7.1.6.1 - The institutional environment and energy initiatives

1. Green audit
2. Energy audit
3. Clean and green campus recognitions/awards
4. Beyond the campus environmental promotional activities

Green Audit

PDEA's

Annasaheb Magar Mahavidyalaya,

Hadapsar, Pune 411028

GREEN AUDIT REPORT

2021 – 22

GREEN AUDIT REPORT 2021-22
Reported by
Environmental Awareness Committee

1	Dr. Shelke Pandit N.	Principal	
2	Dr. Mule Prashant P	Vice-Principal	
3	Prof. Dr. Patil Neha N.	Head, Department of Microbiology and Environmental Science; Science coordinator	
4	Dr. Joshi Ramakant P.	IQAC Co-coordinator	
5	Dr. Shirurkar Deepavali D	Head, Department of Botany; Chairman / Co-coordinator - Environmental Awareness Committee	
6	Dr.Shinde S.R	Chairman - Criteria VII	

Executive Summary – Green Audit

Sr.No	Area	Observations	Remark
1.	Awareness and use of renewable energy	Renewable energy such as solar PV plant, solar street lamps and water heater is effectively used in college and hostel.	Awareness program has been also carried out in nearby villages about use of solar energy such as solar cooker, water heater, etc. Good initiative taken by college toward use of renewable energy
2.	Solid Waste Management	Vermicomposting project is on college campus to make the use of solid waste	Good initiative taken by college towards use compost of solid waste and its effective use for fertilizer and biogas
3.	Liquid Waste Management	There is ETP plant.	Initiative taken by college towards liquid waste management
4.	Water conservation	Rain water harvesting system is used to recharge the ground level water. Students and staff participated in pani foundation and panlote programs.	Good initiative taken by college towards water conservation
5.	E waste Management	E -waste channelised through collection Centre or recycler	Well-intentioned initiative by college towards the e-waste management.
6.	Plastic and Paper Management	College is taking initiative by displaying posters/banners about awareness of plastic	Worthy initiative by college towards to implement plastic free campus
7.	Environment awareness	Various programs under taken in the forms of rallies, campaign, guest lectures, workshops etc.	Good initiative taken by college towards awareness regarding various environmental issues.

Content:

A) INTRODUCTION:

The term "Green" means eco-friendly or not damaging the environment. Green Audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of environmental diversity. College has "Green audit, campus beautification, environmental awareness and rallies committee". Healthy and ecofriendly campus maintained and monitored by committee members. Colleges and Universities have broad impacts on the sphere around them, both negative and positive. The activities pursued by colleges can create a variety of positive environmental impacts. But colleges are also in a unique position as educational institutions to be leaders in pursuing environmentally sustainable solutions. This college was established in 1972 with the motto of our parent institution Pune District Education Association, Pune. The motto is □□□□□ □□□□□ !□□□□□ □□□□□! (meaning the welfare of masses and for the happiness of all)

B) GOALS OF GREEN AUDIT:

The 'Green Audit' aims to analyze environmental practices within and outside the college campus, which will have an impact on the eco-friendly ambience. Green Auditing is a unique process that allows you to know the uses of your available resources i.e. Energy, Water quality, Buildup Space, Air quality, Play Ground, Stationary, Human Resources, Fire Safety, Transport, Cafeteria, Classroom Environment, Library uses, Sanitation Facilities, Green cover, Return on your Investment, etc. which will give you clear authentic data of resources uses.

C) COLLEGE INFORMATION:

Name of the college	Annasaheb Magar Mahavidyalaya, Hadapsar, Pune.
Year of Establishment	1972
Address	Manjari Road, Hadapsar, Pune - 411028, India.
Contact details	020 – 26990376
College key members	Dr. Shelke P. N. (Principal) Dr. Mane A. B. (Vice-Principal)

	Dr. Mule P. P. (Vice-Principal and CDC member) Prof. Dr. Patil N. N. (Science Coordinator) Dr. Bhujbal N. N. (CDC member) Dr. Satav G. P. (CDC member) Mr. Bagade Dhananjay (O. S.) Mr. Sonavane Shivaji (CDC member)
Green Audit, rallies, Campus Beautification and Environmental Awareness Committee	Dr. Shirurkar D. D. - Associate Professor (Chairman / Coordinator) Prof. Dr. N. N. Patil, Professor Dr. Kulkarni S. S, Associate Professor Mr. Awsare D. B., Associate Professor Ms. Kamble A. N., Assistant Professor Ms. Wadekar A. B., Assistant Professor Mr. Kumkale V. Y. Ms. Dhangar U. S. Dr. Mundhe A. Y. Mrs. Gadekar A. J. Mr. Poman, C. N., Peon
Courses offered	**Senior college (UG)** - Arts, Science and Commerce, BBA, BBA(CA), BSc Computer Science. **PG Courses:** MSc - Chemistry, Physics and Microbiology, Computer Science, Environmental Science. MA - Hindi, Marathi, English, Politics and Economics, MCA - Science Ph.D. – Chemistry, Physics, Microbiology, Marathi, Economics and Commerce.

D) ATTENTION ZONES:

a. Solid Waste and Recycling
b. Electricity and Natural Gas Use
c. Water and Waste water Management
d. Wetlands, Store water Management and Campus Ground Management
e. Emissions and Air Quality
f. Canteen

E) BUILDING SURVEY:

1.	Total campus area	: 5.2 acres.
2.	College Building	: 11,917 square meters.
3.	Ground Area	: 3000 square meters.
4.	Green Area	: 3100 square meters.
5.	Road/Paved Area	: 2570 square meters.
6.	Terrace Area	: 3570 square meters.
7.	Impervious area	: 6140 square meters.
	Pervious area	: 6100 square meters.
	Ratio of impervious: pervious area	: 50:50
8.	Number of Class Rooms	50
9.	Number of Laboratories	34
10.	Water filters with aqua guard	03
11.	Water coolers	09
12.	Number of Fire Extinguishers	15
13.	Gymkhana	: 1800 sq.fit.
14.	Number of washrooms:	Male Toilet Blocks: 4 (Total - 8 WC, 32 Urinals) Male Toilet Blocks: 1 (Total - 1 WC, 2 Urinals) Wash rooms – Male: 2 Female Toilet Blocks: 4 (Total - 16 WC, 4 Urinals) Female Toilet Blocks: 1 (Total - 1 WC, 2 Urinals) Wash rooms – Female: 9
15.	Hostel Area	: Campus area : 1.36 acres., Building 10327.82 m^2

16. ACs are with Five star rating in Power saving.
17. Classrooms with sufficient cross ventilation and light.
18. Laboratories with safety instructions and measures.

F) WATER FACILITIES ON CAMPUS:

- RO water purifiers are mounted in the College and Hostel premises.
- 09 water coolers installed in the College and Hostel premises.
- PMC drinking water connection.
- 02 drinking water bore wells.
- 16 Water tanks →

  Underground: 05 tanks of total capacity 78000 litters;

  Overhead: 02 cement tanks of capacity 50000 litters and

  09 Sintex tanks of capacity 9000 litters.

G) RAIN WATER HARVESTING ON CAMPUS:

- Annasaheb Magar College campus = 5.2 acres
- Average annual rainfall ranges between 700-800 mm.
- Total catchment area = 3570 m^2
- Total quantity of rainfall (harvesting potential) = 200 m^3/annum
- Total 6 rain water harvesting units are present on campus.
- This project gives adequate quantity of harvested rain water.
- It is helpful for recharging ground water and other uses like watering garden plants.

H) USE OF RENEWABLE ENERGY:

1. 10 solar street lamps installed on campus. (PV panel 12 V 40 W, LED luminary : 9 W ; Battery : 160 WAH – Lithium ferro phosphate battery)
2. Terrace area of college buildings is with roof top Grid Tied Captive Solar PV plant with following specifications.

Type of system	:	Grid tied
Solar array capacity	:	40 kWp
Module mounting	:	Fixed tilt
Estimated power generation	:	55,480 KWh / year (First year)
Degradation	:	0.7 % YOY Linearly
Project life	:	25 years

Project benefits:

- Installing this system is equivalent to planting 2360 mature trees.
- Reduction of 30 metric tons of CO2 Emission for first year.

I) WASTE MANAGEMENT ON CAMPUS:

1. SOLID WASTE MANAGEMENT:

- Garbage segregated as Dry waste and wet waste, 15 dustbins were provide in different areas on campus.
- In laboratories bins are clearly labeled for glass, paper, plastic, and for organic waste.
- Reuse of waste material: Show pieces / articles were prepared by students from waste materials.
- Vermicomposting project is maintained.
- Organic waste, like food scraps from hostel, canteen, plants and lawn clippings used for vermicomposting.
- Prepared vermicomposting used as a fertilizer for plants grown in campus.
- Re use of paper - System is evident. Both sides of paper are used.
- Regular activities are monitored by software.
- Book bank system is evident by library.
- E-book system is used.
- Hazardous chemicals are carefully handled at Chemistry, Microbiology, Botany and Zoology laboratories.
- List of chemicals are available with respective laboratory.
- M S D S / safety displays for chemicals recommended.

2. PLASTIC WASTE MANAGEMENT :

- For plastic collection 15 dustbins were provide in different areas on campus.
- Collected plastic handed over to registered recycler **Keshav Sita Memorial Foundation Trust** for recycling and disposal.
- MOU with **Keshav Sita Memorial Foundation Trust** is renewed in years 2021-22.

3. E-WASTE MANAGEMENT :

- E – Waste dropping boxes set up in Computer Science Department and in Library.
- Collected E-waste handover to Poornum Eco-vision Foundation (registered recycler for recycling and disposal).
- Whenever Department of Computer Science upgrade computer system, old systems are handed over to other departments and PDEA, Parent Institute, for distribution to the schools, as their requirement can be fulfilled with these system.

- Machines which are not in working conditions, revived by replacing required spares parts from other non-working machines having some functional spare parts.
- Old Batteries of back-up system are replaced under buy back scheme.
- Students prepared articles from E-waste.

4. LIQUID WASTE MANAGEMENT:

- Effluent treatment plant (ETP) Installed on campus.

J) GAS USAGE:

- Gas Usage apparent in Chemistry, Microbiology , Botany Laboratories and in Canteen.

K) AIR QUALITY MONITORING:

- PUC is mandatory for the Vehicles coming in the campus.
- Awareness done for students by organizing guest lecture.
- VOC / NON VOC based - Water based colours are recommended. No apparent use of VOC based paints.

L) CANTEEN:

- Segregation of wet and dry garbage done.
- Food waste disposed in Vermicomposting pit.
- Food License recommended for Canteen Operator.

M) HEALTHY PRACTICES ON COLLEGE CAMPUS:

- Sanitary napkin Vending Machines and Disposable Machines are installed in the College and Hostel premises.
- Burning of garbage not allowed in campus.
- All water tanks are cleaned twice in a year by External agency by using Jet Machine.
- Water Leakage → Regular checking done in house staff available to rectify leakages.
- Water analysis done in microbiology laboratory, records are available
- Daily cleaning of wash rooms.

- Quality food in canteen.
- College faculty and administrative staff actively participated in **Cycle Rally**, which is organized along with parent institution for promotion of use of cycles and other environment promoting issues.
- Extra efforts have been taken by the college to create environment consciousness amongst students. NSS, NCC and environmental awareness committees organized tree plantation program. Plantation is encouraged by Principal and faculties of all departments to increase greenery and reduce carbon emission effects on campus.
- Medicinal plants and ornamental plants propagated by students in botanical garden and on college premises. Near about 200 plant species are maintained on the campus.
- Development of vertical garden and hanging bottle garden.
- Five Bee boxes installed and maintained in botanical garden.
- Vertical garden and hanging baskets and bottle garden is well maintained.

N) INITIATIVES TAKEN BY THE COLLEGE TO MAKE THE CAMPUS ECO- FRIENDLY

- Awareness of environment issues and Awareness of carbon footprints inculcated in students.
- Green building for quality living, Know green and think green is promoted on the campus
- Tree Plantation is encouraged by Principal and faculties of all departments to increase greenery and reduce carbon emission effects on campus.
- Tree plantation campaign is organized by NSS every year.
- Water conservation by water harvesting units and prevention of water wastage.
- Twice a year staff lectures/ guest lectures on Environment issues are arranged.
- Environment Awareness course is conducted for all second year students (S.Y.B.A, B.Com, B.Sc. and B.Sc. Computer Science)
- Environment Awareness rallies and street plays were organized.
- Projects on Environment were carried out by students and staff.

