





# MARUTRAOJI GHULE PATIL ART'S, COMMERCE AND SCIENCE COLLEGE,

Dist-Ahmednagar, Pin-414111 (Maharashtra)



# Assessment and Accreditation Document 1st cycle

A.Y. 2017-2018 to 202<u>1-2022</u>

**Criterion 7-Institutional Values and Best Practices (100)** 

**Key Indicator - 7.1 Institutional Values and Social Responsibilities (50)** 

**Details: -Data Verification and Validation (DVV) for** 

**7.1.2** Environmental Consciousness and Sustainability and Divyangjan friendly initiatives of Institute.





### Bahujan Hitay , Bahujan Sukhay! Janata Shikshan Prasarak Mandal's

# MARUTRAOJI GHULE PATIL ART'S.

COMMERCE AND SCIENCE COLLEGE
Ahmednagar, 414111 Ph.No. 0241-2779497

Web-www.mgpcollege.com. e-mail-mgpcollege@gmail.com

Online College Code No-C02430

ID No PU/AN/ACS/111/2009

College Code No.893,

Pun.Code-CAAA017120

Principal - Dr. A.K. Pandarkar (M.Sc.Ph.D.FZSI)

Ref. No. MGP/SSR/2023-24/21

Date 05/06/2023

#### **DECLARATION**

This is to Declare that this document is Prepared by Internal Quality Assurance Cell (IQAC). All the supportive documents, Links, Reports, Presentation, Photographs, Numerical Data and True copy etc. Submitted/Presented in this document are verified by IQAC. The declaration is for the purpose of NAAC accreditation of HEI for 1st Cycle academic year 2017-2018 to 2021-2022.

Date: 05/06/2023

Place: Ahmednagar.

D. F. S. B. Darbatonde

1QAC

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PRINCIPAL
Marutraoji Ghule Patil Arts,
Commerce & Science College
Nagapur, Ahmednagar
College Code-893



### Criterion 7.1.2. The institution has facilities and initiatives

### Index

Sr. No	Particulars	Page.No
1	Alternate sources of energy and energy conservation measures-policy	05
2	Solar Lamp Installed in the campus	07
3	Energy saving efficient Equipment	10
4	Degradable & Nondegradable waste Management - Policy	13
5	Water Conservation -Policy	19
6	Rain Water Harvesting & Recharge in Campus	20
7	Program on water conservation	21
8	Green campus initiatives -policy	26
9	Disabled-friendly, barrier free environments -Policy	37



### Alternate sources of energy and energy conservation measures

#### ENERGY POLICY

#### Preamble

Energy is now a vital part of everyday life. As per the Environment Policy 2020 of UGC, that sets long-term goals for educational institutes to conserve natural environment, develop sustainable solutions and control energy consumption, an educational institution has to evolve programs and policies that turns the institute into a carbon-negative institute and promote in educating students and employees on environmental concerns and sustainability, be responsive to the emerging challenges in the Energy sector and Sustainable development of the State and Country. So, it is essential for the educational community to practice sustainable energy that will provide favorable effect on the eco-system.

The Energy Policy of the Institution will thus be effective in organizing structured programs to promote awareness on the proper management and conservation of energy those models' resource-efficient and low-carbon campuses that demonstrate practice for sustainability.

#### **Features in the Campus:**

- 1. MSEB Electricity connection
- 2. Solar Street Lamp installed in the campus
- 3. Generator Backup (Diesel)
- 4. Power Backup UPS Battery for administrative office
- 5. LED Light fixtures.
- 6. Repair, Re-use and frequent maintenance of equipment to ensure sustainable longevity.
- 7. Effective maintenances through annual maintenance.

#### 1. Energy Policy Statement

The energy policy articulates commitment of the Institution to the conservation of energy by defining energy management protocol for electrical energy systems of the institution, focusing on sustainable practices of Energy Conservation and maintaining an eco-friendly green campus.

#### 2.Objectives

- Utilize energy resources efficiently by introducing innovative technologies
- Use of renewable energy.
- Optimize the Energy consumption and cost.
- Reduce, Reuse and Recycle.
- Carry out regular internal energy audits to identify energy conservation opportunities.
- Regular monitoring and follow up procedures managed by the Institution Energy Audit for effective implementation at department levels.
- To train faculty, non-teaching staff and students to make the Institute a role model in the



area of Energy conservation.

