

Green Audit Report

For

**Smt. Meenalben Mehta College, Panchgani
(Arts, Commerce and Science)**

Tal. Mahabaleshwar,

Dist. Satara



Audit Co-ordinator

Dr. S. K. Khade

Department of Botany

By

Mahesh Narhar Kulkarni

Lobhas Consultants

B4/407, Anita Residency, Katraj-Kondhwa Road,
Katraj, Pune – 411046.

+91 9890906034, maheshnarhar@gmail.com

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This report describes the status of environmental management at Smt. Meenalben Mehta College, Panchgani (Arts, Commerce and Science) Tal. Mahabaleshwar, Dist. Satara. The report provides an overall idea about existing conditions, efforts taken to make the area green compliant, increasing awareness amongst stakeholders etc.

It helps in understanding the activities carried out by the college team as a responsible educational citizen and provides guidance on further scope for improvement. This report is prepared based on the evidences produced during the course of audit.

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1. Introduction

1.1.General

Name: Smt. Meenalben Mehta College, Panchgani
(Arts, Commerce and Science)

Tal. Mahabaleshwar,

Dist. Satara.

Mail: iqcsmt.mmcollegepanchgani@gmail.com, Website: www.smtmmcollege.org

Ph. No.02168 240677.

Lattitude & longitude: NL: 17⁰ 92' 36" EL: 73⁰ 79' 83" .

Altitude: 10293 m from seashore.

Available Area of the facility: 1.27 Hectors

Population:

Teaching Staff and Non teaching Staff: 50

Students: 903

Facilities

- a. Total built up area around 2147 square meters.
- b. Numerous Classrooms are available for variety of the classes.
- c. Adequate number of sanitary facilities separate for male candidates and female candidates, Staff males and females are provided.
- d. One library is available with lot of books collections and chronicles.
- e. Various laboratories as per the subject requirements for chemistry, botany, zoology, physics, computer/stats/math etc are also provided.

1.2.Environmental Management Program:

Annually Rs. 25000/- budget is allocated towards environmental protection and pollution prevention activities. This includes plantation, treatment recurring costs etc. in addition to this, whenever there is any specific project or capital expenditure required for environmental protection, then institute provides it as per the needs.

1.3.Environmental Policy

Smt College of Arts, Science & Commerce, Panchgani shows its sensitivity towards the environment by establishing its environmental policy.

The aims of the policy

The policy aims to eliminate or reduce all forms of environmental pollution and encourages all faculty members, staff, students and other stakeholders to do the same.

The college always raises awareness of environmental issues among its staff/students/stakeholders and encourages initiatives leading towards a clean environment. Its academic departments, NSS unit, NCC units and Women Cell works towards this aim collectively.

The policy promotes the 3 R's for waste in the following order: Reduce, Reuse and Recycle and provide convenient waste collection points and guidance for the disposal of

- a. Paper
- b. Cardboard
- c. Glass
- d. Plastic
- e. Electrical items and white goods
- f. Hazardous waste
- g. e-wastes

The college aims to minimize the consumption of water and thereby to contribute to the proper use of the natural resource by the following ways:

- a. Encouraging to report leaks and rectifying them promptly
- b. Progressively replacing/supplementing water-taps in the staff room, washroom, etc. if needed.
- c. Exploring options for using waste/roof water wherever possible
- d. Establishing rainwater harvesting schemes in the old buildings of the campus
- e. Minimizes the consumption of electricity where opportunities arise by
- f. Progressive replacement of light bulbs with energy efficient ones
- g. Encouraging staff to turn off electrical appliances when not in use
- h. Conserving energy by promoting the use of daylight
- i. Conducting frequent preventive and corrective maintenance

1.4. Steps taken and mechanism

- a. The college adapts health, safety, and environments based codes of practice and relevant guidance and complies with legislation relating to the use of chemical products.
- b. The college has planned for hybrid (solar) power systems on the campus.
- c. The college campus is completely free from plastic bags and cups.
- d. Waste bins are placed at appropriate locations to maintain a clean and tidy campus.

- e. Green initiatives are taken by developing plantation.
- f. The arrangement to set off the fire causing environmental damage by setting the fire extinguishers at different places on the premises.
- g. Nature club and botany department work towards to green initiative at the college campus.

2. Audit Scope

The audit is carried out for the activities carried out at

**Name: Smt. Meenalben Mehta College, Panchgani
(Arts, Commerce and Science)**

Tal. Mahabaleshwar,

Dist. Satara..

3. Audit Criteria

- a. Applicable guidelines of NAAC
- b. Applicable Environmental Legislation
- c. Best environmental practices

4. Audit Objective

In line with the audit definition, the objective of the audit is to have systematic, periodic, planned evaluation against objective evidences and reporting the results to the management as per the focus of the audit. Green Audit focuses on the basis of the environmental sustainability in terms of applicable environmental elements like Air, Water, Land, Flora, Fauna, Natural resources and Human being. The very objective of this audit is to evaluate the institutes green performance based on the focus indicators as stated above in view of the goal towards Environmental Sustainability, applicable legislation, environmental policies and standards. The green audit objectives can be stated as follows.