- Science Exhibition related to environmental awareness projects was organized in the College.
- Extra efforts have been taken by the college to create environment consciousness amongst students. NSS, NCC and environmental awareness committees organized tree plantation program.
- Plastic waste is collected twice a year from the College and also from homes of students and sent to Keshav Sita Foundation Trust for plastic recycling solution.
- Energy conservation - maximizing the use of natural light and solar light.
- Use of solar street lamps and CFL bulbs.
- Solar system for electricity generation.
- Vending machine for sanitary napkins is available at ladies common room, also disposal methods is evident for the same.
- Burning of garbage is not allowed in campus.
- Displaying boards like 'Say No to Plastic' for promotion of usage of paper bags.
- Reduce – Reuse – Recycle methods are followed.
- Carbon dioxide neutrality is maintained on the campus by developing greenery
- Global warming, bio-diversity and pollution incorporated in the curriculum.
- Organization of E-waste campaign and rallies for environmental awareness.
- Use of renewable energy - Utilization of solar energy for production of light energy.
- Solid waste management by vermicomposting.
- Liquid waste management carried out by chemistry department.
- NSS & NCC activities –
    - Swatchatta Bharat Abhiyan
    - Cleaning of surrounding area
    - Tree plantation
    - Water management by making bandhara in villages.
    - 'Save female child' awareness campaign in villages.

O) SUGGESTIONS:

- All computers have to be set for power save mode for switching off screen if not used for 15 minutes and hibernate if not used for more than 60 minute.
- Students may be educated towards saving of electricity by displaying messages in the classroom and common public area for switching off lights, fans and computers when not required.
- Fans should not be rewound more than once and has to be replaced by 5 STAR rated energy efficient fans to reduce consumption.
- CFL bulbs should replace with LED bulbs.

P) PHOTOGRAPS

Green Audit Assessment Team (2021-22)

Environmental Awareness Committee (2021 – 22)

RO Water Purifier

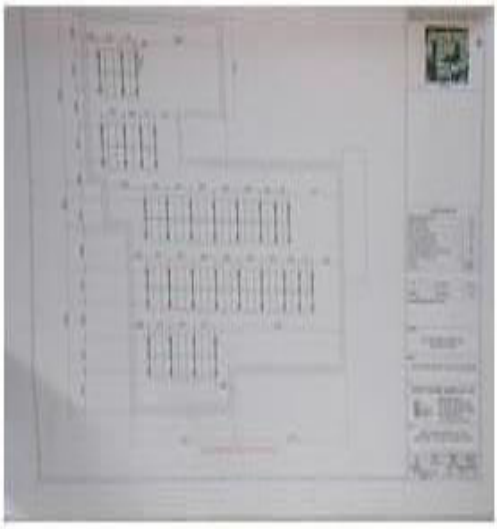
Effluent Treatment Plant (ETP)

Sanitary Napkin Vending and Disposable Machine (College and Hostel)

College premises.

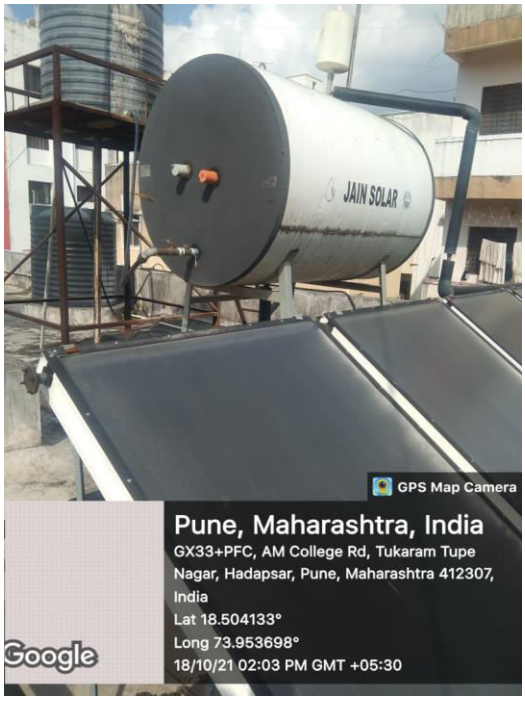
Sanitary napkin Vending Machines Hostel premises.

Grid Tied Captive Solar PV Plant

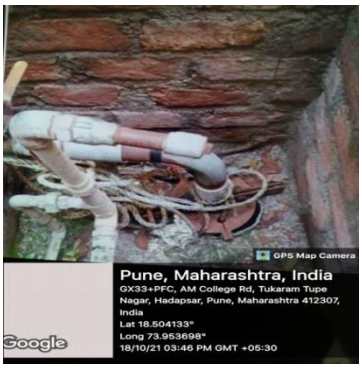


Solar Street Lamps

Solar Water Heater System

At College	At Hostel
	

Water Harvesting at Campus

Vertical Garden and Hanging Bottle Gardenand Bee Boxes

Bee boxes

Vermicomposting unit

Campus Beautification and Botanical Garden














ग्रंथालय


Tree Plantation on Hostel Campus

LIST OF SOME ANGIOSPERM PLANTS GROWN IN COLLEGE CAMPUS

Sr. no.	Botanical name of the plant	Common name	Family	Habit
1	*Abrus precatorius* L.	Gunj.	Papilionaceae/ Fabaceace	Climber
2	Acalypha wilkesiana Muell-Arg	Acalypha	Euphorbiaceae	Shrub
3	Acalypha hispida Burm.	Acalypha, Copper leaf	Euphorbiaceae	Shrub
4	*Acorus calamus* L.	Wekhand	Araceae/ Acoraceae	herb
5	*Adeniu obesum Roem. & Schult.*	Red Sandalwood, Desert rose	Apocynaceae	Tree (Bonsai)
6	*Adhatoda vasica* Nees	Adulsa	Acanthaceae	Shrub
7	*Aegle marmelos* (L.) Corr.	Bael	Rutaceae	Small to medium-sized tree
8	*Aglaonema commutatum* Schott	Philippine evergreen	Araceae	Perennial herb
9	Aglaonema Modestum	Chinese evergreen	Araceae	Perennial herb
10	Aglaonema widuri	Red Peacock	Araceae	Perennial herb
11	Aglaonema nitidum	Silver evergreen	Araceae	Perennial herb
12	*Albizia saman* (Jacq.) Merr.	Shirish	Mimosaceae	Tree
13	*Alcea rosea* L. *Synonym: Althaea rosea Cav*	Hollyhock	Malvaceae	Herb
14	*Allamanda blanchetii* A. DC.	vine red Allamanda	Apocynaceae	Climbing h abit
15	*Allamanda cathartica* L.	Yellow Allamanda Golden trumpet	Apocynaceae	Climbing h abit
16	*Aloe vera* (L.) Burm	Korphad	Liliacae	Herb under Shrub
17	*Alstonia scholaris* L. R.Br.	Saptparni	Apocynaceae	Tree
18	*Araucaria heterophylla,* (Salisb) Franco	Christmas tree	Araucariaceae	Tree
19	*Artabotrys hexapetalus (L. f.) Bhandari*	Green Champa	Annonaceae	Bushy shrub climbing by hooks
20	*Asparagus densiflorus* (Kunth) Jesso	Asparagus Fern / foxtail fern	Liliaceae /Asparagaceae	Perennial herb
21	*Asparagus plumosus* Baker., J. Linn	Climbing asparagu s fern	Liliaceae /Asparagaceae	climbing ha bit
22	*Asparagus racemosus* Willd.	Shatavari	Liliaceae /Asparagaceae	climbing shrub
23	*Azadirachta indica* A. Juss.	Kadu-Neem	Meliaceae	Tree
24	*Bauhinia acuminata* L.	Safed Kachnar	Caesalpiniaceae/	Shrub/

25	*Bombax ceiba* L.	Kapok	Bombacaceae	Tree
26	*Bougainvillea spectabilis* Willd	Bougainvel	Nyctaginaceae	Woody climber
27	*Bryophylum pinnatum* Oken	Paanphuti	Crassulaceae	succulent herb.
28	*Caesalpinia pulcherrima* (L) Sw.	Shankhasur	*Caesalpiniaceae/Fabaceae*	Shrub
29	*Callistemon lanceolatus (Sm.) Sweet*	Bottle brush	Myrtaceae	Small Tree or shrub
30	*Campsis radicans* Seem. Journ.	Trumpet Vine	Bignoniaceae	Shrub
31	*Canna indica* L	Kardal	Cannaceae	Perennial herb
32	*Canna flaccida* Rosc.	Kardal Piwali	Cannaceae	Perennial herb
33	*Cascabella thevetia* (L)	Pivali Kanher , Bitti	Apocynaceae	Shrub or small tree
34	*Cassia siamea* Lam.	Kashid	Caesalpinaceae/ *Fabaceae*	Small tree
35	*Cassia surattensis* Burm. f.) H.S. Irwin & Barneby	Motha Tarvad	Caesalpinaceae/ *Fabaceae*	Tree
36	*Catharanthus roseus* (L.) G. Don.	Sadaphuli	Apocynaceae	Perennial Herb
37	*Celosia argentea* L. var. cristata	Cockscomb	Amaranthaceae	Herb
38	*Celosia spicata* L. Sp.	Kurdu	Amaranthaceae	Herb
39	*Cereus peruvianus*	Apple Cactus	Cactaceae	Perennial Shrub
40	*Cestrum nocturnum* L.	Raat-ni-Rani	Solanaceae	Climber
41	*Chlorophytum comosum* (Thunb.) Jacques	Spider Plant	Liliaceae /Asparagaceae	Herb
42	*Cinnamon zeylanicum* Blume	Dalchini	Lauraceae	Evergreen Tree
43	*Cissus quadrangularis* L.	Hadjod	Vitaceae	Climber
44	*Citrus aurantifolia* (Christm. & Panz.) Swing.	Limbu	Rutaceae	Small Tree
45	*Citrus limetta Risso.*	Mosambi	Rutaceae	Small Tree
46	*Clerodendrum wallichii* Merr.	Bridal vail	Verbenaceae /Lamiaceae	Shrub
47	*Clerodendrum thomsoniae* Balf.f.	Bleeding Heart Vine	Verbenaceae /Lamiaceae	bushy climber
48	*Clitoria ternatea* L.	Gokarna	Papilionaceae	Climber
49	*Cocos nucifera L.*	Coconut	Palmae / Arecaceae	Tree
50	*Codiaeum variegatum var. angustifolium*	Limbu croton	Euphorbiaceae	Shrub
51	*Codiaeum variegatum* var. Pictum, (L.) Bl., Bijdr.	Amba Croton	Euphorbiaceae	Shrub
52	*Codiaeum variegatum var. Spirale*	Croton	Euphorbiaceae	Shrub

53	*Combretum indicum (*L.) *De Filipps Synonyms: Quisqualis indica L.*	Madhumalti, Rangoon Creeper	Combretaceae	Climber
54	*Commiphora wightii (Arn.) Bhandari Synonyms: Commiphora mukul (Stocks) Hook.*	Gugul	Burseraceae	Shrub or small tree
55	*Cordyline rubra* Otto & A. Dietr	Palm lily	Liliaceae/Asparagaceae	Evergreen shrub or small tree
56	*Cordyline fruticosa* (L.) A. Chev. Synonyms : Dracaena terminalis L.	Ti plant	Liliaceae/Asparagaceae	Evergreen shrub or small tree
57	*Costus igneus N.E. Br.*	Insulin plant	Scitamineae/ Costaceaes	Herb
58	*Cycas revoluta*	sago palm, king sago	Cycadaceae	Tree
59	*Cymbopogon citratus* (DC.) Stapf.	Lemongrass	Gramineae/ Poaceae	Herb
60	*Delonix regia* (Hook.) Raf.	Gulmohar, Flame Tree	*Caesalpiniaceae/ Fabaceae*	Tree
61	*Dianthus chinesis* L.	Rainbow pink / China pink	Caryophyllaceae	Herb
62	*Dianthus plumarius* L. Synonyms : *Caryophyllus plumarius* Moench	Garden pink	Caryophyllaceae	Herb
63	*Dieffenbachia seguine* (Jacq.) Schott	Dumb-cane	Araceae	Herb
64	*Dolichandra unguis-cati* (L.) Miers Synonyms: *Bignonia unguis*-cati L.	Cat's Claw/ Nakh Vel	Bignoniaceae	Climber
65	*Dracaena fragrans* (L.) Ker Gawl. Synonyms : cornstalk dracaena	Corn Plant	Asparagaceae	Shrub
66	*Dracaena trifasciata* Prain Synonyms: *Sansevieria trifasciata* Prain	Snake Plant	Agavaceae/ Asparagaceae	Herb
67	*Dypsis lutescens* (H. Wendl.) Beentje & J. Dransf.	Areca palm	Araceae	Tree
68	*Echinocactus grusonii* Hildm.	Golden ball	Cactaceae	Shrub
69	*Epiphyllum oxypetalum*	Brahma-Kamal	Cactaceae	Shrub
70	*Epipremum aureum* (Linden & André)	Money plant	Araceae	Climber
71	*Eucalyptus globulus* Labill.	Nilgiri	Myrtaceae	Tree
72	*Euphorbia milli* Ch. Des. Moulins	Tawa	Euphorbiaceae	Shrub
73	*Euphorbia pulcherrima* Willd. ex Klotzsch	Lal-patti	Euphorbiaceae	Shrub
74	*Ficus benghalensis* L.	Banyan tree	Moraceae	Tree
75	*Ficus benjamina* L.	Weeping Fig	Moraceae	Tree
76	*Ficus racemosa* Linn Synonyms: *Ficus glomerata* Roxb.	Umber	Moraceae	Tree
77	*Ficus religiosa* L.	Pimpal	Moraceae	Tree
78	*Gaillardia aristata* Pursh	Blanket flower	Asteraceae	Herb