• Promote awareness related with Energy conservation among various sections of society.

#### 3.Action Plan

- 1. Regular Monitoring and benchmarking resource use and waste generation.
- 2. Setting short-term and long-term targets and conservation strategies, to achieve and surpass goals for zero-carbon Campus.
- 3. Use of energy efficient, star labelled equipment.
- 4. Periodic maintenance and replacement of other lights/lighting fixtures to LED.
- 5. Maintaining a sustainable approach by use of existing equipment efficiently till its life cycle ends, and replacing with more efficient equipment when necessary.
- 6. Maximum use of Daylight for Indoor illumination and natural ventilation.
- 7. Maximize use of Renewable Energy Grid Interactive Solar PV System installed in the Campus.
- 8. Encourage students to undertake Energy Management, Energy optimization techniques, Renewable Energy Harvesting thereby promoting a sense of awareness towards Energy use and its cost.
- 9. Monitor and evaluate the energy performance level.



### Solar Lamp Installed in the campus

#### Bill & Images

#### **SWATEJ SOLAR SYSTEMS**

Infront of Samar Palace, Pipeline Road, Savedi, Ahmednagar

Phone no.: 9860909176 Email: swatejsolar@gmail.com GSTIN: 27AQHPM8535H1ZH State: 27-Maharashtra



#### **Tax Invoice**

Bill To: Marutiraoji Ghule College, Bolhegaon Place of Supply: 27-Maharashtra

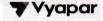
Invoice No.: 38 Date: 21-04-2023

HSN/ SAC Unit Price/ unit **Amount** Quantity Item name ₹ 4,200.00 Solar Street Lights 9Watt ₹ 8,750.00 ₹ 39,200.00 (12.0%)with solar panel ₹810.00 Street Light Pole 2 ₹ 2,250.00 ₹ 5,310.00 (18.0%) ₹ 5,010.00 Total 44,510.00 INVOICE AMOUNT IN WORDS Sub Total ₹ 39,500.00 ₹ 2,100.00 SGST@6.0% Forty Four Thousand Five Hundred and Ten Rupees ₹ 2,100.00 CGST@6.0% SGST@9.0% ₹ 405.00 ₹ 405.00 CGST@9.0% Total ₹ 44,510.00 ₹ 0.00 Received Balance ₹ 44,510.00

