In-charge Principal  
M U MAHAVIDYALAY,  
UDGIR (413517)

Green Audit

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## 1. Introduction: -

Green Audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of environmental diversity. The 'Green Audit' aims to analyze environmental practices within and outside the College campus, which will have an impact on the eco-friendly ambience. It was initiated with the purpose of inspecting the work conducted within the Organizations whose exercises can cause risk to the health of inhabitants and the environment. With this, one gets a direction as how to improve the status of environment.

Green audit is assigned to the criteria 7 of the Self Study Report of be submitted to the National Assessment and Accreditation Council which is a self-governing organization of India.

**Profile of the college:** -Maharashtra Education Society's Maharashtra Udayagiri Mahavidyalaya, Udgir was established in 1962 with the objective of imparting quality education to students. It is affiliated to the Swami Ramanand Teerth Marathwada University, Nanded and offers various Under Graduate and Post Graduate courses. In a short span, the College has achieved laurels in academic as well as extracurricular activities.

The College has been successful in keeping pace with the changing educational scenario by introducing new career-oriented courses every year. It has firmly established itself as 'Modern' and 'Progressive'. The college has highly qualified and experienced teaching staff, who consistently strive for the all-round development of the students. The college has received Best College award by Swami Ramanand Teerth Marathwada University, Nanded for the year 2012-13.

- **Salient Features:**

- \* Affiliated to Swami Ramanand Teerth Marathwada University, Nanded.
- \* Accredited by NAAC with 'A' Grade.
- \* Well qualified and experienced faculty.
- \* Healthy and academic environment.
- \* Well equipped Laboratories with internet connectivity.
- \* Digital library facility and internet.
- \* Gymnasium for staff and students.
- \* Well equipped administrative office for convenience of students.
- \* Spacious and well equipped audio-visual hall.
- \* Beautiful green campus with well developed Botanical Garden.
- \* Canteen facility.
- \* Spacious parking, playground and facility for indoor games.
- \* Adequate sports facilities.
- \* Cultural activities, discussions, in-house interactions, industrial visits, training and presentations.
- \* High-Tech computer laboratory with latest computers, latest hardware and software.
- \* College magazine 'Uday' a platform for students to express their innovativeness and creativity
- \* State / National level seminars / workshops / Conferences for continuous academic development.

### **Mission of the College:**

To offer meaningful, purposeful and useful education to enhance human potentialities for the development of the self and society.



### Goals and Objectives:

- To spread quality education in general and to impart instruction in any branch of knowledge, wherever and whenever feasible to the socially and economically backward students belonging to rural areas.
- To implement and instruct different educational plans undertaken by the Government which are relevant to the regional and national needs.
- To introduce job oriented, career oriented and need based courses as and when the situation demands.
- To create awareness among students about the existing socio-economic problems of the country.

### Objectives of the study: -

The main objective of the Environmental Audit is to promote the Environmental Management and Conservation in the College Campus. The purpose of the audit is to identify, quantify, describe and prioritize framework of Environment and the sustainability in compliance with the applicable regulations, policies and standards. This Audit Scheme is divided into three parts as Green Audit and Energy audit.

#### Total Campus Area and college Building spread Area

Sr. No.	Campus area	34.59 Acres
01	Built up area	2.76 Acres
02	Playground area	12.50 Acres

### Campus Infrastructure

Sr. No.	Facilities
1	Class rooms
2	Laboratories- including language lab
3	Seminar Halls
4	CCTV monitored in the Principal's office and the library ensures discipline and Security of resources.
5	Information display and notification
6	D-space Digital Repository Library; computer with internet facility
7	Canteen
8	Basket Ball & Volleyball Court
9	Gymnasium
10	Sports Complex (Table Tennis Board, Chess board, Caroms, Badminton Court)
11	Library
12	Hostel for Students
13	Smart Class

#### Scope and goals of Green Auditing

A clean and healthy environment aids effective learning and provides a conducive learning environment. There are various efforts around the world to address environmental education issues. Green auditing is one among them for educational institutions. Once a baseline is established, the data can serve as a point of departure for further action in campus greening. Existing data will allow the college to compare its programs and operations with those of peer institutions, identify areas in need of improvement, and prioritize the implementation of future projects. This data will also provide a basis for calculating the economic benefits

of resource conservation projects, by establishing the *current rates of resource use* and their associated costs. This audit initiative focused initially on educating colleges and universities through workshops, guidebooks, fact sheets and ensuring compliance through inspections and self-audits.

A very simple indigenized system has been devised to monitor the environmental performance of Maharashtra UdayagiriMahavidyaaya Udgir. It comes with a series of questions to be answered on a regular basis. This innovative scheme is user-friendly and totally voluntary. The aim of this is to help the institution to set environmental examples for the community, and to educate the young learners.

### **2.3 Benefits of the Green Auditing**

- ✓ More efficient resource management
- ✓ To create a green campus
- ✓ To enable waste management through reduction of waste generation, solid-waste and water recycling
- ✓ To create plastic free campus and evolve health consciousness among the stakeholders
- ✓ To provide a basis for improved sustainability
- ✓ Impart environmental education through systematic environmental management approach and improving environmental standards  
Benchmarking for environmental protection initiatives
- ✓ To provide a basis for improved sustainability
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Benchmarking for environmental protection initiatives  
Financial savings through a reduction in resource use
- ✓ Curriculum enrichment through practical experience

- ✓ Development of ownership, personal and social responsibility for the College and its environment
- ✓ Enhancement of college profile

Developing an environmental ethic and value systems in young people

### 1. **Target Areas of Green Auditing**

#### ➤ **Auditing for Water Management**

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

#### ➤ **Auditing for Energy Management**

This indicator addresses energy consumption, energy sources, energy monitoring, lighting, appliances, and vehicles. Energy use is clearly an important aspect of campus sustainability and thus requires no explanation for its inclusion in the assessment.

#### ➤ **Auditing for Waste Management**

This indicator addresses waste production and disposal, plastic waste, paper waste, food waste, and recycling. Municipal solid waste has a number of adverse environmental impacts, most of which are well known and not in need of elaboration. Solid waste can be divided into two categories: general waste and hazardous waste. General waste includes what is usually thrown away in homes and schools such as paper, plastics tins and glass bottles. Hazardous waste is waste that is likely to be a threat to one's health or the environment like cleaning chemicals and petrol.

Unscientific landfills may contain harmful contaminants that leach into soil and water supplies, and produce greenhouse gases contributing to global

climate change. Furthermore, solid waste often includes wasted material resources that could otherwise be channeled into better service through recycling, repair, and reuse. Thus, the minimization of solid waste is essential for a sustainable college.

➤ **Hazardous materials**

This indicator addresses hazardous wastes of laboratories, medical waste, art supplies, and chemicals (paints, cleaning materials etc.) used in campus maintenance. Hazardous materials represent significant risks to human health and ecological integrity. Hazardous wastes are also leached out through the e-waste generated in the campus. They often persist in the environment leaving a legacy of land and water contamination for generations. They also accumulate in the tissues of organisms and become concentrated within food chains, leading to cancer, endocrine disruption, birth defects, and other tragedies. The minimization, safe handling, and ultimate elimination of these materials are essential to the long-term health of the planet.