79	*Gaillardia pulchella* Foug.	Blanket flower	Asteraceae	Herb
80	*Galphimia glauca* Cav.	Rain of gold Shower of Gold	Malpighiaceae	Shrub
81	*Gomphrena globose* L.	Makhmali, Supari	Amaranthaceae	Herb
82	*Graptoveria opalina*	Stonecrops	Crassulaceae	Prostrate habit
83	*Grevillea robusta* A. Cunn. Ex. R.Br.	Silver Oak	Proteaceae	Tree
84	*Hamelia patens* Jacq.	Fire Bush, Scarlet Bush	Rubiaceae	Shrub
85	*Hibiscus rosa-sinensis L.*	Jaswand	Malvaceae	Shrub
86	*Impatiens balsamina* L.	Garden Balsam/ Terada	Balsaminaceae	Herb
87	*Ixora coccinea* L.	Kuda, Jungle flame	Rubiaceae	Evergreen shrub
88	*Jacaranda mimosifolia* D. Don, Synonyms: *Jacaranda ovalifolia* R.Br.	Nil mohar	Bignoniaceae	Tree
89	*Jasminum samba* (L.) Aiton	Mogra	Oleaceae	Shrub
90	*Jatropha gossipifolia* L.	bellyache bush	Euphorbiaceae	Shrub
91	*Jatropha integerrima* Jacq. Synonyms: *Jatropha pandurifolia* Andr. *Jatropha hastate* Jacq.	Peregrina, Spicy Jatropha,	Euphorbiaceae	Shrub
92	*Lagerstroemia speciosa* (L) Pers.	Pride of India, Taaman	Lythraceae	Small to medium tree
93	*Lantana camera* L. var. *aculeata*	Tantani, Ghaneri	Verbinaceae	Medium size tree
94	*Lantana involucrata* L.	Buttonsage	Verbinaceae	Shrub
95	*Lantana montevidensis* (Spreng) Brig	trailing lantana	Verbinaceae	Shrub.
96	*Licuala grandis* (hort. Ex W. Bull) H. Wendl	Ruffled fan palm, Palas palm	Palmae/ Arecaceae	Shrub
97	*Livistona rotundifolia (Lamarck) Mart. Synonyms: Saribus rotundifolius (Lamarck) Blume*	Fan palm, Table palm	Palmae/ Arecaceae	Tree
98	*Malvaviscu penduliflorus* DC.	Muki Jaswand	Malvaceae	Shrub
99	*Mangifera indica* L.	Amba	Anacardiaceae	Tree
100	*Michelia champaca L.*	Pivala chaph , Sonchapha	Magnoliaceae	Tree
101	*Mimosa pudica* L.	Touch-Me-Not, Lajalu	Mimosaceae/Fabaceae	Tree
102	*Monstera deliciosa* Liebm.	Window Leaf,	Araceae	Herb
103	*Muntingia calabura* L.	Singapore cherry	Muntingiaceae	Climber
104	*Murraya koenigii* (L.) Spreng.	Kadhi-patta	Rutaceae	Shrub
105	*Mussaenda erythophylla* Schumach & Thonn.	Red flag bush, Buddha's lamp	Rubiaceae	Evergreen Shrub
106	*Mussaenda frondosa*, L.	Dhobi tree, white flag bush	Rubiaceae	Shrub
107	*Nerium indicum* Mill. Gard.	Kaner	Apocynaceae	Shrub Vine

108	*Nyctanthes arbor-tristis* L.	Parijatak	Oleaceae /Nyctaginaceae	Shrub or small tree
109	Nymphaea sp. Peach Glow	Water lily.	Nymphaeceae	Herb
110	*Ocimum tenuiflorum* L. , Synonym: *Ocimum sanctum* L.	Krishna Tulsi,	Labiateae	Herb or Under Shrub
111	*Ocimum americanum* L. Synonym: *Ocimum canum*, Sims.	Ran Tulsi	Labiateae	Herb or Under Shrub
112	*Ocimum basilicum* L.	Sabja	Labiateae	Herb or Under Shrub
113	*Pandorea jasminoides* (Lindl.) K. Schum. cultivar *alba*	Bower creeper, bower vine	Bignoniaceae	Shrub
114	*Passiflora caerulea*	Krishnakamal	Passifloraceae	Climber
115	*Passiflora incarnate* L	purple passionflower	Passifloraceae	Climber
116	*Pelargonium vitifolium* L. Ait., Hort. Synonym: *Geranium vitifolium* L	Geranium	Geraniaceae	Herb
117	*Pentas lanceolata* (Forsk) Deflers	Star Flower, Star Cluster	Rubiaceae	Herb
118	*Petunia grandiflora*	Crimson star	Solanaceae	Herb
119	*Phyllanthus emblica* L. Synonyms: *Emblica officinalis* Gaertn.	Amla	Euphorbiaceae	Tree
120	*Piper betle* L.	Nagvel, Nagarvel,	Piperaceae	Climber
121	*Piper nigrum* L.	Black Pepper, Kala Mari	Piperaceae	Climber
122	*Pithecellobium dulce (*Roxb.) Benth & Hook. Synonyms : *Mimosa dulce* (Roxb.)	Vilayati chinch	Mimosaceae	Tree
123	*Plectranthus scutellarioides (*L.) R. Br. *Synonyms: Coleus blumei Benth.*	Coleus	Lamiaceae	Herb
124	*Plectranthus amboinicus* Lour. Synonyms: *Coleus amboinicus*	Indian Mint, Owa pan	Lamiaceae	Herb
125	*Plumbago auriculata* Lam.	Blue Chitrak	Plumbaginaceae	Perennial herb
126	*Plumbago zeylanica* L.	Pandhara Chitrak	Plumbaginaceae	A soft perennial herb.
127	*Plumeri alba* L.	White Champka, white frangipani	Apocynaceae	Shrub/tree
128	*Plumeria pudica* Jacq.	Golden Arrow	Apocynaceae	Shrub/tree
129	*Plumeria obtuse* L.	Singapore graveyard flower	Apocynaceae	Shrub/tree
130	*Plumeria rubra* L. *Synonyms : Plumeria acutifolia* Poir.	Red champka	Apocynaceae	Tree
131	*Polianthes tuberosa L.*	Tube Rose,	Amaryllidaceae	Herb

132	*Polyalthia longifolia* (Sonner.) Thw, Enum.	Asoka Tree	Annonaceae	Tree
133	*Portulaca umbraticola* Kunth.	*'Cupcake Carrot'/* 9 o'clock flower	Portulacaceae	Herb
134	*Pothos Scandens* L.	Money plant	Araceae	Climber
135	*Prosopis cineraria* (L) Druce	Shami	Mimosaceae / Fabaceae	Tree
136	*Psidium guajavac* L.	Peru	Myrtaceae	Tree
137	*Pyrostegia venusta* (Ker Gawl.) Miers Synonyms : *Bignonia venusta* Ker Gawl.	Flame Vine, Flaming Trumpet	Bignoniaceae	Climber
138	*Rhoeo spathacea (Sw.)*	Rhoeo	Commelinaceae	Herb
139	*Rosa* sp.	Gulab	Rosaceae	Herb or small shrub
140	*Roystonea regia (Kunth) O. F. Cook* Synonyms*: Oreodoxa regia Kunth*	Bottle Palm, Royal Palm	Palmae / Arecaceae	Tree
141	*Russelia equisetiformrs* Schlt Dl. & Cham*. Synonyms Russelia juncea* Zucc.	Fountain or Fire Cracker	Scrophulariaceae	Shrub
142	*Saraca asoca* (Roxb.)Wild. Synonyms: *Saraca indica* sensu Bedd. L.	Sitecha Ashok	Caesalpinaceae / Fabaceae	Tree
143	*Scadoxus multiflorous (*Martyn) Raf.	Blood lily, May flower	Amaryllidaceae	Herb
144	*Spathiphyllum cochlearispathum* (Liebm.) Engl.	Peace Lily.	Scrophulariaceae	Herb
145	*Spilanthes acmella* Murr. Synonyms: S. paniculata, Spilanthes calva DC.	Akarkara	Asteraceae	Herb
146	*Strelitzia reginae* Banks	Bird of Paradise	*Strelitziaceae*	Herb
147	*Syzygium cumini* (L.) Skeels, Synonyms: *Eugenia jambolana* Lam.	Jambul	Myrtaceae	Tree
148	*Tamarindus indica* L.	Chinch	Caesalpiniaceae / Fabaceae	Tree
149	*Terminalia catappa* L.	Desi Badam	Combretaceae	Tree
150	*Thuja occidentalis* L.	Mayurpankhi	Cupressaceae	Tree
151	*Thunbergia laevis* Nees	Whitelady	Acanthaceae	Climber
152	*Thunbergia grandiflora* (Roxb. Ex Rottl.)	Blue Thunbergia, blue skyflower	Acanthaceae	Climber
153	*Tradescantia pallida* (Rose) D. R. Hunt	Purple Queen	Commelinaceae	Herb
154	*Tradescantia zebrina* (Schinz) D. R. Hunt	Wandering jew	Commelinaceae	Herb
155	*Tradescantia spathacea* Sw. Synonyms: *Rhoeo discolor (L'Her.) Hance*	Rhoeo	Commelinaceae	Herb
156	*Vitiveria zizanoides (*L.)	Wala	Poaceae	Herb
157	*Withania somnifera* (L.) Dunal.	Ashwagandha	Solanaceae	Shrub

158	*Wodyetia bifurcate A.K. Irvine*	Foxtail palm	Palmae: Arecaceae	Tree
159	*Xanthostemon youngii C.T. White & W. d. Francis*	Red penda crimson penda	Myrtaceae	Shrub
160	*Zamia pumila* L.	Coontie palm.	Zamiaceae	Shrub
161	*Zephyranthes candida* (Lindl.) Synonyms: *Amaryllis candida* Lindl.	Fairy Lily	Amaryllidaceae	Herb
162	*Tagetus erecta L.*	Zendu	Asteraceae	Herb
163	*Chrysanthemum indicum L.*	Shevati	Asteraceae	Herb
164	*Magnolia liliifera*	Kawathi chafa	Magnoliaceae	Tree

- Gymnosperms : 05 species
- Pteridophytes : 03 species
- Caccti :25 species

PRINCIPAL
Annasaheb Magar Mahavidyalaya
Hadapsar, Pune - 411 028.

Energy Audit

PDEA's

Annasaheb Magar Mahavidyalaya

Hadapsar Pune - 411028.

Energy Audit Report

Submitted to

Principal,

PDEA's

Annasaheb Magar Mahavidyalaya, Hadapsar Pune - 411028

Academic Year 2021- 2022

Prepared By

Head, Department of electrical, Vocational Department

and

Head, Department of Electronics

PDEA's Annasaheb Magar Mahavidyalaya, Hadapsar Pune - 411028

Preface

Electrical energy data was collected for energy audit of the PDEA's Annasaheb Magar Mahavidyalaya, Hadapsar, Pune 411028 for the period of 01.06.2021 to 31.05.2022. Energy audit is an overview about improvement in the energy competence of the campus. The main purpose of energy audit is to reduce electrical energy. For energy audit, auditor team focuses on electrical appliances in each classroom, laboratory, seminar hall, Principal hall, office, etc. The energy audit is done by considering LED bulbs, Tubes, Fans, A.Cs and other electronic equipments used in each room. Electricity consumption of each component is also considered during the audit.