For, SWATEJ SOLAR SYSTEMS

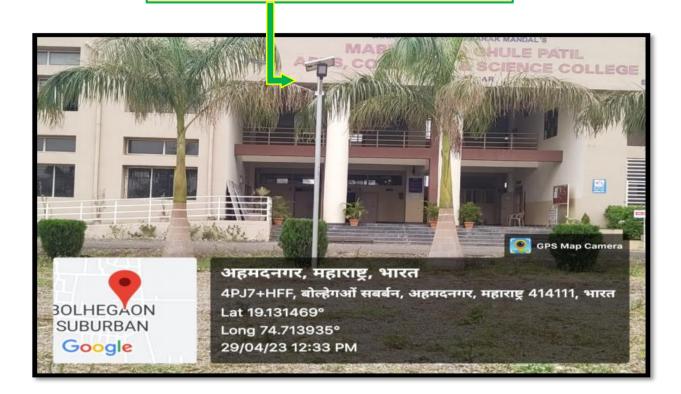
**Authorized Signatory** 

www.vyaparapp.in





### **Solar Lamp Installed in the campus**

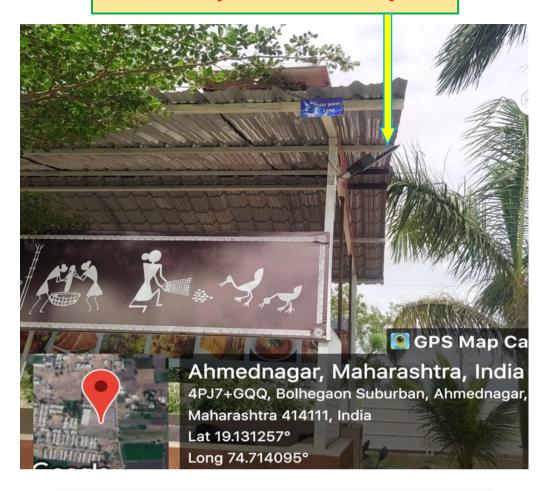


### Solar Lamp Installed near parking





### **Solar Lamp Installed in the campus**

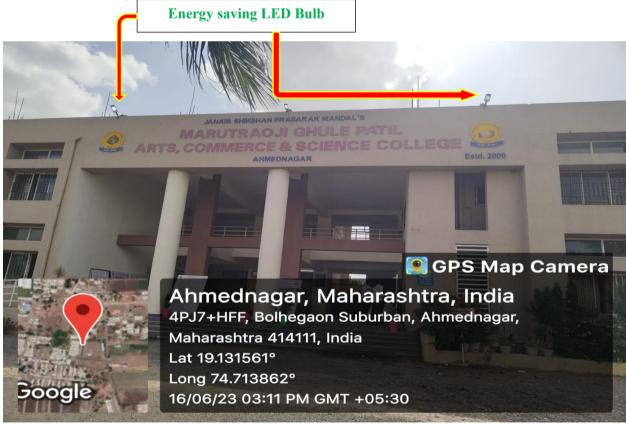






### **Energy saving efficient Equipment**







### **Energy saving efficient Equipment**



### **Energy saving efficient Equipment**





#### **ENERGY SAVING INITIATIVE**







#### WASTE MANAGEMENT POLICY

#### **Preamble**

Waste Management is one of the challenges that educational institutions have to face in accomplishing the sustainability goals. In 2016 the Union Ministry of Environment, Forests and Climate Change (UMoEF &CC) released the updated Solid Waste Management (SWM) Rules which applies to every Solid Waste generator contributing to Waste generation in the premises. In recent years, technologies have been developed that not only help in generating substantial quantities of decentralized energy but also in reducing the quantity of Waste for its safe disposal.

#### **Features in the Campus:**

- A. Vermi composting plant.
- B. Dust bins for to collect wet & dry waste.
- C. Student Projects on Waste management

#### 1). Waste Management Policy Statement

The MGPC Waste Management Policy articulates commitment to reducing its environmental impacts through effective Waste Management and sustainable practices converting Waste into resource. The Campus strives to work for obtaining a Zero Waste plan thus obtaining its Eco-friendly status through the policy of "reduce, reuse and recycle".

#### 2) Objectives

- Minimizing the consumption of natural resources.
- Avoiding and minimizing the generation of Waste.
- Reducing, re-using, recycling and recovering Waste.
- Ensure segregation of Waste at the source
- Treating and safely disposing of Waste to reduce the pollution.
- Promoting and ensuring the effective delivery of Waste services.
- Achieving integrated Waste Management reporting and planning.
- Ensure that the stakeholders are aware of the impact of Waste on their health, wellbeing and the environment through Awareness programs
- Ensure the protection of the environment through effective Waste Management measures.
- Encourage Waste to energy options through projects and research work

#### 3) Waste Management Plan

- 1. Setting short term and long-term targets and conservation strategies pertaining to the UN Sustainable Goals.
- 2. Initiate sustainable practices like Composting for Waste generated from the Canteen.
- 3. Reduce e-waste to maximum with proper maintenance, before moving on to Replace & Recycle stage.
- 4. Continue to introduce innovative strategies to reduce paper Waste and plastic Waste



in the Campus

- 5. Ensure effective disposal methods for Laboratory and Hazardous Wastes generated in the campus.
- 6. Provide training for faculty, students and staff about Waste Management and practicing Sustainable habits.
- 7. Include Sustainable Project learning strategies for Waste Management in the curriculum with Industry tie up.