- a. To review the knowledge and awareness concerns of the institute for the journey of sustainability.
- b. To review the efforts made to protect the environment by preventing pollution and conserving the natural resources being used in the campus.
- c. To establish a baseline data to assess future sustainability and avoid heavy environmental tolls.
- d. To bring out a status report on environmental compliance
- e. To assess the environmental performance and report it to management/authorities.

5. Audit methodology

The scope of the audit is divided into various environmental areas like Land use, water, effluent, sewage, energy etc. Each such area is analyzed based on the evidences produced by the institute. The evidences are collected in form of discussions/interactions, documents and records, practical site conditions and photographs of it.

6. Observations and Recommendations

6.1.Land Use

6.1.1. Land and efforts for green belt development

Available land is in the town with a limit of 1.27 Hectors. The college is located in the mountainous region of lush green Pachgani. However, college has still some plantation to have rich green effect. College has selected 2.5 hectors land in village Vivar started plantation in collaboration with NSS. As on date over 500 species have been planted and maintained by the college. The village Vivar has been adopted by the college.



6.1.2. Recommendations

As of now there is a count of the trees being planted. Localized species can be more used for plantation since they are more suitable to the local environment and habitat. It can become a habitat of the native birds, animals and insects and can help in biodiversity conservation and reclamation. A count of variety of species can also be kept handy. It can be treated as a structural biodiversity creation effort for achieving substantial positive results.

6.2. Water Supply

6.2.1. Sources

The main source of water supply for the institute is from the nagar parishad. The water quantity required per day is around 5000 liters. Institute has installed the Water harvesting to recharge ground water by use of natural well available in the premises. The drinking water is provided through modular water treatment facility dispensers at various locations for the ease of access to the students and staff. The drinking water is periodically tested for basic parameters from the laboratory and ensured its potability for drinking purpose.



6.2.2. Recommendations

Drinking water measurements and tests can be done in details to include all portability parameters as per the water standards applicable.

6.3. Energy

6.3.1. Energy Source

Mahadiscom is the major source of electricity. For electricity conservation, the tube lights are replaced with CFL wherever feasible.

6.3.2. Recommendation

Use of non conventional energy can be adopted.

6.4. Effluent

6.4.1. Effluent management

Laboratory waste water around 20 liters per day which is connected to the Nagar parishad.

6.4.2. Recommendations

Since the waste water quantities are very minimal, small in-house set up can be worked out for treatment of the lab waste water.

6.5. Sewage

6.5.1. Domestic sewage management

Domestic sewage is generated through the use of water for sanitary purposes. The sewage generated after the use is connected to septic tank and the overflow is connected to the nagar parishad sewer lines.

6.5.2. Recommendation

Based on the population of each day and the daily water supply quantities, domestic sewage can be quantified for further water conservation purpose. Specific water audit can be conducted to know the water inflow and out flow along with the losses, leakages, wastages etc. so as to plan actions for water conservation.

6.6. Solid waste

6.6.1. Solid waste management

Solid waste major sources are from the canteen and stationary wastes. The food waste is treated through vermi-compost plant and then the manure is used for the plantation site. General solid waste i.e. stationary waste is segregated as paper waste, plastic waste and is recycled as per the volumes generated.



This initiative is also extended to the adopted village Vivar. The Vivar village solid waste is collected at one place and similar strategy for composting is adopted there. The village persons are trained in the solid waste management.

6.6.2. Recommendation

Nil.

7. Other Environmental Initiatives

- a. Approximately 1000 visitors visit the campus every year. Institute offer warm and green welcome to them and describes the green initiatives as a part of the induction to them on their visit.
- b. National seminars and National Conferences are arranged for Environmental awareness during last year.
- c. Paryavaran Janjagruti Rally on environmental awareness
- d. Various students have participated in the Swacchha Panchgani Abhiyan last year.
- e. Related to environmental awareness
 - Seminar and conferences: 02
 - Rally : 05
 - Exhibition : 02
 - Field visit: 02
- a. **Environmental CSR activities are also conducted every year and specific activities are also carried out each year differently. Vivar village is adopted through NSS for various environmental initiatives. Few of these are as follows.**
 - a. Vermi Composting

- b. Water transport through siphoning by saving electricity
- c. Weirs constructed for water conservation
- d. “No Plastic” drive
- e. Training provided for making paper bags
- f. “No smoke burner” (Nirdhur Chul) demo through Gram parichay
- g. Springs protection

8. Conclusion

The institute strives hard and sincerely towards conservation of environment. Starting with the workshops on environment for students, projects on environment for students till the practical changes like Solar wind hybrid installation to conserve energy. The institute has put lot of efforts in the waste water treatment areas also. It is noteworthy to say about the vermicomposting plant and effective management of the environmental drives. It shows the commitment and responsibility towards the Mother Nature. There is always opportunities for improvements which are noted in the different sections for making the activities robust. These would help in the journey of sustainable development which already have been started and reached at a remarkable height.

Institute takes care of the students and staff well. The rooms are well ventilated and having sufficient light levels. There is no much noise that would disturb the education process.



Mahesh Narhar Kulkarni

Lead Auditor