The survey of energy audit was conducted by Head, Department of electrical, Vocational Department and Head, Department of Electronics, PDEA′s Annasaheb Magar Mahavidyalaya, Hadapsar. Pune 411028

Acknowledgement

Head, Department of electrical, Vocational Department and Head, Department of Electronics, PDEA's Annasaheb Magar Mahavidyalaya, Hadapsar Pune – 411028 is very much thankful to Principal Nitin L. Ghorpade, and IQAC coordinator Dr. Ramakant P. Joshi for motivating us for energy audit

Energy Audit Committee 2021- 22

Sr. No.	Name		Signature
1.	Prin. Dr. N. L. Ghorpade	Principal	
2.	Dr. P. P. Muley	Vice Principal	
3.	Dr. V. B. More	Head of Electronics Dept	
4.	Prof. A. N. Kamble	Assistance Professor Electronics Dept	
5.	Prof. S. A. Whagmode	Head, of Electrical Dept.	
6.	Prof. L. J. Jarad	Electrical Dept.	
7.	Dr. R. P. Joshi	IQAC Coordinator	
8.	Dr. R. U. Mene	Assistance Professor	
9.	Shri. S. S. Ghorpade	Non teaching Staff	

ANNASAHEB MAGAR MAHAVIDYALAYA Hadapsar Pune-28

PRINCIPAL
Annasaheb Magar Mahavidyalaya
Hadapsar, Pune-411028.

Energy Audit Report of
PDEA's Annasaheb Magar Mahavidyalaya, Hadapsar
Pune - 411028

Introduction:

New National Education Policy is implemented in India from 2021 to inculcate education among common Indian and improve their intelligence.

To achieve such task, various type of management is essential, especially energy management. Because, at office timing every one facing electricity problem. Educational institutes require large amount of energy. So, institute must have energy management about production of electricity and saving electricity. Most of the Energy requirement in India is depends on domestic fossil fuel. Government motivates educational institute for the use of renewable energy resources,

In this energy audit study, auditor team measured use of electricity in classroom, laboratories, practical purpose instruments, Fans, air conditioners, computers, printers, photo copy machines, etc. first we calculate exact consumption of bulb, fans, AC, computer, printers, instruments, etc in the total requirement of electricity. Our team calculated institutional investment on the electricity and total generation electricity from the solar electricity generation. Also, we have focused on saving of electricity from solar generation and solar energy requirement.

Energy audit study is completed by collecting exact data mentioned above things using above survey.

Experimental and data collection:

All required data is collected by Head, Department of electrical, Vocational Department and Head Department of Electronics PDEA's Annasaheb Magar Mahavidyalaya, Hadapsar Pune – 411028. Institute has three main buildings, Arts, commerce and Science. Electricity consumption in every room, fans, tubes, fans, computer, instrument AC, etc measured in survey. According to survey following data is collected.

Total Power Requirement of various Equipment

PDEA's

Annasaheb Magar Mahavidyalaya, Hadapsar Pune – 28

Administration

Sr. No.	Hall No.	Specification	Tube	Fan	LED Tube	Projector	Fridge	Computer	Printer	Scanner	Xerox Machine	Motar	Water Cooler	A. C.
1	G 1	Office	17	14	9		1	12	11	4	1			
2	G 2	Ladies Toilet		1										
3	G 3	Gents Toilet		1	1									
4	G 4	Principal Office	2	7	2	1	1	3	2	2				3
5	G 5	Library	22	24	15			32	3	1				
		Ground Floor	12									4	2	

Commerce Building

Sr. No.	Hall No.	Specification	Tube	Fan	LED Tube	Projector	Fridge	Computer	Printer	Scanner	Xerox Machine	Motar	Water Cooler	
6	CF 1	Class Room	1											
7	CF 2	Class Room	4											
8	CF 3	Class Room	3	6										
9	CF 4	Class Room	2	3										

10	CF 5	Class Room	1											
11	CF 6	Class Room	4											
12	CS 7	Commerce Seminar Hall	1	6	12	1		1						
13	CS 8	Commerce Computer Lab		7	12			20	1					
14	CS 9	Commerce Department	8	8				4	2	1				
15	CS 10	Class Room												
16	CS 11	Class Room	1											
17	CT 12	Class Room												
18	CT 13	Class Room												
19	CT 14	Class Room												
20	CT 15	Class Room												
21	CT 16	Class Room												

Arts Building

Sr. No.	Hall No.	Specification	Tube	Fan	LED Tube	Projector	Fridge	Computer	Printer	Scanner	Xerox Machine	Motar	Water Cooler	
22	AF 6	Ladies Toilet			1									
23	AF 7	Class Room	2											
24	AF 8	Class Room	2											
25	AF 9	Staff Room (Gents)	3	5									1	
26	AF 10	Staff Room (Ladies)	3	5										
27	AF 11	Marathi Department	5	5	2	1		3	1					
28	AF 12	Vice Principal Cabin	1	1	2									
29	AF 13	Store												
30	AF 14	Hindi Department	2	2	1	1		2	1					

31	AF 15	Class Room	5	3										
32	AF 16	NCC Departme nt	3	2										
33	AF 17	Mathemat ics Departme nt (BCS)	8	16	18	1		33	1					
34	AS 18	Ladies Toilet	2	1										
35	AS 19	Class Room	2											
36	AS 20	Class Room	2											
37	AS 21	Class Room	2											
38	AS 22	Class Room	2	1										
39	AS 23	IT Lab	4	4	8	1		26	1					
40	AS 24	Geograph y Departme nt	2	2	4	1		2	2					
41	AS 25	Class Room	7	4				1						
42	AS 26	Psycholog y Departme nt	7	4				1						
43	AS 27	Counselin g Cell		1	2			1	1					
44	AS 28	Political Science Departme nt	2	2	8	1		2	2					
45	AS 29	Class Room	7	3				1						
46	AS 30	Economic s Departme nt	1	2	10	1		2	1					
47	AS 31	Class Room	6	3										
48	AS 32	English Departme nt	9	8	10			2	1					
49	AT 33	Gents Toilet		1										
50	AT 34	Class Room	1	1										
51	AT 35	Class Room	1	1										

Sciences Building

Sr. No.	Hall No.	Specification	Tube	Fan	LED Tube	Projector	Fridge	Computer	Printer	Scanner	Xerox Machine	Motar	Water Cooler	
		Ground Floor Comman Passage	**8**										**1**	
52	SG 1	Examination Department	**3**	**8**	**22**		**0**	**4**	**1**	**1**	**3**			
53	SG 2	CAP Room	**1**	**1**										
54	SG 3	IQAC Room	**6**	**6**		**1**		**1**						
55	SG 4	Cultural Department	**2**	**2**										
56	SG 5	Student Development Department	**1**	**1**										
57	SG 12	Gents Toilet	**1**	**0**										
58	SG 13	Ladies Toilet	**1**	**0**										
59	SG 14	Ladies Toilet	**1**	**0**										
60	SG 15	Ladies Toilet	**1**	**1**										
61	SG 16	Ladies Common Room	**2**	**2**	**10**									
62	SG 17	Vice Principal Cabin	**2**	**5**	**20**									
63	SG 18	Chemistry Department and Research centre	**45**	**50**	**9**	**1**		**12**	**2**					
		First Floor Comman Passage	**8**											
64	SF 19	Brilliant Class Room/ Seminar Hall	**7**	**7**		**1**		**1**						
65	SF 20	NSS Depart	**1**	**1**				**1**						

		ment												
66	SF 21	Brilliant Class Room/ Seminar Hall	**6**	**6**		**1**								
67	SF 22	Class Room	**2**	**0**										
68	SF 23	NCC Department Store Room	**1**	**1**										
69	SF 24	Class Room	**2**											
70	SF 25	Class Room	**2**	**2**										
71	SF 26	Class Room	**2**	**2**										
72	SF 27	Electrical Board Room	**2**											
73	SF 28	Gents Toilet	**1**		**1**									
74	SF 29	Ladies Toilet	**1**											
75	SF 30	Ladies Toilet	**1**											
76	SF 31	Ladies Toilet	**1**											
77	SF 32	Class Room	**1**											
78	SF 33	Class Room	**1**											
79	SF 34	Class Room	**2**											
80	SF 35	Botany and Zoology Department	**40**	**30**		**1**	**6**	**7**	**2**					
		Second Floor Comman Passage	**8**										**1**	
81	SS 36	Electronics Department	**9**	**8**	**14**	**1**		**14**	**1**					
82	SS 37	Computer Science Department	**34**	**28**	**34**	**6**		**169**	**12**	**1**				

83	SS 38	Class Room	**2**											
84	SS 39	Class Room	**2**											
85	SS 40	Class Room	**2**											
86	SS 41	Class Room	**2**											
87	SS 42	Gents Toilet			**2**									
88	SS 43	Ladies Toilet	**2**											
89	SS 44	Ladies Toilet	**1**											
90	SS 45	Ladies Toilet	**1**											
91	SS 46	Server Room	**0**	**2**	**6**			**1**	**1**					
92	SS 47	Electronics Staff Room	**2**	**4**	**1**			**1**						
93	SS 48	Class Room	**2**	**1**										
94	SS 49	Physics, Mathematics and Statistics Department	**26**	**35**		**2**	**1**	**23**	**4**	**1**				
		Third Floor Comman Passage	**8**										**1**	
95	ST 50	Class Room	**2**	**6**										
96	ST 51	Store Room	**1**	**1**										
97	ST 52	Shivaji Hall	**18**	**16**	**42**	**2**								
98	ST 53	Store Room	**1**	**1**										
99	ST 54	Class Room	**0**	**1**										
100	ST 55	Class Room	**2**											
101	ST 56	Class Room	**2**											
102	ST 57	Class Room	**0**											
103	ST 58	Gents Toilet	**2**											
104	ST 59	Ladies Toilet	**1**											
105	ST 60	Ladies Toilet	**1**											

106	ST 61	Ladies Toilet	**1**											
107	ST 62	Class Room	**1**	**1**										
108	ST 63	Class Room	**1**											
109	ST 64	Class Room	**0**											
110	ST 65	Microbiology Department	**46**	**25**	**12**	**1**	**7**	**8**	**3**					

Sr. No.	Hall No.	Specification	Tube	Fan	LED Tube	Projector	Fridge	Computer	Printer	Scanner	Xerox Machine	Motar	Water Cooler	
111		Gyamkahan Building	15	14				2	1	1				
112		Research Lab	8	4			1	2						
113		Student Health centre						4	1	1				
114		Student Co oprative Store	1	1										
115		Comman Room	1	1	1									
		Total	529	428	291	26	17	398	58	13	4	3	4	3
Total Power Consume in '1' Hours Unit			**9.6**	**19.2**	**24**	**150**	**144**	**27**	**50**	**150**	**150**	**53.76**	**80**	**70**
Total Power Consume Unit in 5, 6, 8 and 24 Hours			25392	32870.4	27936	11700	39168	53730	8700	1950	2400	1290.24	1600	840
consumption in month(Watt)			761760	986112	838080	351000	1175040	1611900	261000	58500	72000	38707.2	48000	25200

Total Power consumptions of all equipments as per Mahavitran = 5235.40 KW in Month

Power Consumption of Electricity Board

In this chapter, we present the analysis of last year Electricity Bills Table No-

Electrical Bill Analysis- 2020-21:

Sr. No.	Months	170564794689	160233156181	170343289386	170345549245	Total
1	Jun-21	862	278	1323	134	2597
2	Jul-21	1791	311	1990	1021	5113
3	Aug-21	1394	313	1962	166	3835
4	Sep-21	1296	329	2109	177	3911
5	Oct-21	1325	321	2159	203	4008
6	Nov-21	1334	306	2303	182	4125
7	Dec-21	1586	551	3433	354	5924
8	Jan-22	1483	317	3130	170	5100
9	Feb-22	1315	302	2572	166	4355
10	Mar-22	1563	347	3045	164	5119
11	Apr-22	1875	1223	6338	204	9640
12	May-22	2150	458	4535	150	7293
Total		**17974**	**5056**	**34899**	**3091**	**61020**

Total Power Consumption in Yearly	61020 KW
Average Power Consumption in Monthly	5085 KW