#### 4) Procedure

#### **Solid Waste Management –**

To reduce the problem of the waste; college has kept in the campus at necessary places disposal dust bins. Waste is collected everyday once in the evening. It is then processed on the basis of the nature of the waste. Vermicomposting- vermicomposting is the product of composting process using a species of warms. The worms are used to create a mixture of decomposing vegetable or food waste, bedding material and vermicast. For the process of vermicomposting organic waste, dry leaf of the plants, grass, kitchen waste from the college canteen and other waste are collected from different places of the campus. After the complete process of vermicomposting over a certain period are ready to harvest and then the produced biofertilizer used for the plants on the campus. This vermicomposting plant developed by science faculty to strengthen the ecofriendly environment in the college premises.

#### Liquid waste management-

The hazardous chemicals are used in low proportion and carefully; to conduct the practical in the laboratory. The waste drained after reasonable treatment. An attempt is made to dilute the liquid waste while draining them. A certain waste is disposed by burning them.

#### E- Waste Management-

yet the problem regarding the e- waste have not occurred to college. If in future occurred the e- waste will be sold as scrap materials on the basis of the rules of purchase committee and ruling out from dead stock register for future records in order to ensure their safe recycling. If some parts are found useful in other system they will keep outside for future use.



Images of vermin composting plant







#### PURCHES BILL OF DUST BINS AND OTHER MATRIAL

#### TAX-INVOICE

**2**.- 2778312

#### AMOL ENTERPRISES

Mob.- 9423167072

Plot No.P - 40 A/2, Near Chaken Oil Mill, M.I.D.C., A'Nagar

Stationary, Fax.Spy. Bainding, Lamination, Computer Job Work & Corrier Service

No. 06

Date: 14106123

M/s. Marutrao Ghule Patil College.

Qty.	Particulars	Rate	Amount
2	Darypin 150 MARE	2000	4000 F
20	Planter - Bahubali -	350	5200 h
40	Dlanter - 191"	00)	4000 h
6	Durt bin-60 LAR	550	3300 L
	Pario -	- 3	
, c	/AT TIN NO. 27870744963 V w.e.f. 31/12/2009 CST TIN NO.27870744963 C w.e.f. 31/12/2009	Total	13800 L

Rs.In Words-

If We hear by certify that my/our registration certificate under the maharashtra value Added tax Added-2002 is in force on date on which the sale of the good specified in this tax invoice is made by me us and that the transaction of sale covered by this tax invide has been effectid by me/us and it shall be accounted for in the turnover of sales while filling of return and the due tax if ony payable on the sale has been paid or shall be paid.

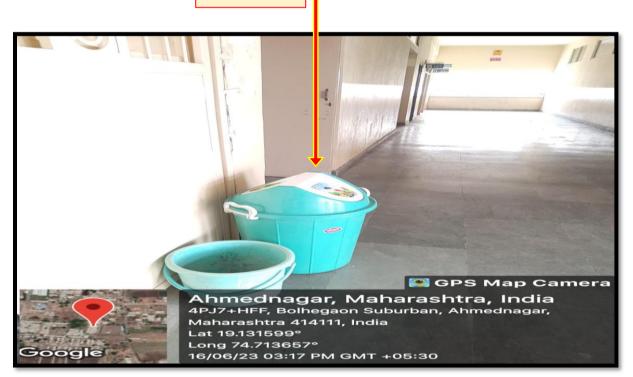
For Amol Enterprises



Images of Dust bins.









#### Dust bins



#### Dust bins





### **Water Conservation**

### WATER MANAGEMENT POLICY

#### **Preamble**

The water is called elixir for life. It is an integral part of ecosystem. Conservation and proper utilization of water will prove beneficial not only for the present era but also future as a part of social responsibility need to do extensive work for water conservation and proper management.

#### **Statement**

Water is the fundamental requirement of life. It touches all life activities such as agriculture, domestic and all socio-economic activities. The water management policy of institution includes all the water related field activities.

#### **Objectives**

- To provide adequate water supplies to meet demands of the campus.
- To provide for groundwater recharge while protecting groundwater resources from overdraft
- To control excessive erosion and manage sedimentation/ situation
- TO Minimize wastage of water & maximize water use.
- The college building is to be used for rain water harvesting.
- To create awareness of effective water conservation projects among students.
- Organize various programs under the leadership of NSS unit in the nearest villages regarding water conservation.
- To increase awareness regarding the importance of water to use & the need for conservation.
- To undertake activities to sensitize people about Climate change.