➤ **Auditing for Green Campus Management**

All plant and animal species - including humans - are linked together in a complex web of life; we depend upon biodiversity for our survival. Biodiversity is the key to healthy ecosystems and ultimately a healthy planet. It keeps the air and water clean, regulates our climate and provides us food, shelter, clothing, medicine and other useful products. Each part within this complex web diminishes a little when one part weakens or disappears. The trees work hard to keep the air we breathe clean and healthy. They are like sponges. Their leaves take in much of the poisonous unwanted carbon dioxide in the air, and replace it with the oxygen we need for healthy living. This system of absorbing gases on which all plants rely for their food is

called photosynthesis. In this process, the plants with the help of sunlight, water, minerals and the green material called Chlorophyll within the leaves change the carbon-dioxide into food for themselves. When doing this they release oxygen into the air which is vital for all life on earth. At night when there is no sunlight the plant no longer makes food, so it does not release the same amount of oxygen. One is often told not to sleep with plants in one's room, as they will use up all the oxygen. However, at night although photosynthesis does take place the plants also rest, so that little oxygen is absorbed from the air and very little harm can be done to the sleeper.

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

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

Trees give us food, and juice to drink. Ropes, medicines, wood, paper, and so many other things we use in our daily life, or which are necessary for our health, are made from trees.

### ➤ Auditing for carbon footprint

How we get around and commute to and from college each day has an impact on the environment through the emission of greenhouse gases into the atmosphere by the burning of fossil fuels (such as petrol). The most common greenhouse gases are carbon dioxide, water vapour, methane, nitrous oxide and ozone. Of all the greenhouse gases, carbon dioxide is the most prominent greenhouse gas, comprising 402 ppm of the Earth's atmosphere. The release of carbon dioxide gas into the Earth's atmosphere through human activities is commonly known as carbon emissions.

An important aspect of doing an audit is to be able to measure our impact so that we can determine better ways to manage the impact.

### 3. Methodology: -

In order to perform Environmental audit, the methodology included different tools such as physical inspection of the Campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. The study covered the following areas to summarize the present status of environment management in the campus:

- Water use and its management
- Energy Conservation
- Waste management
- E-waste management
- Green area management

## **4. Observations and Recommendations: -**

### **4.1. Water Use**

This indicator addresses water sources and consumption, like domestic use, drinking purpose, irrigation, Gardening, appliances and fixtures. A water audit is an on-site survey and assessment to determine the water use and hence improving the efficiency of its use.

#### **Observations:**

The source of water is from underground water source as open well and bore wells, there are two bore wells and one open well in the campus. Water from these wells is used for drinking purpose, canteen, toilets, and gardening. During the survey, no loss of water is observed neither by any leakage, nor by overflow of water from overhead tanks. The data collected from all the departments is examined and verified. On an average the total use of water in the College is 10000 liters/day for domestic use, 6000 liters /day for gardening in the garden drip irrigation system is applied so the loss of water is prevented and 2000 liters for other purpose and 2000 liters/day for different laboratories.

Rainwater harvesting unit is functional for storing and reuse. Staff and students are instructed not to waste water unnecessarily.

#### **RainWater Harvesting**

**Goal: Encourage efficient water usage.**

#### **Benchmark:**

- Water use does not exceed **02 to 05** liter per day/ person in campus.
- The campus facilities department provides information to campus users about water use in ways that raise awareness and facilitate action.



**Performance:**

The most important part of the rain water harvesting is the storage system. The storage system is designed according to the amount of water that is to be stored. The design and site (location) of the storage or the recharge system should be properly chosen. The areas which receive the rainfall frequently, there a simple storage system could be constructed, to meet the daily water requirements. Otherwise the areas which receive the lesser rainfall, there the storage systems are quite essential.

Rainwater harvesting first of all increases water security. It is the perfect solution to meet water requirements especially in the areas which do not have sufficient water resources. It helps in improving the quality of the ground water and increasing the level of the ground water. It reduces the loss of top layer of the soil. If we capture the water directly, we need not to depend much on the water storage dams. It is the good solution to the increasing water crises. The use of water in campus is within the 02 to 05 liter per day/ person.

The institution has enacted the projects of roof water harvesting. The project of roof water harvesting is in operation. Rain water which precipitates on roof is collected and filtered through pipes and released in Tubewell. Roof water harvesting is observed beneficial to conserve the wastage of water and it also recharge bore water (ground water level) This practice is unique and it is model for the society. College will get advantage of this practice in future.

Through this rain water harvesting project generally college can collect rain water annually are: **102637** gallons annually (The annual precipitation in Udgir is 700 to 900 mm following calculations are based on 100% precipitation)

**Detailed calculations of RWH are given below:**

A = (catchment area of building) (Where Roof water harvesting is done)  
 = 560 sq. mt.

R = (inches of rain) (Annual rain fall in area a) = 700 to 900 mm

G = (total amount of collected rainwater)

$G = (A) \times (R) \times (600 \text{ gallons}) / 1000$

$G = 560 \times 35.5 \times 600 / 1000$

**G = 11928 gallons**

**Total requirement of water per day in campus are given below:**

Academic year	Consumption of water / day for drinking and sanitation	Consumption of water /day for gardening	Total consumption /day	Total annual Average usage of water
2014-15	10000 liters	5000 liters	15,000 liters	713265 Gallons

**Details of storage of water in campus:**

**No of water tank (Synthetic) : 15 (10000 lits)**

**Check dam construction**

One check dam adjacent to the boundary of campus constructed. Water flowing out is checked at these check dams. Water level in open wells and bore wells of campus are maintained due to these check dam.

A = (catchment area of Check Dam) (Where Roof water harvesting is done)  
 = 140 sq. mt.

R = (inches of rain) (Annual rain fall in area a) = 700 to 900 mm

G = (total amount of collected rainwater)

$G = (A) \times (R) \times (600 \text{ gallons}) / 1000$

$G = 140 \times 35.5 \times 600 / 1000$

**G = 2982 gallons**

Total annual water consumption is near about 713265 Gallons and we annually conserve water near about 14910 Gallons.



**Recommendations:**

- Rainwater harvesting should be done on each building.
- Need of monitoring to leakages in Taps, Pipes and storage tanks.

## 4.2 Energy Use and Conservation



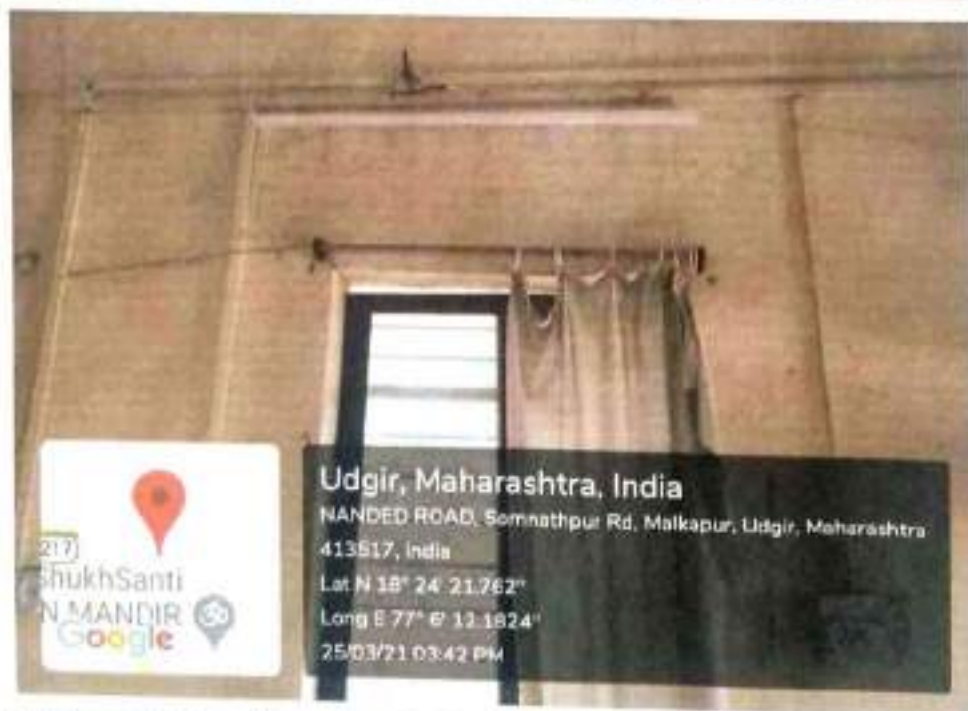
### Biogas Plant



### Sensor based Energy conservation photo



## Use of LED Bulbs photo



LED Bulbs and Tubes Placed in the Halls

This indicator looks forward for energy sources, consumption, monitoring.