Graphically Representation of Electricity Power Consumption per Months :-

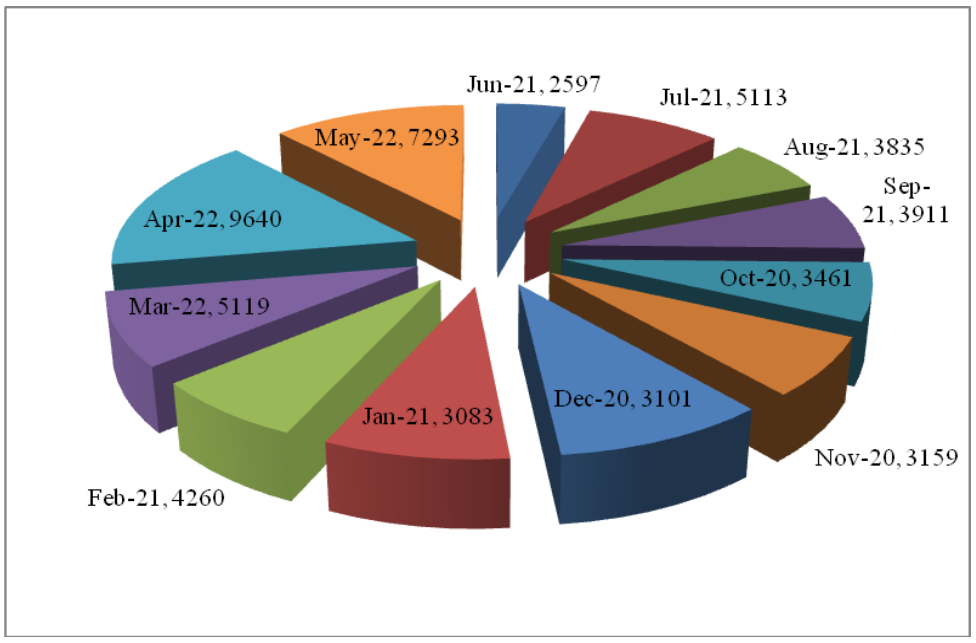
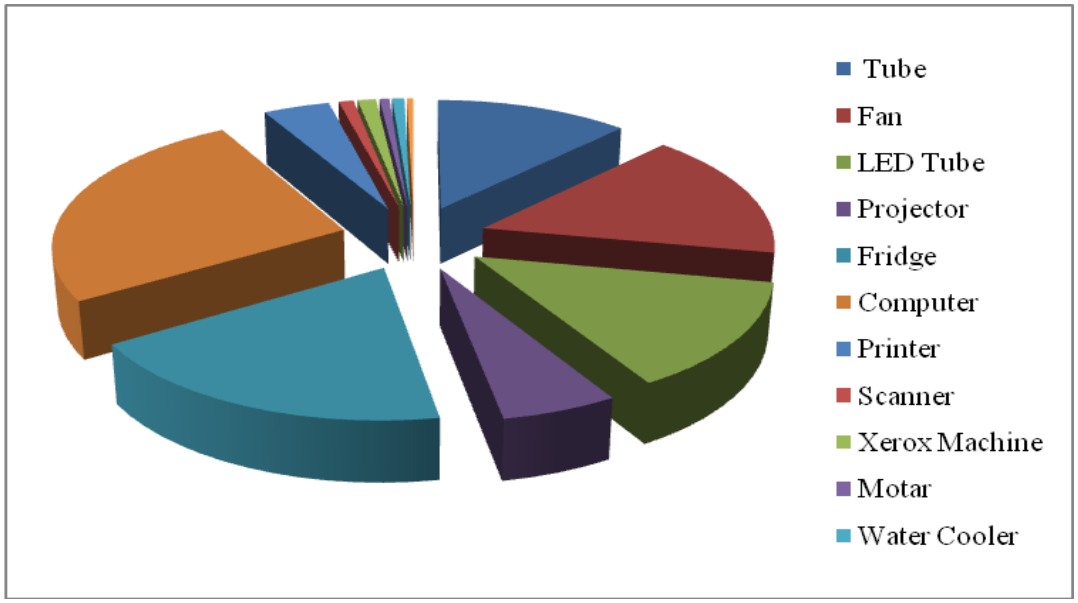


Fig. Graphical Representation of Electricity Power Consumption of electric equipments like tube lights, fans, computers, printers, AC and Lab instruments.

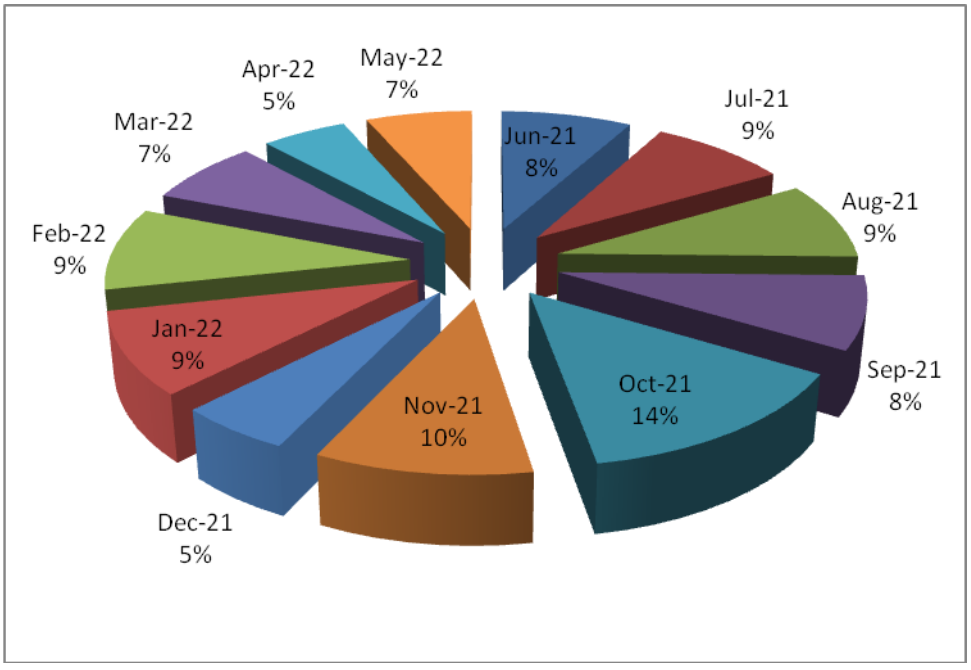


Electricity Power generated by renewable energy source per Months :-

Sr. No.	Mahavitran Meter No.	160233156181				
Bill in Units	Months	Import	Export	Generation	Offset	Power from Mahavitran
1	Jun-21	1420	1530	3254	1142	278
2	Jul-21	1453	1609	3145	1142	311
3	Aug-21	1501	1636	3904	1188	313
4	Sep-21	1440	1534	4039	1111	329
5	Oct-21	1310	2605	4964	989	321
6	Nov-21	1437	1869	3573	1130	306
7	Dec-21	1974	994	3774	1424	551
8	Jan-22	1433	1736	4730	1116	317
9	Feb-22	1435	1740	4635	1133	302
10	Mar-22	1643	1362	5125	1297	347
11	Apr-22	2219	996	5019	997	1223
12	May-22	1936	1242	4876	1478	458
Total		19201	18853	51038	14147	5056

Total power requirement	Renewable energy generated and used
5085 units /Month	**1169 units /Month**

Graphical Representation of Electricity Power generated by renewable energy source per Months :-



Photograph of Renewable Energy Sources-

Conclusion:

After completion of survey, auditor team conclude that there are four electricity meters in a institute campus and the total electricity power required is around 5200 KW per month. Institute installed Solar power plant (Renewable Energy Source) having capacity of 50 KW spite in to three part which generate 1970 KW.

From energy audit team it is recommended that following electrical appliance should be replace to save more power.

Sr. No.	Old electrical appliance	To be replace electrical appliance
1.	CFL Bulb	LED Bulb
2.	Tube light	LED Tube light
3.	CRT monitor	LED or LCD monitor

PRINCIPAL
Annasaheb Magar Mahavidyalaya
Hadapsar, Pune - 411 028.

Clean and green campus recognitions/awards

Pune District Education Association's **Annasaheb Magar Mahavidyalaya,Hadapsar, Pune-28.**

Date: 06/10/2021

To,

Hon. Principal.

Kind Attn : Hon. Teacher Representative.

Sub: ' Kirloskar Vasundhara Green College Clean College (GCCC) Trophy 2021-22'.

Dear Sir / Madam,

Greetings from `Kirloskar Vasundhara and KVER'!

It is our great pleasure to invite your participation for 'Kirloskar Vasundhara Green College Clean College (GCCC) Trophy' 2021-22. Year 2019-20-21 will be considered as unique years. Activities all over the world were hampered due to COVID 19 pandemic. Now the life is slowly coming to normal. Kirloskar Vasundhara intends to convert this challenging situation into an opportunity for change.

We are thankful to you for the support for online programmes throughout the year. The response and enthusiasm from Eco Rangers was noteworthy. It is our great pleasure to declare 'GCCC Trophy' details for the year 2021-22.

> **We understand that campuses were closed and most of the activities were hampered. In order to maintain the continuity, the approach and theme has been changed.**

Theme:**'Green technologies to make the campus green and clean'**.

This year's award concept aims to seek engagement with the Eco Rangers community to draw their attention towards immense scope and potential that the green technology offers for abstract objectives such as cleanliness, sustainability, environment etc.

As an institution of learning, the seeds of change that are sown on your campus by Kirloskar Vasundhara for last 6 years will grow and ultimately disperse far afield. The Green and Clean Campus Concept offers your institution the opportunity to take the lead in rethinking environmental culture and developing new paradigms for solving problems that are local, national and global in nature.

The rising use of technologies especially IOT, robotics, cloud and automation have immense potential to re-model a campus in to a smart campus. These smart campuses can minimally help in 'forward delivery' by optimizing the use of, inter alia energy and water consumption in the campus. Smart campuses would construct 'Smart Citizens' – those who are 'future-ready' for the Smart Cities and aneven Smarter India.

Beyond the campus environmental promotional activities

7.1.6.1:

Beyond the campus environmental promotional activities:

Sr.No.	Name of the activity
1.	Vasundhara project Microbiology department
2.	Reuse of Plastics Sparrow conservation by Zoology departmnet
3.	Manufacturing and sale of vermicompost by Botany department

	Pune District Education Association's **Annasaheb Magar Mahavidyalaya,Hadapsar, Pune-28.**	

1.Vasundhara project Microbiology department:

Date: 06/10/2021

To,

Hon. Principal.

Kind Attn : Hon. Teacher Representative.

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Greetings from `Kirloskar Vasundhara and KVER'!

It is our great pleasure to invite your participation for 'Kirloskar Vasundhara Green College Clean College (GCCC) Trophy' 2021-22. Year 2019-20-21 will be considered as unique years. Activities all over the world were hampered due to COVID 19 pandemic. Now the life is slowly coming to normal. Kirloskar Vasundhara intends to convert this challenging situation into an opportunity for change.

We are thankful to you for the support for online programmes throughout the year. The response and enthusiasm from Eco Rangers was noteworthy. It is our great pleasure to declare 'GCCC Trophy' details for the year 2021-22.

We understand that campuses were closed and most of the activities were hampered. In order to maintain the continuity, the approach and theme has been changed.

Theme:**'Green technologies to make the campus green and clean'**.

This year's award concept aims to seek engagement with the Eco Rangers

community to draw their attention towards immense scope and potential that the green technology offers for abstract objectives such as cleanliness, sustainability, environment etc.

As an institution of learning, the seeds of change that are sown on your campus by Kirloskar Vasundhara for last 6 years will grow and ultimately disperse far afield. The Green and Clean Campus Concept offers your institution the opportunity to take the lead in rethinking environmental culture and developing new paradigms for solving problems that are local, national and global in nature.

The rising use of technologies especially IOT, robotics, cloud and automation have immense potentialto re-model a campus in to a smart campus. These smart campuses can minimally help in 'forward delivery' by optimizing the use of, inter alia energy and water consumption in the campus. Smart campuses would construct 'Smart Citizens' – those who are 'future-ready' for the Smart Cities and aneven Smarter India.

About the Trophy' :

- This trophy was instituted six years back at Pune and three years back at Nashik, Kolhapur, Solapur and Hospete-Koppal.
- This year a team of Eco Rangers from each college will present the concept in form of **PPT** (maximum 8 to 10 min) which will explain changes at the campus with the help of Green Technologies.

- Last date of submission is **31st Dec 2021.**
- Reference to the submitted PPT a team of expert jury members will judge the work done.
- A special interactive session will be organized for selected PPTs, in order to understand concepts and ideas presented by Eco Rangers.
- The award ceremony will take place during the month of **January**.