#### Procedure

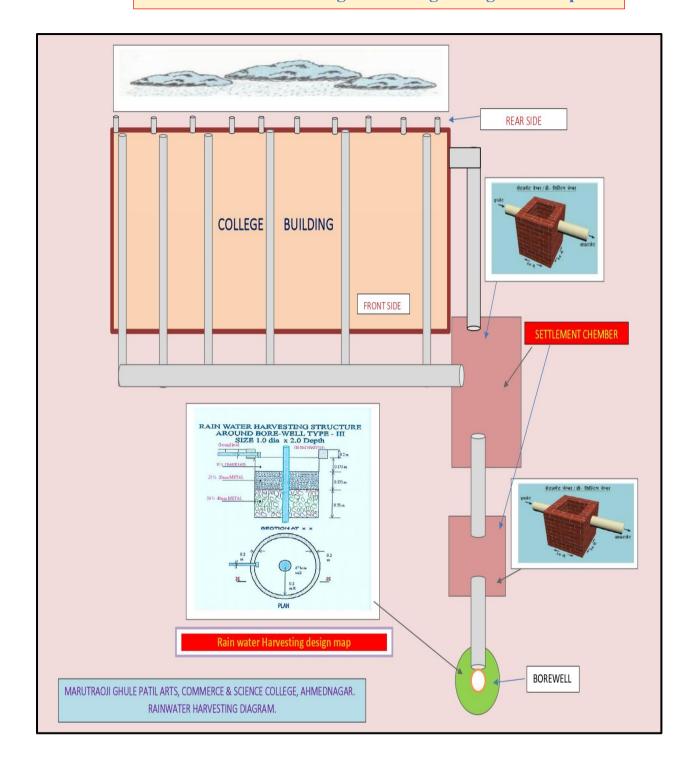
The college campus has borewell for supply of water. But since last few years ground water level found decline. So, the college has started rain water harvesting. The college building has selected for rain water harvesting structure. The rain water which falling on the terrace of the building is systematically collected through pipeline and used to recharge borewell.

Water harvesting	Rain water harvesting at the	e college building. (Root	Area-1304.95sq.mts)
	collected water used to recharge the bore well.		