## **Observation**

Energy source utilized by the administrative office, departments and classrooms is electricity only. College is situated at the outskirts region of the city, which keeps the area healthy and having less pollution. The building is formed in such a way that all the time natural sunlight and aeration is available to all the laboratories, class rooms, administrative office and library. The college is very careful about the environment, so that taken an initiative towards the eco-friendly renewable energy source that is solar energy by installing solar unit in the campus.

### **01)Energy Utilization**

**Goal: Efficient Energy use**

#### **Benchmark:**

- Total consumption of energy for college office, Laboratories, Library, and Playground etc. does not Exceed **10000** Unit per month.

#### **Performance:**

The college has employed several measures to save energy including;

- The use of electricity CFL lamps in the college office, class rooms and laboratories
- Computers and instruments when not in use are switched off.
- Electricity wastage is controlled through central double switch system one at centre board

(Nearby office) and another in hall, laboratories so the lights and fans can be switched off timely on each wing and floor.

- By using stickers of switch off power. These initiatives had helped to reduce the overall energy consumption in campus. Staff and students were motivated towards energy conservation. Generator is also used as alternative source in emergency only.

Details of Electrical particulars working in the campus

S.No.	Name of Particulars	Total No
01	Total No. of Electrical fans	183
02	Exhaust fans	15
03	Air Conditioner	02
04	Total No. of Tubes	128
05	Total No. of LED lamps	10
06	Refrigerator	09
07	Total No. of CFL lamps	40
08	Total No. of Sockets	550
09	Water Motor	01 HP x 01-03 02 HP x 01-04
10	Water Cooler	04
11	No. of Computer	210
12	Printers	20
13	Xerox Machine	02
14	Scanner	01
15.	Computers	87
16	Mercury lamp	01
17	Sodium lamp	01
18	He-Ne Laser	01
19	Diodes	01
20	Ballastic Galvanometer	01
21	Electric heater	01
22	Oscillator	01
21	Sonometer	01
22	Potentiometer	01
23	Dimmer	01
24	Thomson tube	01
25	High volume air sampler	01
26	UV Double beam spectrophotometer	01
27	Hot plate	01
28	Heating Mantle	01
29	Muffle furnace	01
30	pH meter	07
31	Incubator	02



32	Hot air oven	01
33	Laminar air flow	01
34	Turbidimeter	01
35	Shaker	01
36	Digital balance	02
37	Centrifuge	01
38	Heating mantle	01
39	Potentiometer	01
40	Magnetic stirrer	01
41	Spectrophotometer	01

The average consumption of electricity was 29016 except in the year 2020 it was 66243 units the average monthly energy consumption was 7938 units and by using eco-friendly techniques it is reduced to significant level.

**Recommendations:**

The College should improve its monitoring cell to save the energy. Every staff member should take care of it to minimize the use of energy by any means and also continuous alert to student about saving the energy.

**2) Indicator: Use of Renewable Energy**

**Goal: Encourage purchasing and/or production of renewable energy.**

**Benchmark:**

- A percentage of energy purchased and/or produced from renewable sources i.e. solar power.
- Future plans for setting and attaining a higher percentage.

**Performance:**

Adoption of solar energy under renewable energy was the best course of action in the existing circumstances. Solar technologies are broadly characterized as passive or active solar technologies depending on the way these equipments capture, convert and distribute solar energy. Active solar techniques include the use of photovoltaic panels and solar thermal collectors to harness the energy.

Passive solar techniques include orienting a building to the Sun, selecting materials with favorable thermal mass or light dispersing properties, and designing spaces that naturally circulate air. The identification of renewable, sustainable and affordable energy sources has led to the installation of 'Solar Park' with 30 percent subsidy from the Government. Solar energy is one of the sources for lights, fans, heaters used in the college.

Minimal consumption of energy is the saving factor of energy conservation in the campus. College has planned to use non-conventional sources of energy in the campus to save the use of conventional sources of energy i.e., reduction in electricity. It also gives the imperative message of how the non-conventional sources of energy are useful to the society by using Solar Power Lamps in the campus. Institute has installed solar water heater in the ladies hostel.

We are planning to use solar energy in the college campus. The stickers are placed for preventing wastage of energy.

**Recommendations:**

- Use of renewable energy for total campus.
- Solar motor pump must be used for garden irrigation
- Avoid wastage of energy.
- Use of more sensor-based energy lamps
- As the campus is huge try to generate own source of energy source through solar energy park.

## Facilities for alternate sources of Energy



### Solar Energy Unit located on Women's Hostel Roof

In science departments all equipment's and other electric facilities are shut down after occupancy time which is one of the green practices for energy conservation.

**Recommendation:** All the electricity consuming equipment's like fans, tubes and bulbs should be replaced by New Energy conservation technologies.

### 4.3 Wasterecycling system:

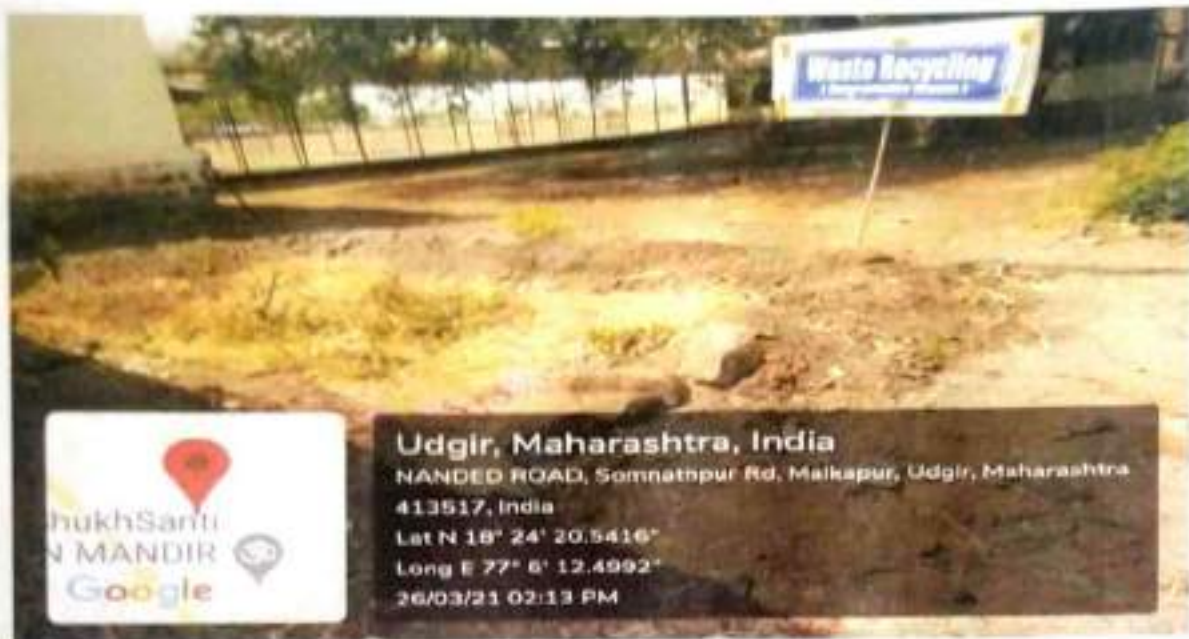


This indicator addresses waste production and its disposal.