Selection criteria along with marking system for the PPT:

Sr No	Category/Description	Marks
1	Number of actions shown in PPT	20
2	Innovative technologies shown	20
3	Proposed impact predicted	20
4	Sustainability predicted	10
5	PPT presentation	10
6	Impact of interaction with students	20
Total Marks		**100**

Note :

- Maximum weightage will be given to number of green technologies and their sustainable-visible impact shown.
- We understand that students do not have presentation background, so undue importance will notbe given to technicalities related to PPT.
- Jury's decision will be final and unchallengeable.

May I kindly request you to:

- Appoint a team of Eco Rangers for creating the presentation.
- Nominate one teacher representative to guide them.

Please rest assured, KVER and ' Kirloskar GCCC Trophy' is a non-commercial and non-political activity. We also feel that students' involvement in these activities will add a great value to their careers and also make them responsible citizens.Please feel free to call or write if necessary. For further communication **Nayaneesh Deshpande** (9561097096) will be in touch with you.

Thanking you in anticipation, Yours

Virendra Chitrav (Festival Director)
9822975881

Date:06/10/2021

To,

Hon. Principal.

Kind Attn : Hon. Teacher Representative.

Sub: ' Kirloskar Vasundhara Green College Clean College (GCCC) Trophy 2021-22'.

Dear Sir / Madam,

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Thanking you in anticipation, Yours

Virendra Chitrav (Festival Director)
9822975881

Pune District Education Association's

ANNASAHEB MAGAR MAHAVIDYALAYA

Hadapsar, Pune - 411 028 ✆ 020 - 2699 0376 Fax. : 020 - 2699 0353

E-mail : plasma_amm@yahoo.co.in • Website : www.amc.pdeapune.org

Affiliated to Savitribai Phule Pune University • Id No. : PU/PN/ASC/029/1971 • Jr.Coll.No. 11.15.005 (Mah.)

• Re-Accrediated by NAAC at 'A' Grade • Best College Award by Savitribai Phule Pune University

Outward No. : AMMH / 2021-22 / ~~500~~

Date : 29/09/2024

To,

Mr.Virendra Chitrav,
Festival Director,
Kirloskar Vasundhara,
Pune – 411004.

Subject :- Nomination of One Teacher and Six Students (3 boys + 3 girls)...

I am thankful to you for giving us an opportunity to join Kirloskar Vasundhara film festival (KVIF) and Kirloskar Vasundhara Eco Rangers (KVER).

I am here by nominating One Teacher and Six Students (3 boys + 3 girls) from our College.

The details are as follows-

Sr.No.	Name	Designation
1	Prof.Dr.Patil Neha Nitin	Head, Department of Microbiology
2	Mr.Gawande Yuvraj Jagadish	Boys Student
3	Mr.Mandhare Abhishek Ashok	Boys Student
4	Mr.Ashtage Mahadev Mallirath	Boys Student
5	Ms.Zade Namrata Rajkumar	Girls Student
6	Ms.Zore Prajkta Pandurang	Girls Student
7	Ms.Ghule Shradha Balasaheb	Girls Student

Please do the needful,

Thanking you,

Yours Sincerely,

Dr.Pandit N.Shelke
Principal
Annasaheb Magar Mahavidyalaya,
Hadapsar, Pune-411028.

Date: 11th Oct 2021.

To,
Hon. Principal,

Sub: Teacher representative's meeting.
Dear Sir/Madam,

In order to discuss and decide next 4 months activity plan for GCCC, KVER, RRM, online meeting of teacher representatives was organised on Saturday 9th Oct, between 10 am to 11 am. Following points were discussed and decision taken are as follows:

- Activities will not be carried out during 1st to 10th Nov 2021 (Diwali Vacation).
- Last date of submission for 'Kirloskar Vasudhara Green College Clean College Trophy' CompetitionPPT will be 31st Dec., each and every college will send consent letter of participation before 20th of October.
- All colleges will form different teams for 'GCCC Trophy Competition' and Ramandi Restoration Mission.
- All the colleges will ensure good registration for this year's KVIFF which will be organised in the month of December.

Probable activities will be organised during next 4 months:

- Floating beds will be installed at Khatpewadi Lake with the help of H.V.Desai College.
- Online A/V lectures of renowned experts will be organised as usual.
- Online film making workshop will be organised.
- H. V. Desai College, Modern College, Ganeshkhind and NCL Junior College are willing to takeDissolve Oxygen levels on regular basis at all the stretches of Ramnadi.
- Symbiosis College, Lavle shown interest in providing guidance for Reed Bed making.
- 'Ramnadi Parikrama' (2 no) will be organised in the month of Nov. (Online + Offline)
- Ramnadi offline Photo Walk in the month of Nov. (during 8 am to 11 am)
- Modern College, Ganeshkhind is willing to organise visit to their terrace garden and also would like to conduct workshop for interested students.

Note : Details of each activity will be conveyed through email and WhatsApp.Thanks

Virendra Chitrav
(Festival Director)

Gmail **Principal pdeaamcollege <principal@pdeaamcollege.edu.in>**

Result : Kirloskar Vasundhara Green College Clean College Competition 2021-22.

1 message

virendra chitrav <vasundharaclubpune@gmail.com> Tue, Jan 18, 2022 at 4:35 PMTo: Kalyani Kulkarni <kjk_entc@pvgcoet.ac.in>, mail@bnca.ac.in, gdrauthistory@gmail.com, "Director IMCC, Pune" <director.imcc@mespune.in>, rohinihonap@gmail.com, principalspcpune@gmail.com, Arun Mokashi <mokashiarun7@gmail.com>, Dr Adya Sharma <director@scmspune.ac.in>, Hrishikesh Soman <principal@symbiosiscollege.edu.in>, shobha supekar <directormnvti@gmail.com>, erach.bharucha@bvieer.edu.in, SameerTalwalkar <sameer.talwalkar@seamedu.com>, armadgulkar@gmail.com, seema.purohit@despune.org.in, sagar.y.pawar9@gmail.com, vinay.chati@gmail.com, kharat.sanjay@gmail.com, alka.padhye@gmail.com, director@scon.edu.in, Principal pdeaamcollege <principal@pdeaamcollege.edu.in>, drashokbhusawal@gmail.com, kaveri.college@gmail.com, asnatu@bkps.edu
Cc: Priya Deshpande <sandeepriyad@gmail.com>, Prajakta Kulkarni <prajakta.kulkarni@bnca.ac.in>, Rajashree Patwardhan <dr.rbpatwardhan@gmail.com>, Swapnaja Patwardhan <sp.imcc@mespune.in>, Manasi Ustoorikar <msu.imcc@mespune.in>, sudhirtarote@gmail.com, Subanggi Paatil <subanggipaatil@gmail.com>, EVS HOD FCP <evshod.fergussoncollege@gmail.com>, Yogesh Pisolkar <yogesh.pisolkar@scmspune.ac.in>, swatiadixit@gmail.com,Manasi Desai <manasi.desai@symbiosiscollege.edu.in>, shivani.joshi0@gmail.com, amrutadagaledm@gmail.com, "sagar.gokhale" <sagar.gokhale@seamedu.com>, Vidya Wable <vidyapawar9@gmail.com>, Shilpa Avate <shilpa.avate@siu.edu.in>, abhimantaral@gmail.com, "Dr. Prachi Kshirsagar" <drprachi.kshirsagar@gmail.com>, sdkulkarni14@gmail.com, Shilpa Khadse <shilpa.khadse@indusschoolpune.com>, Anupriya Dhooli <anupriya.dhooli@indusschoolpune.com>, oliver.drishila@indusschoolpune.com, Shalaka Nagarkar <shalaka.nagarkar@indusschoolpune.com>, Salomie Paul <salomie.paul@indusschoolpune.com>, Kavita Baraskar <kvtbaraskar@gmail.com>, bmcc.studycircle@gmail.com, "Gokhale R.D." <rdgokhale@bmcc.ac.in>, BHOSALE KISHOR S <kishorsbhosale@rediffmail.com>, "Bhosale K.S." <ksbhosale@bmcc.ac.in>, ksbbmcc2018@gmail.com, MMSD85 <MMSD85@gmail.com>, nandini.mmsid@gmail.com, pradnyapatki@bkps.edu, barhate.raksha@rediffmail.com, IshaChiplunkar <cisha253@gmail.com>, Nayaneesh Deshpande <nayaneeshdeshpande@gmail.com>

Date: 18th Jan 2022.To,

Hon. Principal

Kind Attn: Hon. Teacher Representative

Sub: Result of 'Kirloskar Vasundhara Green College Clean College Trophy Competition 2021-22'.

Dear Sir/Madam,

Kirloskar Vasundhara Green College Clean College Competition has been organized for the last 6 years. We are thankful to you and college management for the whole hearted support to this competition. The response and enthusiasm from Eco Rangers wasnoteworthy.

This year we also received a good response from a number of colleges for the subject: 'Green technologies to make the campus green and clean'.

Eco Rangers from eleven colleges presented their concepts online on 8th Jan 2022. With this letter, I am happy to announce the result which has been finalized unanimously by all the judges.

- **First Prize** : H. V. Desai College
- **Second Prize** (Joint): Modern College, Ganeshkhind and Dr. Bhanuben Nanavati College of Architecture.
- **Third Prize** : Fergusson College

- **Consolation Prize** (Two) : Annasaheb Magar College and NCL Junior College

- **Certificate of Participation:** S.P. College, BKPS College of Architecture, Symbiosis College of Arts and Commerce, B.M.C.C.,Symbiosis Biodiversity.

Note :

- Due to rising cases of Corona, we are not organizing **offline** prize distribution ceremony.
- We are willing to hand over the trophy / citation at your place after **25th of Jan.** as per your convenience.

Heartiest congratulations to all the winners and participants.

Thanks

Virendra Chitrav

(Festival Director)

9822975881

मगर महाविद्यालयात पर्यावरणीय प्रयोग

बोटॅनिकल गार्डनही ठरतेय आकर्षणाचे केंद्र

पुणे, ता. ३१ : पर्यावरण रक्षणासाठी विविध पातळ्यांवर तंत्रज्ञान विकसित केले जात आहेत. विद्यार्थ्यांमध्येही पर्यावरण रक्षणाचे बीज रुजावे यासाठी हडपसर येथील अण्णासाहेब मगर महाविद्यालयाने प्रयोग केला आहे. महाविद्यालयात मुलींच्या सॅनिटरी पॅडच्या कचऱ्यापासून, प्रयोगशाळेतील प्रयोगादरम्यान निर्माण होणाऱ्या द्रव कचऱ्याच्या (लिक्विड वेस्ट) व्यवस्थापनातही विविध प्रयोग करण्यात येत आहेत. तसेच येथील 'बोटॅनिकल गार्डन'मध्ये होत असलेले औषधी वनस्पतींचे संगोपनही सध्या आकर्षणाचे केंद्र ठरत आहे.

महाविद्यालयात विद्यार्थी आणि शिक्षकांच्यावतीने आधुनिक तंत्रज्ञानाचा वापर करत महाविद्यालयाच्या परिसरात पर्यावरणपूरक प्रकल्प तयार करण्यात आले आहे. या प्रयोगासाठी महाविद्यालयाला नुकतेच 'किर्लोस्कर वसुंधरा'च्या 'ग्रीन कॉलेज, क्लीन कॉलेज' स्पर्धेत उत्तेजनार्थ पुरस्कारही मिळाला. प्राचार्य डॉ. पंडित शेळके, उपप्राचार्य डॉ. प्रशांत मुळे यांच्या मार्गदर्शनाखाली सुक्ष्मजीवशास्त्र आणि पर्यावरणशास्त्र विभागाच्या प्रमुख

पान ४ वर »

“ महाविद्यालयातील अनेक विद्यार्थ्यांचा या प्रयोगांमध्ये सक्रिय सहभाग असल्याने त्यांच्या कुटुंबीयांनादेखील आनंद होत आहे. महाविद्यालयात निर्माण होणारे खत शेतीसाठी उपयुक्त असून, ते परिसरातील शेतकऱ्यांना देण्यात येत आहे.

- प्रा. नेहा पाटील, सूक्ष्मजीवशास्त्र आणि पर्यावरणशास्त्र विभागप्रमुख

हडपसर, पुणे : अण्णासाहेब मगर महाविद्यालयातील औषधी वनस्पतींचे बोटॅनिकल गार्डन.

गार्डनची वैशिष्ट्ये...