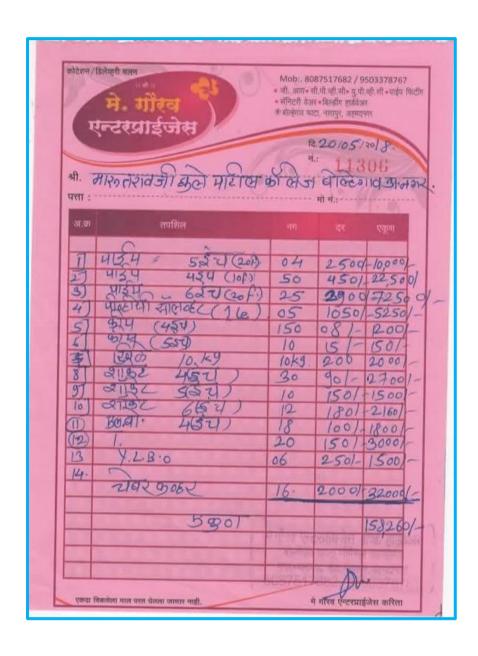
#### DVV

# Rain Water Harvesting & Recharge Design in Campus





### Bills for Rain Water Harvesting & Recharge in Campus





### Rain Water Harvesting structure (Pipeline)



### Rain Water Harvesting structure (Pipeline)





#### 5) Rain Water Harvesting & Recharge in Campus

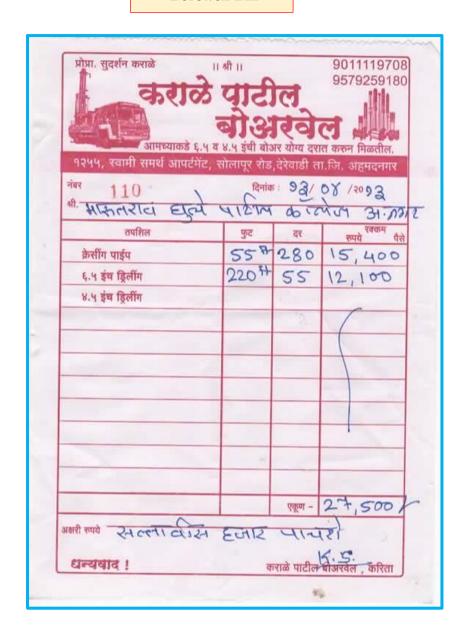








#### **Borewell Bill**





# **Borewell Recharge in Campus**







### Rain Water Harvesting & Recharge in Campus

After harvesting the rain water used to recharge Borewell





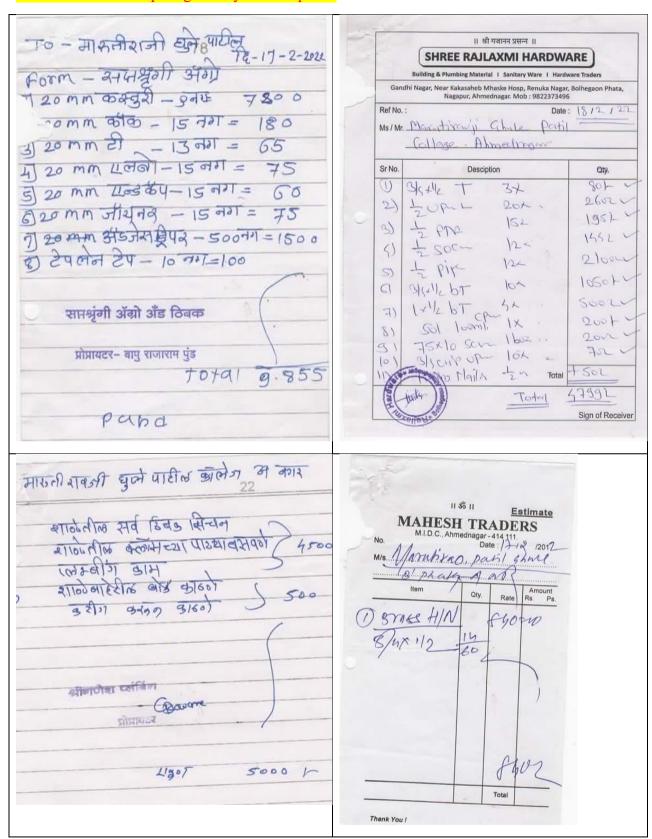
#### WATER CONSERVATION Message.





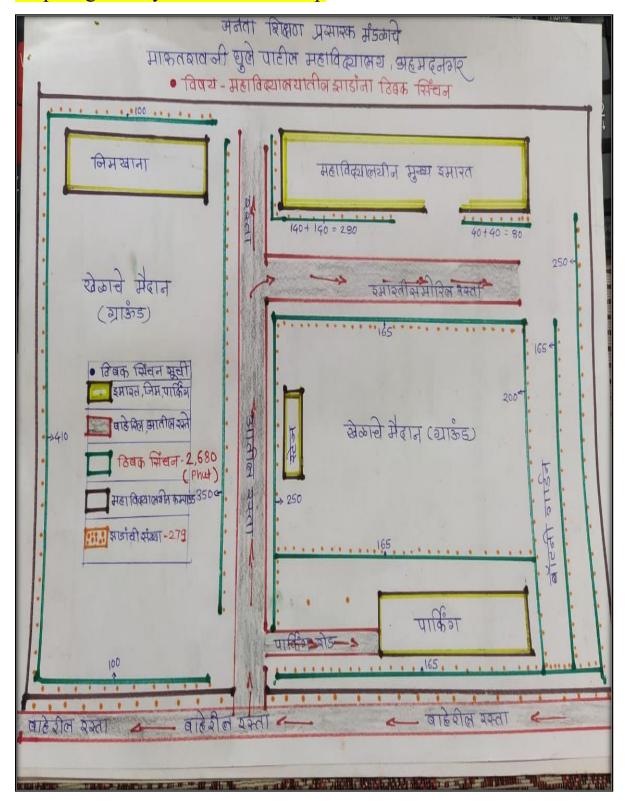
#### WATER CONSERVATION

Purchase Bills of Drip Irrigation system for plants





# Drip irrigation system structure map





### **Program on water conservation**





In Academic Year 2021-22 On behalf of the Nehru yuva Kendra (Govt. of India) & Aadharvd Prathisthan -National Water Mission Program organized in the college.