**Solid waste:** It means any garbage, refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded materials including solid, liquid, semi-solid, or contained gaseous material, resulting from industrial, commercial, mining and agricultural operations,

Observation: In the College the waste generated is in the form of paper waste, glass waste, and plastic waste almost all the waste is non-biodegradable. Udgir Municipal Corporation had a solid waste management system. The waste is sent to the 'Municipal corporation solid waste management plant' for further processing.

## Waste Recycling system:

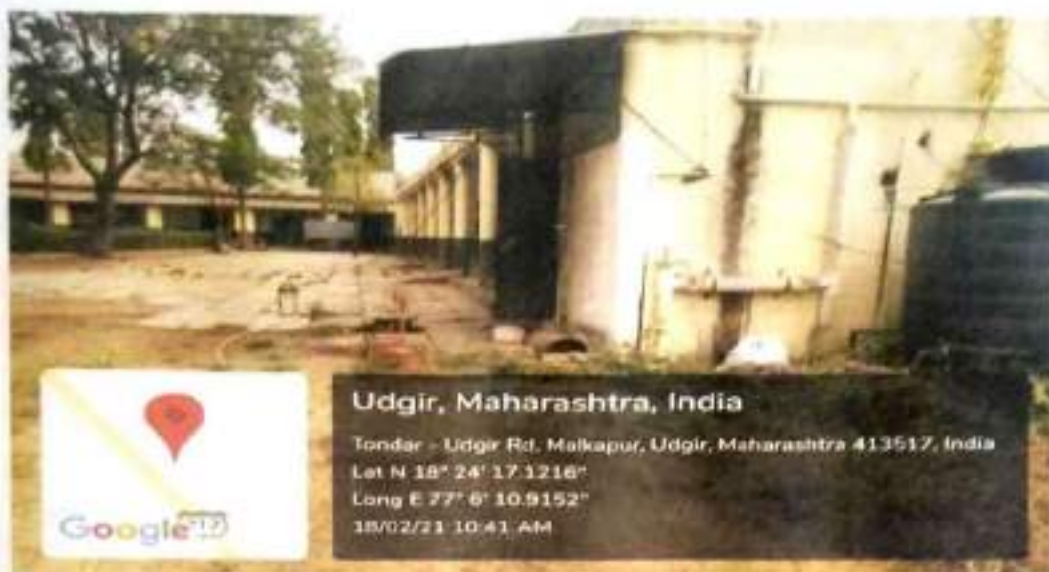


The Institute has major contribution of organic waste in the form of leaf foliage. This is treated by using the pit method. And this fully decomposed material is used as manure in the garden. Some partially decomposed material

### Liquid waste:

The major sources of generating waste water are wash basins, toilets and science laboratories. Waste water coming from Water purification unit is used for a Borewell recharge. The waste from science laboratories is disposed properly. Waste Recycling System for water, water from water purification unit is used for

gardening.



**Bio Medical waste Management:** Biomedical waste is the waste which is generated through surgeries, medical dressings, waste of syringes, hand gloves, operated organs and first aid. In the college First aid is available but the waste from it is generated it is negligible.

#### 4.4 E- waste

##### Observation:

E-waste is any electrical or electronic equipment that's been discarded. This includes working and broken items that are thrown in the garbage in the campus whatever e waste is generated in the form of computers, CD, and printers and other equipment's are sorted properly and sold as scrap to local vendor.

##### **Hazardous chemicals and radioactive waste:**

**Hazardous chemicals and radioactive waste:** Hazardous materials are substances that could harm human health or the environment. Hazardous means dangerous, in the campus only chemistry lab has the output of hazardous waste in the form of mixed chemical waste. But this is also

very less. The solution for pollution is the dilution, so the waste from this laboratory is initially diluted and disposed of.

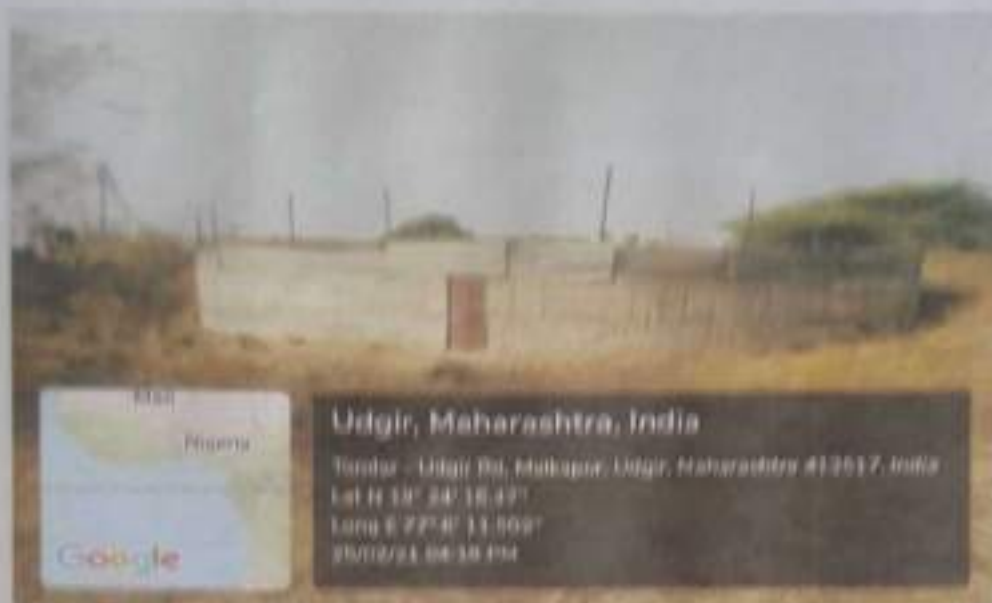
Memorandum of Understanding has been done for the these facilities of Institution School of Earth Science's, Swami Ramanand Teerth Marathwada University, Nanded, Sardar Vallabhbhai Patel College, Chandrapur and Recently with Maharashtra Pollution Control Board, Government of Maharashtra.

Solution for the pollution is dilution whatever chemical waste is coming out from the laboratories is diluted for more than 100 times and then discharged.