महाविद्यालयातील बोटॅनिकल गार्डनमध्ये एकूण ३०० औषधी वनस्पती आणि इतर प्रकारच्या १२० वनस्पती आहेत. शतावरी, तुळस, अश्वगंधा, हळद, शिरीष अशा विविध प्रकारच्या औषधी वनस्पतींचा समावेश आहे. या औषधी वनस्पतींचा वापर संशोधनासाठी केला जात आहे, तसेच वनस्पतींचे संगोपन करताना किमान एका वनस्पतीबाबत विद्यार्थ्याला माहिती मिळत आहे. सध्या औषधी वनस्पतींचे संशोधन आणि त्याचा अभ्यास यावर भर दिला जात आहे. त्या अनुषंगाने इतर महाविद्यालयांनादेखील संशोधनासाठी या औषधी वनस्पतींचा वापर करता येईल.

पर्यावरणपूरक प्रकल्प

- सौर पीव्ही प्लांट, सौर पथदिवे आणि वॉटर हिटर यासारख्या अक्षय ऊर्जेचा महाविद्यालय आणि वसतिगृहात प्रभावीपणे वापर
- घनकचऱ्याचा व्यवस्थापनासाठी गांडूळ खत प्रकल्प
- द्रव कचरा व्यवस्थापनासाठी 'ईटीपी प्लांट'
- भूगर्भातील पाण्याची पातळी वाढविण्यासाठी जलपुनर्भरण प्रणालीचा वापर
- प्लास्टिक कचरा व्यवस्थापन व संगणक विज्ञान विभागातील ई-कचरा संकलन
- महाविद्यालय आणि वसतिगृह परिसरात सॅनिटरी नॅपकिन व्हेंडिंग मशिन आणि डिस्पोजेबल मशिन बसविले

मगर महाविद्यालयात पर्यावरणीय प्रयोग

» पान १ वरून

प्रा. नेहा पाटील, वनस्पतिशास्त्र विभागाच्या डॉ. दीपावली शिरुकसर आणि सहायक प्राध्यापक मेघमाला वाघमोडे यांच्या नेतृत्वाखाली विद्यार्थी हे प्रयोग करीत आहेत.

या बाबत प्रा. पाटील यांनी सांगितले की,. इ-कचरा व्यवस्थापन, विजेसाठी अक्षय ऊर्जेचा वापर, प्रयोगशाळेतील रासायनयुक्त पाण्यावर प्रक्रिया व त्याचा पुनर्वापर, गांडूळ खत प्रकल्प आदींचा समावेश आहे. महाविद्यालयाने ग्रीन ऑडिट अहवालदेखील तयार केला आहे. त्यानुसार अक्षय ऊर्जेच्या वापरामुळे पहिल्या वर्षात अंदाजे ५५,४८० किलोवॉट वीजनिर्मिती झाली. यामुळे पहिल्या वर्षासाठी सुमारे ३० मेट्रिक टन कार्बन डायऑक्साईड (सीओ २) उत्सर्जन कमी करण्यात यश आले.

Pune District Education Association's

Annasaheb Magar Mahavidyalaya, Hadapsar, Pune-28.

2. Reuse of Plastics Sparrow conservation by Zoology department:

Reuse of plastic: Feeding and Watering devices for birds made by Zoology students from collected plastics.

Reuse of plastic: Birds Feeders and Watering devices are kept in college campus

सकाळ

हडपसरमध्ये चिमणीसंवर्धनासाठी उपक्रम

हडपसर, ता. २० : अण्णासाहेब मगर महाविद्यालयातील प्राणिशास्त्र विभागाच्या विद्यार्थ्यांनी पक्ष्यांना अन्न, पाणी व निवारा देण्यासाठी टाकाऊ वस्तूंपासून कृत्रिम घरटे व फिडर बनवून महाविद्यालय परिसरात लावली आहेत. 'जागतिक चिमणी दिना'चे औचित्य साधून विद्यार्थ्यांनी हा उपक्रम राबविला.

हडपसर : टाकाऊ वस्तूंपासून कृत्रिम घरटे, फीडरसह अण्णासाहेब मगर महाविद्यालयातील प्राणिशास्त्र विभागाचे विद्यार्थी.

प्राणिशास्त्र विषयाचे विद्यार्थी सचिन पवार, ओंकार माने व अभिजित लाटे यांनी प्लास्टिक बॉटल, नारळाचे शहाळे, पुठ्ठे, कागद इत्यादी टाकाऊ साहित्य गोळा करून त्याचे घरटे तसेच धान्य व पाण्यासाठी फीडर बनविले. महाविद्यालय परिसरातील विविध पंचवीस ठिकाणी तयार केलेली घरटी व फीडर बसविण्यात आले आहेत. प्राचार्य डॉ. पंडित शेळके, प्राणिशास्त्र विभाग प्रमुख डॉ. शरद गिरमकर, डॉ. अंजू मुंढे यांनी त्यासाठी मार्गदर्शन केले. प्रा. रूपाली भावसार, प्रा. माधुरी सावंत, संदीपान पवार, नारायण खोमणे, संजय पवार यांनी सहकार्य केले.

प्राणिशास्त्र विभागाचे प्रमुख डॉ. शरद गिरमकर म्हणाले, ''महाविद्यालय परिसरातील सापडलेल्या टाकाऊ वस्तूंपासून पक्षांचे टिकाऊ घरटे व अन्न पाण्यासाठी फिडर बनविण्यात आले.''

Pune, HadapsarToday
21/03/2022 Page No. 5

Reuse of plastic: News on World sparrow Day about reuse of plastic

3. **Manufacturing and sale of vermicompost by Botany department:**

Active vermicomposting unit with vermicomost prepared in college campus.

Excess vermicompost made available to stakeholders on "No profit, No loss" basis.

We are using only vermicompost to garden plants (Strictly no chemical fertilizers).

Pune District Education Association's

Annasaheb Magar Mahavidyalaya, Hadapsar, Pune-28.

Activity Report

Name of Department/ Committee	**Zoology and Botany**	Academic Year: **2021-22**	Name of Coordinator: **Dr. Sharad V. Giramkar** **Sunita Danai-Tambhale**
Name of the Activity	**Vermicompost for sale**		
Day & Date: **Wed. 15th Dec. 2021**	Time/ Duration: **12:30 pm**	Venue: **Shree Chatrapati Shivaji Halll Annasaheb Magar Mahavidyalay Hadapsar Pune 28.**	No of Participants: 09

1. Brief information about the Activity:

Topic	"Vermicompost for sale
Objectives	To recycle college waste into vermicompost. To enhance green campus-clean campus activity.
Methodology	College waste converted to vermicompost by using earthworms and to make available to college plants and stakeholder.
Detail Report of Activity	Separate sheet attached.

2. Proofs and Documents Submitted:

Documents	Yes/No	Documents	Yes/No
Detail Report of Activity	Yes	Activity Photos (Geotagged)	Yes
Notice	...	News Published	...
Invitation and Thank giving Letters	...	Participation Certificate (Specimen)	...
Attendance of Participants	Yes	Feedback Forms	...

Signature of Coordinator

Signature of HOD/ Committee Chairman

Head
Department of Zoology
Annasaheb Magar Mahavidyalaya,
Hadapsar, Pune-411028.

Signature of IQAC Coordinator

Co-ordinator
IQAC Committee
Annasaheb Magar Mahavidyalaya,
Hadapsar, Pune-28.

Principal

PRINCIPAL
Annasaheb Magar Mahavidya
Hadapsar, Pune - 411 028

3. For IQAC Use only:

IQAC File No	IQAC Document No	Criterion/Metric No

Report:

On the occasion of the Golden Jubilee of PDEA's Annasaheb Magar Mahavidyalaya, Hadapsar, Pune-28, the Dept. of Zoology and Botany has prepared vermicompost in college campus to recycle college campus waste. Prepared vermicompost was used as fertilizer to campus plants. Excess vermicompost is made available to stakeholders. Inauguration of vermicompost for sale was done by the auspicious hands of Honorable Mr. Anirudha Deshpande (Managing Director, City Corporation Ltd), Honorable Adv. Sandeep Kadam (Honorary secretary, PDEA), Honorable Adv. Mohanrao Deshmukh (Treasurer, PDEA) and Honorable Principal Dr. Pandit Shelke and others. Vermicompost was sale in principle of No Loss, No Benefit. Total 09 stakeholders purchased 17 kg. vermicompost and college received 595 rupees from the same.

Inauguration of vermicompost for sale by the auspicious hands of Honorable Mr Anirudha Deshpande (Managing Director, City Corporation Ltd), Honorable Adv. Sandeep Kadam (Honorary secretary, PDEA), Honorable Adv. Mohanrao Deshmukh (Treasurer, PDEA) and Honorable Principal Dr. Pandit Shelke and others

Distribution of vermicompost to stakeholders

Audience of inaguration programme

18/04/2022, 11:48

Pune District Education Association's

Annasaheb Magar Mahavidyalaya, Hadapsar

Hadapsar, Pune - 411028

Ph.no. 02026990376, 02026009 Email ID: plasma_amm@yahoo.co.in

uni.rgi.no. py/pn/a.s.c./029(1971) Junior college. 11-15-005

RECEIPT

Receipt No : BDFMANUAL/2022-2023/2 **Dated :** 18/04/2022

Name : SHRI PAWAR S E

Mode Of Payment : Cash

CCF	
Total Amount	385.00
	385.00

Remark : ghandul khat amount

Amount In Words : Three Hundred and Eighty-Five Rupees Only

Cashier : (S KAMTHE)

Annasaheb Magar Mahavidyalaya * Senior * Hadapsar Pune 28

Pune District Education Association's

Annasaheb Magar Mahavidyalaya, Hadapsar

Annasaheb Magar Mahavidyalaya

Hadapsar, Pune-411 028 Ph. : 020-26990376

Receipt No : BDFMANUAL/2022-2023/9

Name : Shri Pawar S E

Mode Of Payment : Cash

RECEIPT

Dated : 28/05/2022

CCF	
Total Amount	210.00
	210.00

Remark : Ghandul Khat Amount

Amount In Words : Two Hundred and Ten Rupees Only

Cashier : (BAVADHANE RAJESH)

अ. क्र.	नाव	वजन	रक्कम	सही	मो- नंबर
१	माने श्रेया सुर्यकांत	१ कि.	रु. ३५/-	Imane	9112927452
२	"	१ कि.	रु. ३५/-	Imane	"
३	प्रा. परदेशी मॅडम	५ कि.	रु. १७५/-		9421015033
४	प्रा. श्री देशपांडे सर	२ कि.	रु. ७०/-		9890773043
५	प्रा. वाघमोडे मेघमाला.	२ कि.	रु. ७०/-	Waghmode	9766262593
	एकूण	११ कि.	रु. ३८५/-		

बिल्डींग खाते जमा रु. ३८५/- दि. ३८/०४/२०२२

१	श्रीमती विद्या खराडे	२ कि.	रु. ७०/-	Anjita	९६५७३८७२५८
२	श्रीमती ज्योती कदम	१ कि.	रु. ३५/-	Anjita	९९६००२०९३५
३	श्रीमती मोरे मॅडम (बाबळे)	१ कि.	रु. ३५/-	Anjita	८६०५३००७५०
४	श्री सी.जी.पवार	२ कि.	रु. ७०/-	Anjita	७०५७४९२२९९
	एकूण	६ कि	रु. २१०/-		

बिल्डींग खाते जमा रु. २१०/- दि. २८/०४/२०२२.

Head
Department of Zoology
Annasaheb Magar Mahavidyalaya,
Hadapsar, Pune-411028.

P.D.E.A's Annasaheb Magar Mahavidyalaya, -28.
Arts, Science and Commerce, Hadapsar Pune 411028 (Year-2021-22)
Affiliated to Savitribai Phule Pune University

Water Audit 2021-22

Under the guidance of our respected Principal Dr .P.N. Shelke the environment science department has assigned a task of water management keeping in mind the main environmental aspect water on earth .

It also helps to inculcate these values among the students in the campus.

This has resulted in development of a model of sustainability with ecological balance in 5.50 acre area of our campus.

We plan to achieve this by implementing principles of sustainability on three fronts i.e.- water, energy and solid waste management.

This has led to an example of development along with ecological preservation.

We have implemented various sustainable technologies such as rain water harvesting, solar power generation, organic waste generation, led lighting etc.

Rain water harvesting

1. Our campus contain 6 bore wells those are thoroughly studied with respect to depth , channeling and the details that help in replenishment of ground water table of the campus and surrounding environment .

2. The study was also done for management of water at time of water scarcity in summer seasons in the campus.

3. Our internal team and various external agencies focused on specific problem areas that are in need of ground water recharge.