#### ENVIRONMENT POLICY DOCUMENT

#### **Preamble**

The balanced existence of environment is the secured basis of life. Its conservation is an indispensable aspect of education. The preservation of every natural object is the prime duty of human. Future Technologies should emphasize the dependence between technology and nature. The Technology based product should be Eco Friendly. Proper Environment Management is essential for sustainable development and the Environment Policy is designed in tune with the United Nation's Sustainable Development Goals 2030, realizing that protection of Environment is part of the Institution at social Responsibility for the survival of humanity. This document through the policy Statement makes clear the Institution's approach to Environment protection which will be ensured through the increment greenery with plantation not only in the campus but also beyond the campus through various activities. Environment Audit which is defined by the ICC as a tool shows how any institution is performing for to achieve the aim of safeguarding the environment and natural resources" in the functioning and dissemination of Knowledge.

Besides initiatives for Environment Protection, the Environment Policy includes Energy Management, Waste Management and Water Management which are dealt with separately taking into account the importance of each, and policies and procedures have been formulated for these topics.

#### **Policy statement**

Marutraoji Ghule Patil Arts, Commerce & Science College avows to protect the Environment by maintaining a Green, Eco-friendly campus, creating an awareness among its stakeholders and will do the various environment promotional activities beyond the campus. so as to contribute to making the earth, our common home, a sure haven and a comfortable dwelling for the posterity.

### **Objectives**

- Promoting & Bench-marking for environmental protection initiatives.
- To encourage projects on environmental awareness.
- To impart awareness about green & clean campus.
- To initiate sustainability practices in the campus and among stakeholders.
- To maintain and monitor the sustainability and Eco-Friendly initiatives
- Reduction in resource use
- Financial savings through a reduction in resource use
- Curriculum enrichment through practical experience
- Developing an environmental ethic and value systems in youth
- Conduct audits for recommendations and continuous improvement



- Teach about sustainable development across all disciplines of students.
- Encourage research and dissemination of sustainable development knowledge,
- Green campuses and support local sustainability efforts,
- Engage and share information with community.
- Introduce carbon neutrality measures

#### **Procedure**

The Botanical Garden committee and campus development committee perform key role in promoting environmental activities. Then it is duty of all stakeholder's regarding to maintain and sustain the environmental balance in the campus. The NSS unit will do the best efforts for environmental promotional activities beyond the campus.

#### **Roles**

- Environment Protection and awareness
- Environment Policy to be implemented in the Campus.
- Internal inspection system should be developed for various equipment's available in campus.
- Waste Management plan should be prepared for the campus.
- Plastic usage can be reduced in college campus.
- Implement measures for carbon neutrality.
- To Communicate the Environment Policy to all faculties members and staff.
- The students and faculty should follow on nature friendly pursuits and sustainable awareness.
- Increase in Environmental promotional activities for spreading awareness in the campus.

### **Action plan**

- 1. To celebrate and to understand importance world environment day,
- 2. To Conduct awareness campaign on pollution
- 3. Conduct regular green/environment audit and follow up corrective measures
- 4. Ensure regular follow up and updates for clean campus practices like proper waste disposal, e-waste campaigning among stakeholders, rain water harvesting and monitoring judicious water usage
- 5. Activities encouraging recycling, reuse, repair and refurbishing etc.
- 6. Conduct invited talk (dept/college level on various updates policies and various dimensions of environment studies)



# **Green campus initiatives- Images**

Tree Plantation in college campus Academic year-2018-19.





Tree Plantation in college campus academic year – 2021-22.



# Alumni Contribution in green campus initiatives



Tree Plantation in college campus academic year – 2020-21



Tree Plantation in college campus academic year – 2020-21.