### Water Conservation Facilities



Rain water Harvesting



**Udgir, Maharashtra, India**

Tindur - Udgir Rd, Malkapur, Udgir, Maharashtra 412617, India  
Lat N 18° 24' 18.47"  
Long E 77° 8' 11.899"  
25/02/21 04:38 PM

Open well Recharge

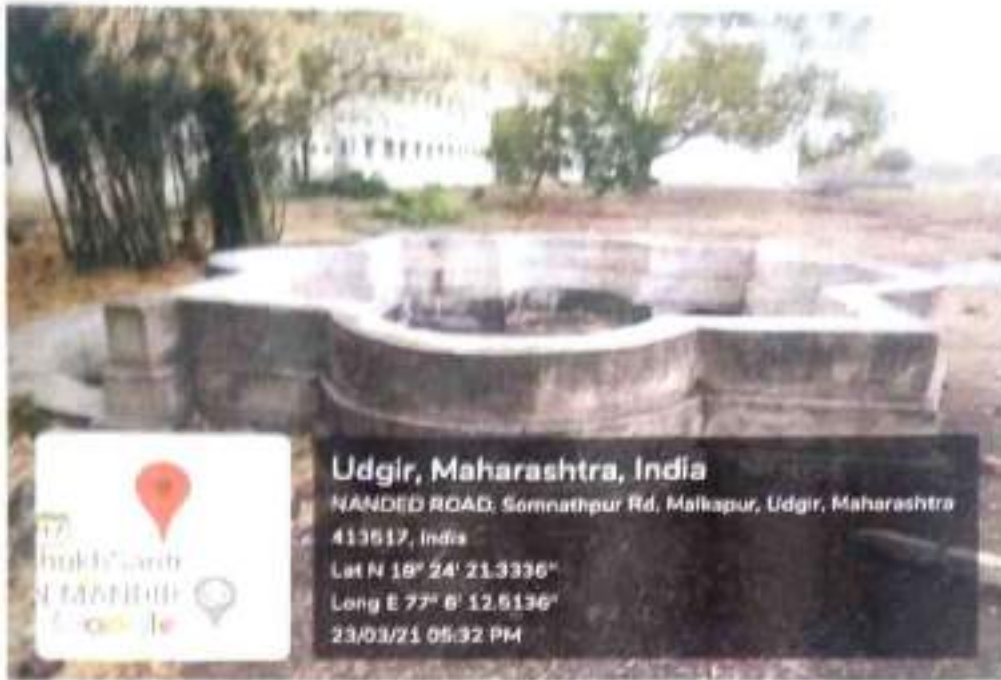


**Udgir, Maharashtra, India**

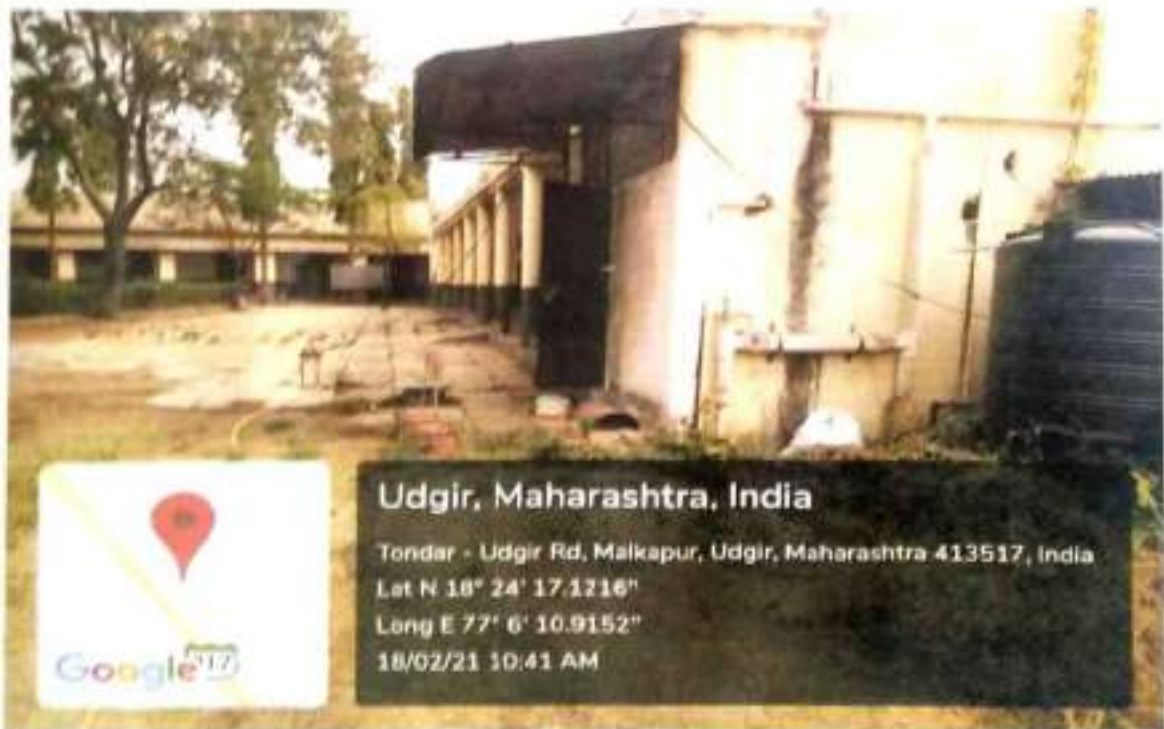
Bamnathpur Rd, Udgir, Maharashtra 412617, India  
Lat N 18° 24' 30.7044"  
Long E 77° 8' 11.4444"  
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Open well Recharge