4. This approach led to the theme of sustainability and consciousness towards the environment.

Implementation of Details:

A) Number of Borewell – 01

Details: Back side of playground

b) Number of water Harvesting Plants: 0

Details:

1) In front of Main gate -2

2) Near Science Building

3) Behind Library

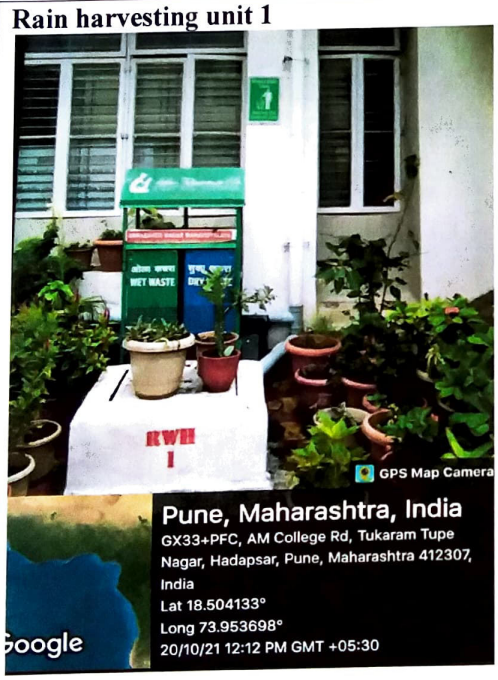
4) Behind Law College

5) Near Canteen

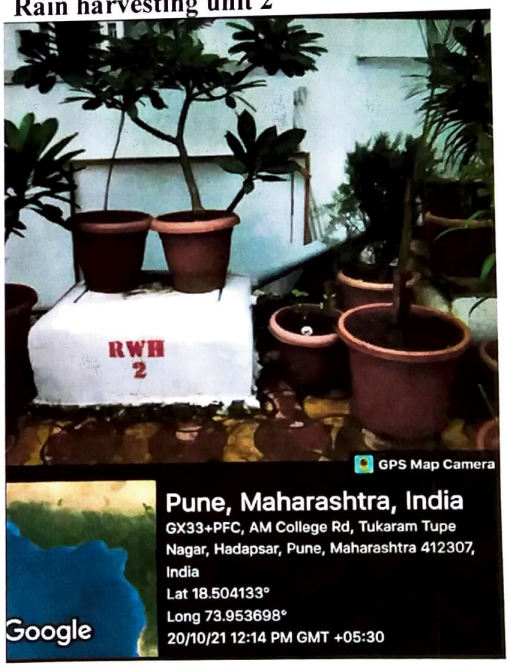
The Annasaheb Magar College campus uses the harvested water for gardening purpose in college and Nursery viz Arts, science and commerce Building. Water harvested from roof top surface runoff is very much sufficient in gardening purpose for entire college campus.

Regular checking of Pipelines is carried out by supervisors and Plumbers for corrosion and Leakage if required. The portability of water is also regularly checked by Department of Microbiology.

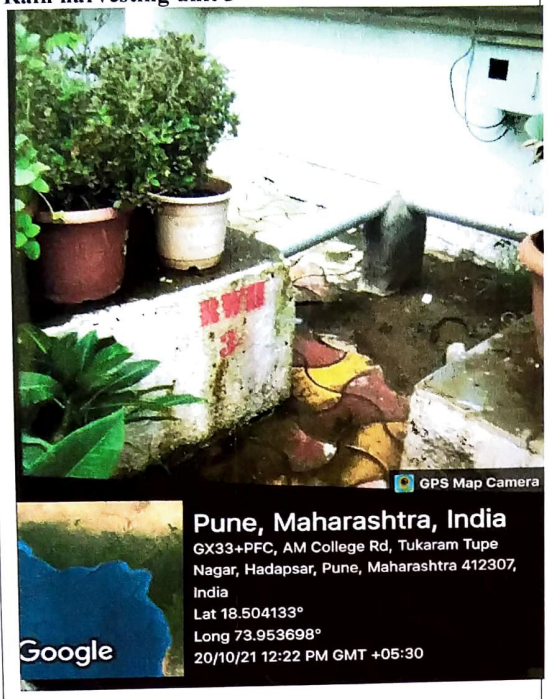
Rain harvesting unit 1



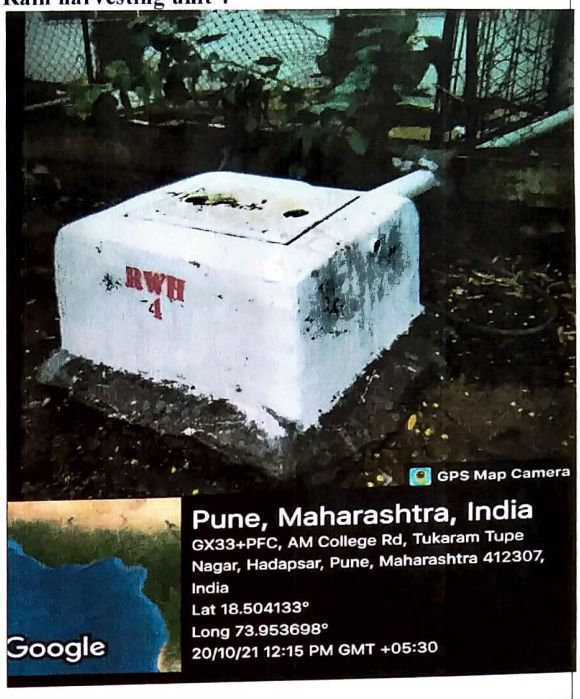
Rain harvesting unit 2



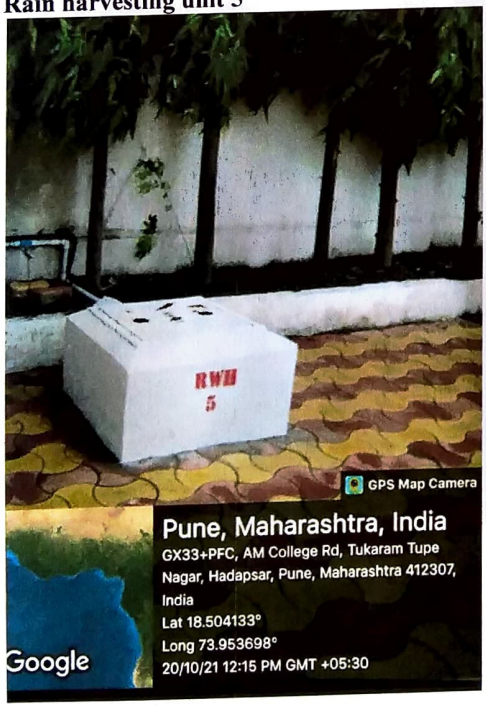
Rain harvesting unit 3



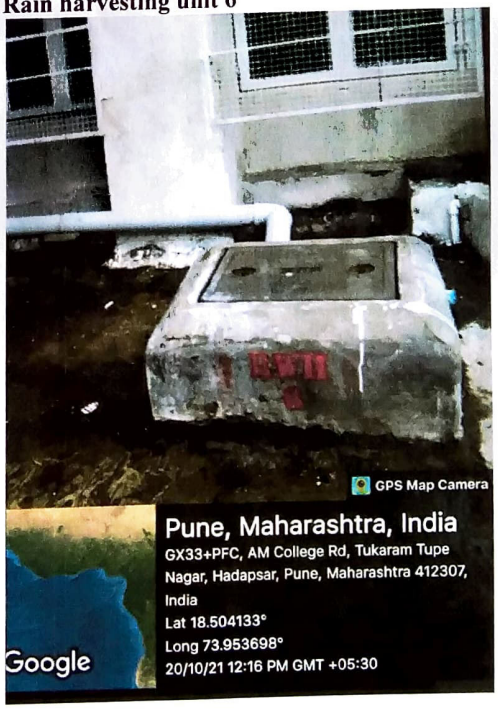
Rain harvesting unit 4



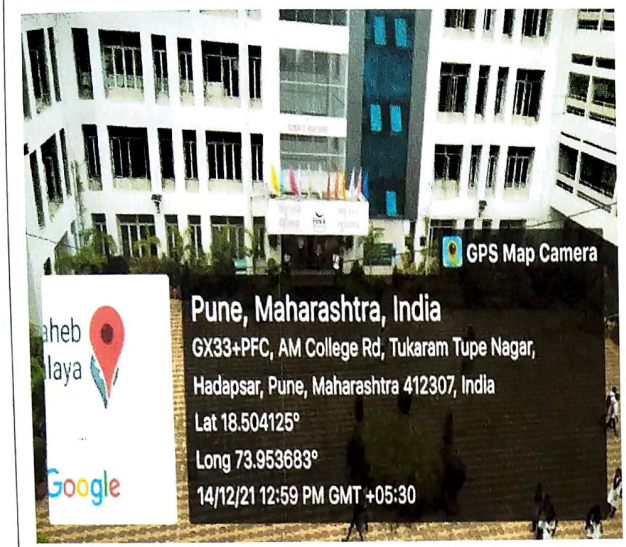
Rain harvesting unit 5



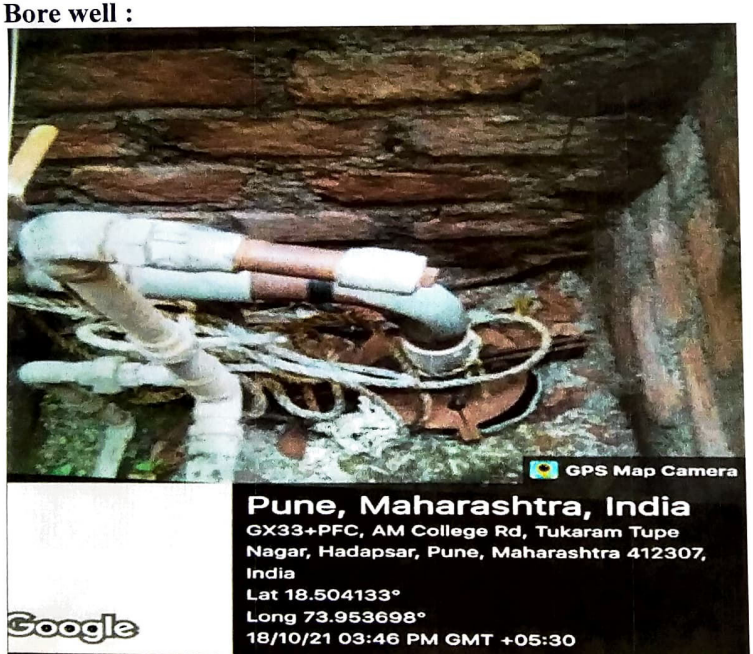
Rain harvesting unit 6



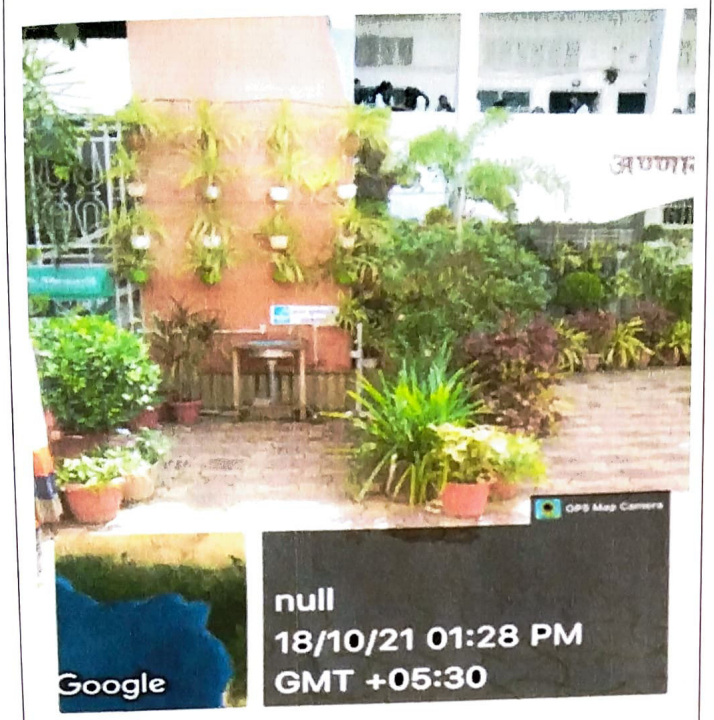
Rain water harvesting pipe :



Bore well :



Bore well: Recharge of ground water



RO system:

Head

Department of Environmental science

IQAC

Co-coordinator

Principal

Dr .P.N. Shelke