Tree Plantation in college campus academic year – 2020-21





Tree Plantation in college campus academic year – 2020-21



### **Green campus initiatives (Botanical Garden)**





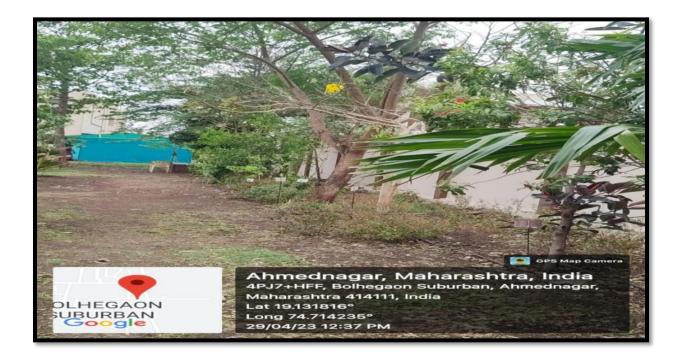
















FLORAL VIEW OF BAHAVA TREE IN THE BOTINICAL GARDEN.





Water feeder installed in campus for birds.





# **Butterfly Plants**





Cactus Garden



### Disabled-friendly, barrier free environments

### Disabled-friendly, barrier free environments -Policy

### Objectives

- To provide equal educational opportunities to the disabled students in the institute.
- To create a suitable educational environment for the disabled students in the institute.
- To strive for the comprehensive development of disabled persons.

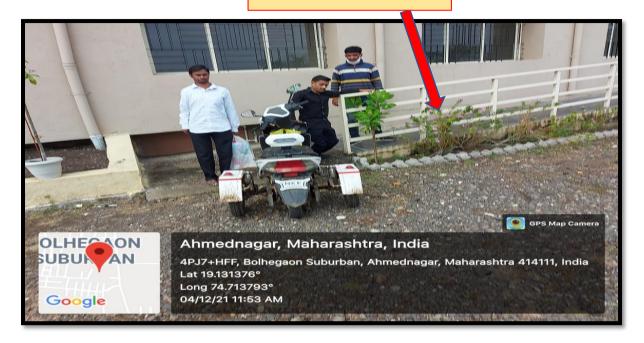
#### **Action Plan**

- To provide basic facilities for disable students for easy access to classrooms, laboratories, administrative offices, libraries.
- Ramps will be provided at the entrances of the buildings in the College.
- As per the rules of the University, extra time of thirty minutes will be given to disabled students during exams.
- Writers will be made available to blind and visually impaired students. The writer should not be a degree holder in the same subject.
- To provide a writer to the examinee who is incapable of using his hands due to illness or accident.
- Encourage disabled students to participate in various activities and competitions.



### Disabled-friendly, barrier free environment

Disabled-friendly Ramp





Disabled-friendly washroom



### Disabled-friendly, barrier free environments

The Felicitation of disabled students On the occasion of World disabled day in academic year -2021-22.

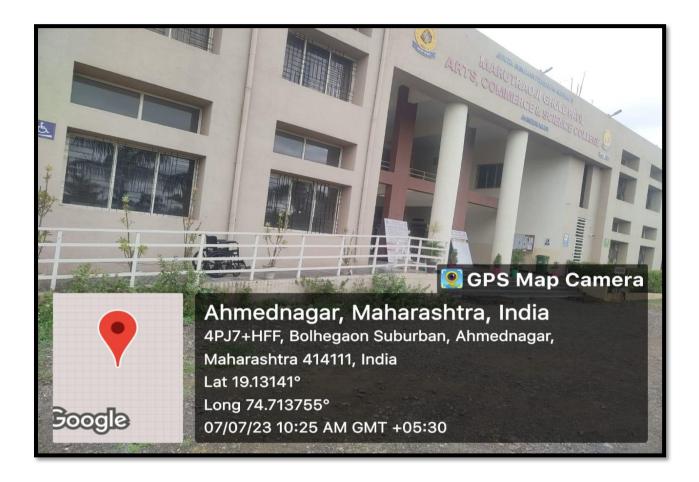




**NEWS CLIPPINGS** 



### Disabled-friendly Ramp





#### Disabled-friendly Ramp & Wheel Chair