Tank

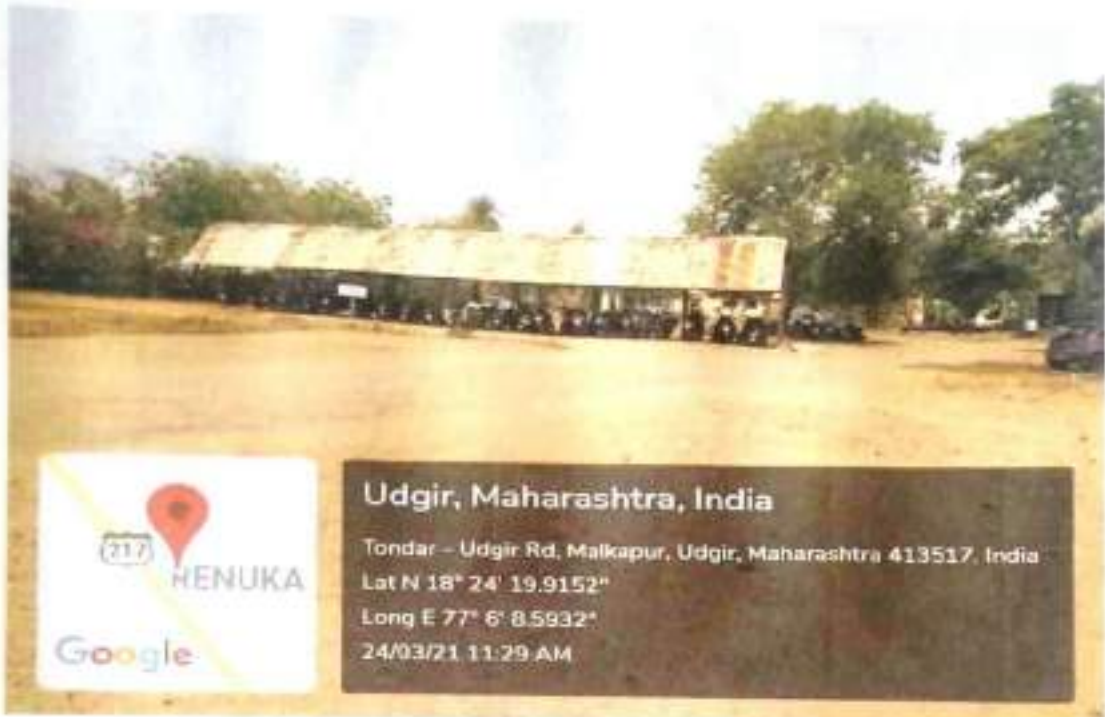


Waste water recycling from RO Drinking water Unit

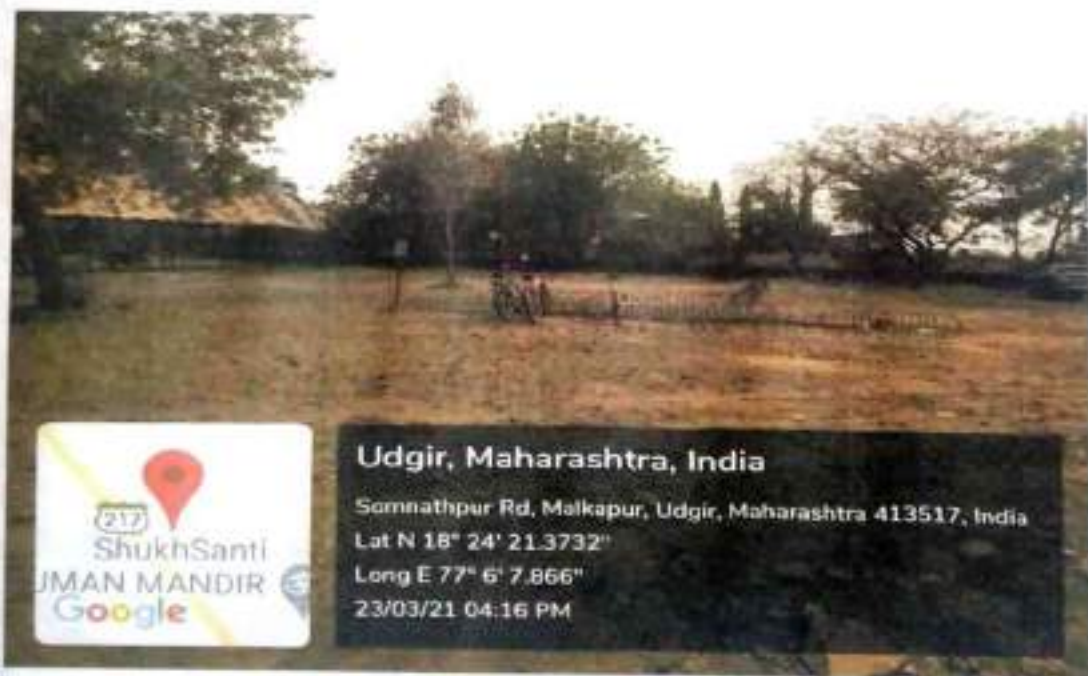


Distribution system of water in the campus.

## Green Campus Initiatives



Beyond this area the entry of Automobiles is restricted in the campus



Use of Bicycles



Pedestrian Friendly Pathway



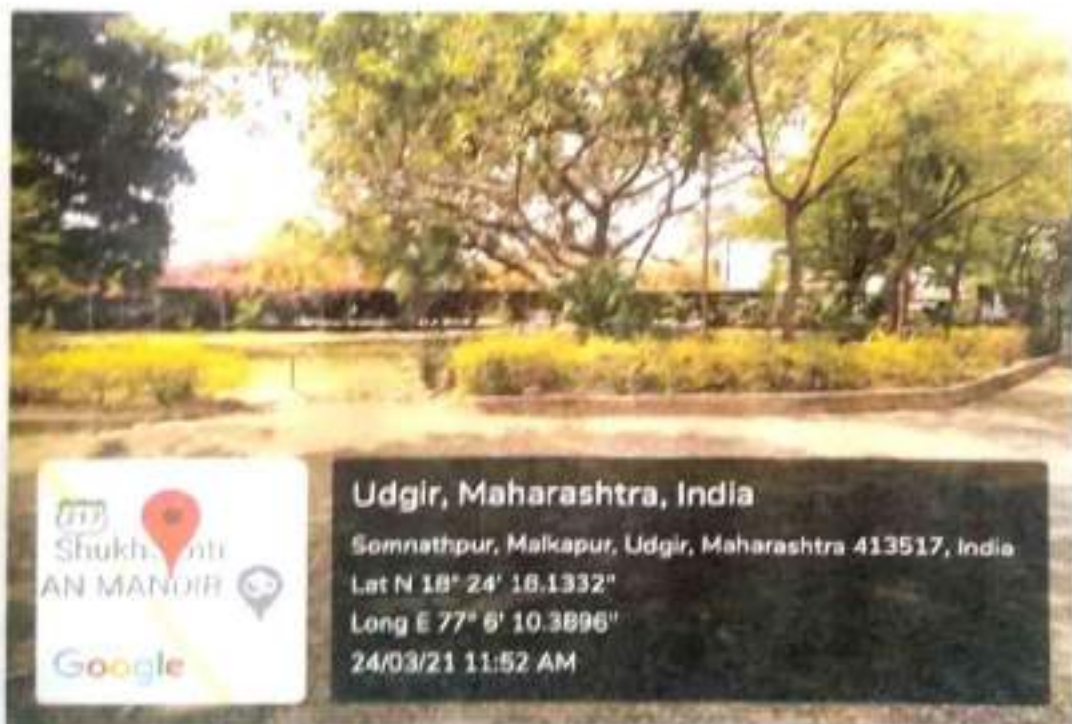
Campus made plastic free by making ban on Use of plastic

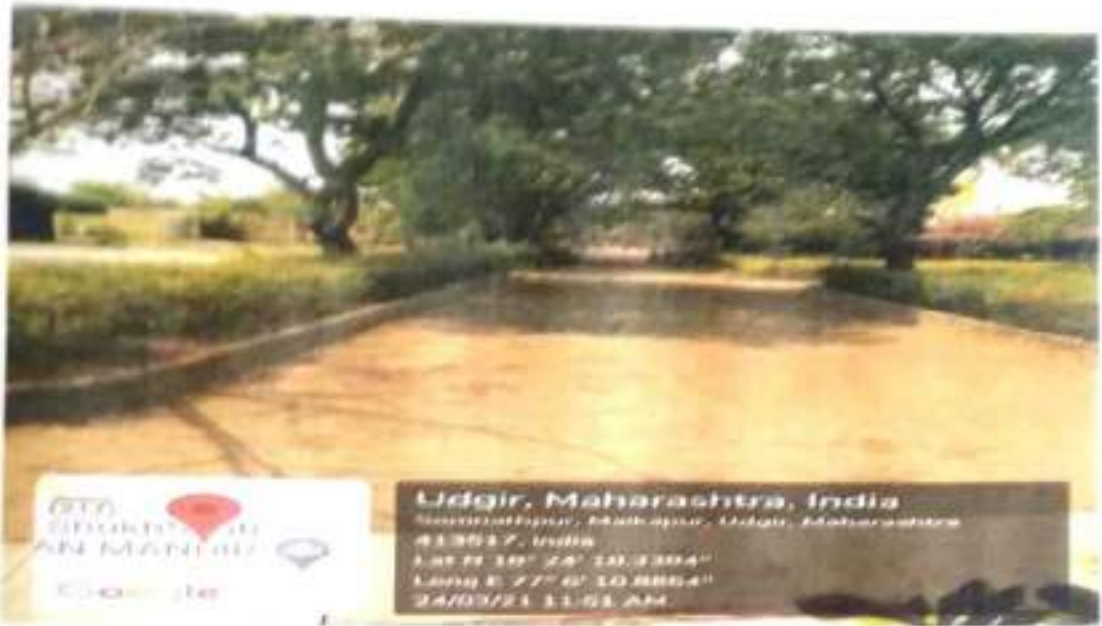


Landscaping with trees

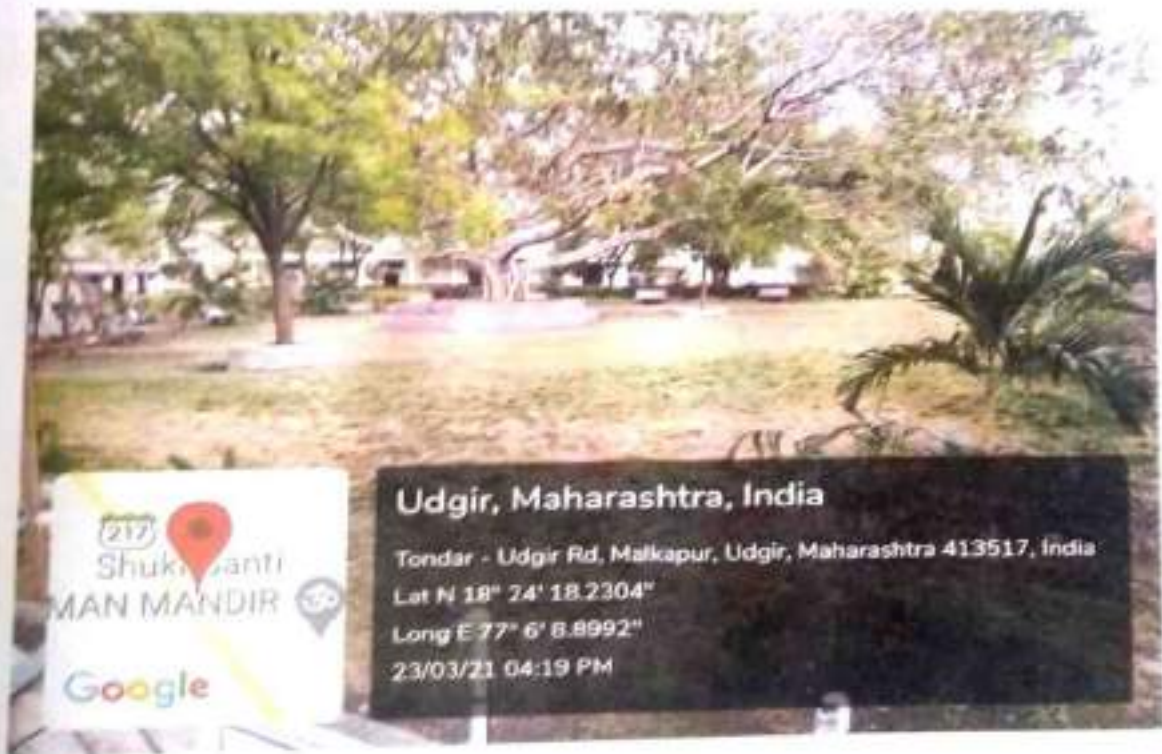


Landscaping with trees

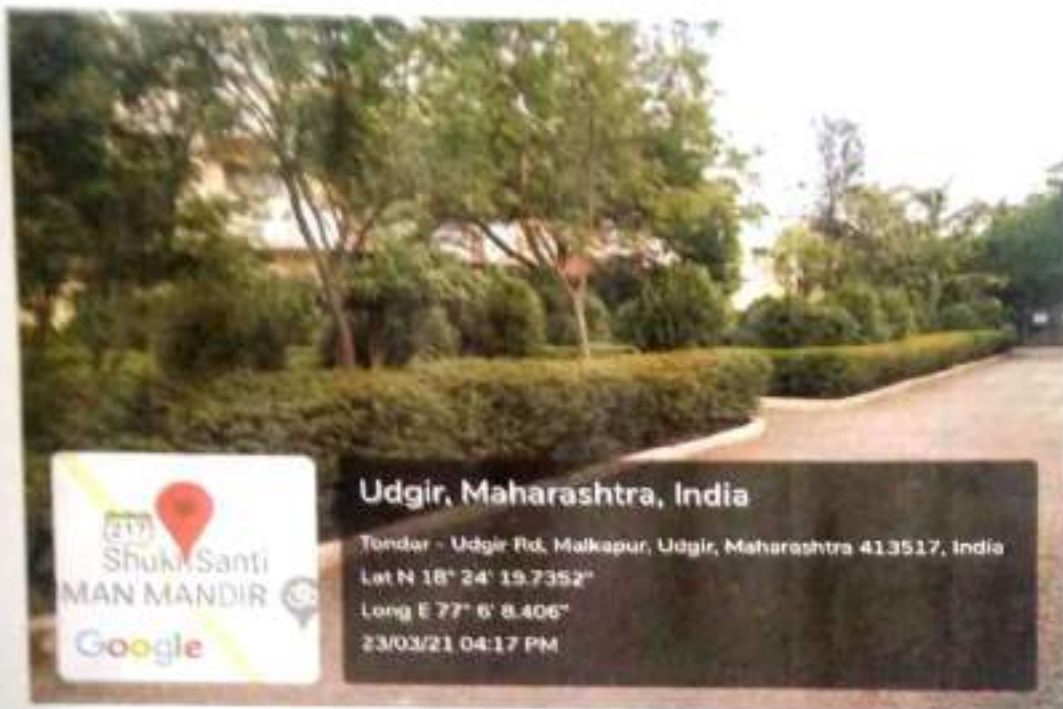




Landscaping with trees



Landscaping with trees



Landscaping with trees

**4.5. Greenarea:** The total area of campus is 37 acres. In the campus there is very good vegetation cover as we enter the college campus there is direct feeling that we are entering in the green zone. Around 843 well grown plants of different species are found in the campus along with a Botanical Garden Sponsored by Ministry of Environment and Climate change, Government of India. Under the Principal Investigator ship of Dr.J.M.Patwari, Head Department of Environmental Science.



## Observation

List of plants present in the campus

Sr. No.	Botanical Name	Family
1	<i>Sarcocausaca Roxburghii</i>	Caesalpiniaceae
2	<i>Artocarpus hirsutus</i>	Moraceae
3	<i>Vatica chinensis</i>	Dipterocarpaceae
4	<i>Ligustrum perrottetii</i>	Oleaceae
5	<i>Ardisia odoratissima</i>	Annonaceae
6	<i>Polyalthia fragrans</i>	Annonaceae
7	<i>Trachycarpus</i>	Arecaceae
8	<i>Parkia roxburghii</i>	Mimosaceae
9	<i>Dyopsis decaryi</i>	Arecaceae
10	<i>Dyopsis lutescens</i>	Arecaceae
11	<i>Pritchardia pacifica</i>	Arecaceae
12	<i>Elaeocarpus grandiflorus</i>	Elaeocarpaceae
13	<i>Wodyetia bifurcata</i>	Arecaceae
14	<i>Areca triandra</i>	Arecaceae
15	<i>Carpentaria acuminata</i>	Arecaceae
16	<i>Adonidia</i>	Arecaceae
17	<i>Careya arborea</i>	Lecythidaceae
18	<i>Coccothrinax argentea</i>	Arecaceae
19	<i>Heterophragma quadrangulare</i>	Bignoniaceae
20	<i>Vallaris glabra</i>	Apocynaceae
21	<i>Salacia chinensis</i>	Celastraceae
22	<i>Dysoxylum bicuriferum</i>	Meliaceae
23	<i>Olea dioica</i>	Oleaceae
24	<i>Pterospermum acerifolium</i>	Sterculiaceae
25	<i>Holigarna arnottiana</i>	Anacardiaceae
26	<i>Amorurohituka</i>	Meliaceae
27	<i>Flacourtia montana</i>	Salicaceae
28	<i>Uvaria</i>	Annonaceae
29	<i>Morinda citrifolia</i>	Rubiaceae
30	<i>Garcinia talbotii</i>	Clusiaceae
31	<i>Mimusops elengi</i>	Sapotaceae
32	<i>Nothopegia castaneifolia</i>	Anacardiaceae
33	<i>Madhuca longifolia</i>	Sapotaceae
34	<i>Garcinia xanthochymus</i>	Clusiaceae
35	<i>Abutilon ranadei</i>	Malvaceae
36	<i>Calophyllum inophyllum</i>	Calophyllaceae
37	<i>Parkia roxburghii</i>	Mimosaceae
38	<i>Glycosmis pentaphylla</i>	Rutaceae
39	<i>Strychnos</i>	Loganiaceae
40	<i>Putranjiva roxburghii</i>	Putranjivaceae
41	<i>Bombax malbaricum</i>	Bombaceae

42	<i>Erythrina Indica</i>	Fabaceae
43	<i>Dalbergia sissoo</i>	Fabaceae
44	<i>Pongamia glabra</i>	Papilionaceae
45	<i>Dalman regia</i>	Fabaceae
46	<i>Cassia siamea</i>	Caesalpinioideae
47	<i>Acacia mangium</i>	Mimosaceae
48	<i>Albizia lebbek</i>	Fabaceae
49	<i>Eucalyptus globules</i>	Myrtaceae
50	<i>Millettodina hortensis</i>	Bignoniaceae
51	<i>Spaethodina campanulata</i>	Bignoniaceae
52	<i>Jacaranda mimosa</i>	Bignoniaceae
53	<i>Tectona grandis</i>	Lamiaceae
54	<i>Embelica officinalis</i>	Euphorbiaceae
55	<i>Ficus religiosa</i>	Moraceae
56	<i>Casuarina equisetifolia</i>	Fabaceae
57	<i>Polyanthus longifolia</i>	Annonaceae
58	<i>Mimusops zelege</i>	Sapotaceae
59	<i>Hevea brasiliensis</i>	Euphorbiaceae
60	<i>Bambusa vulgaris</i>	Poaceae
61	<i>Zizyphus jujube</i>	Rhamnaceae
62	<i>Morus alba</i>	Moraceae
63	<i>Dombeya acutangula</i>	Sterculiaceae
64	<i>ecturnum. Muerraya exotica</i>	Citrus
65	<i>Cesalpinia pulcherina</i>	Fabaceae
66	<i>Calestemon lanceolatus</i>	Myrtaceae
67	<i>Mussaenda frondosa</i>	Rubiaceae
68	<i>Exora coccinea</i>	Rubiaceae
69	<i>Nerium indicum</i>	Apocynaceae
70	<i>Cestrum nocturnum</i>	Solanaceae
71		

The vegetation cover should be maintained.

## 5.0 Green practices: -

1. World ozone day was celebrated in the Deccan Urdu School Principal of the school was Chief Guest 165 participants were present.



Celebration of world ozone day in Deccan Urdu School



C2.Tree Plantation on World Environment Day 05.06.2016

- 3.Tree plantation outreach programme was organized on 01.07.2016, Chief guest was Dr. Ramprasad Lakhotiyafourty persons were benefited.

4.Environment awareness and cleanliness camp was organized by NSS at Jaybhaychiwadi on 17.12.2016, Chief guest was Mr. Santosh Raut BDO Panchayat Samiti, around 220 beneficiaries were present.

5.A lecture in staff academy was organized on Environment and water harvesting on 4.7.2016, Chief guest was Dr.J.M.patwari, Head, Department of Environmental science, MUM Udgir, 80 heires were present

6.Environment day and tree plantation was done on 5.06.2017, the Chief Guest was Dr.lakhadive R.M. Principal of MUM 95 participants were present.



7.Botanical Garden Inaugural Plantation by Hon'ble Dist. Collector G. Shrikant Latur Sponsored by MOEF and CC to Dr. J. M. Patwari Principal Investigator and Head Department of Environmental Science, in August 2017, 155 participants were present.



8.Plantation on world Environment Day-05.06.-2018 by In. Principal Dr.R.R.Tamboli, 50 participants were there.



9.Plantation for Environmental Awareness with NGO Rashtra Seva Dal in August 2018 75 participants were there.



10.Plantation for Environmental Awareness in the presence of Hon'ble Chairman Shri Basavrajji Patil Nagralkar and Secretary Hon'ble Ex.MLA and Prof.Manoharraoji Patwari of Maharashtra Education Society, Udgir, Dist. Latur, Maharashtra, in July 2019 52 participants were there.



11. Tree plantation was done with NSS and Sankalp school udgir in the campus on 26.07.2019, in the auspicious presence of Hon'ble Mr. Basavrajji Patil Nagarkar Chairman, ME society and Ex.MLA Prof. Manohar Patwari Secretary, ME Society, Udgir, 67 participants were there.

12. World ozone day was celebrated on 18.09. 2019 in the department of Environmental Science, chief guest was Prof. Awale S.V., 80 students participated.

13. On the occasion of world ozone day poster competition was organized by the department of Geography on 18.09.2019 in this 110 students participated chief Guest and Examiner was Dr. J.M. Patwari, Head Department of Environmental Science.



14.Celebration of World environment day 05.06.2020 and plantation by Hon'ble Sanjayji Bansode Minister for Environment (State) Maharashtra State.

#### **Other miscellaneous practices:**

1.Cleanliness drive was organized on 02.10.2015 in the presence of Commanding officer T. Sambhaiya of NCC 300 participants were there.

2.Cleanliness drive under Swachh Bharat Abhiyan was undertaken on 15.8.2016, 50 participants were present,

3.Cleaning of Udgir fort was done for overgrowth of plants in the fort on 03.09.2018 by NCC, 75 students participated.

4.Swachh Bharat Camp was organized by NSS camp at Yenki village 25.12.2018 to 1.01.2019, Chief guest was Ex.MLAProf.Manoharraoji Patwari, Secretary, M.E.Society Udgir. 125 participants were there.



5. Cleanliness drive was organized in the campus by NSS on 17.09.2019 110 students participated in this drive.

**Conclusion:** -Considering the fact the Institution is taking very good effort to maintain the environment quality in the Campus. We expect a prosperous future in the context of green campus, sustainable environment and a leader in this region for environmental maintenance and protection.

### **Acknowledgement**

We are grateful to In charge Principal Dr.R.R. Tamboli sir and the Committee members of the Maharashtra UdayagiriMahavidyalaya Udgir, Dist. Latur to assign this prestigious work and allow entering the new era of green audit in the Campus.

Further we sincerely extend our thanks to the Principal, Teaching and Non-teaching staff for providing us necessary co-operation in carrying out our responsibility meaningfully.