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Green Audit a case study of Art's, Science & Commerce College, Manmad

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Abstract: *The term 'Green' means eco-friendly or not damaging the environment. This can acronymic ally is called as 'Global Readiness in Ensuring Ecological Neutrality' (GREEN). Green Accounting" can be defined as 'systematic identification quantification, recording, reporting & analysis of components of ecological diversity & expressing the same in financial or social terms. "Green Auditing", an umbrella term, is known by another name 'Environmental Auditing'. In auditing literature both the terms are being used interchangeably. To implement the green audit other important aspects such as objective of green audit. Drivers of green audit, future scope, benefits, and advantages are necessary to understand. The green audit practically involves energy conservation, use of renewable sources, rain water harvesting, efforts of carbon neutrality, plantation, hazardous waste management & E-waste management Finally, Green audit is a requirement of NACC committee to the junior college. The concept of Green Audit, industries are using it as a management tool to evaluate the environmental standards; industries can perform better and better for the sustainable development of the organization. The experiments on the nature by avoiding natural rules, this can be a one major reason behind that is green Audit.*

Keywords: *Competitive Advantages, Eco System, Global, Sustainable Development.*

I. Introduction

In scenario people are not caring of nature, they are directly or indirectly damaging the environment and it causes problems like; global warming, difficulties in maintaining ozone layers, air pollution, water pollution etc. Green Audit is the most efficient & ecological way to slove such a environmental problem. For protecting the nature as a human being we have to show our sense of humor towards the mother earth. In corporate sector the practice of saving environment through the various programmes like CSR (Corporate Social Responsibility), GO Green, Save Water, Save Trees, Plantation of trees are to be taken. It will definitely work for the future. (Beţianu,2008).

That is the only way out to safeguard the planet. The Green Audit of is Requirement of NACC Committee to the Junior college. It is necessary to conduct a green audit in college campus because student aware of the green audit, its advantages to save the planet & they become good citizen of our country. Green audit and sustainable development process help to reduce the wastage and associated cost as well as increases the product quality. Obviously, there is relationship between Green Audit and Sustainable Development of the any business organization. The primarily needs for achieving the sustainable development of the business are to determine the Green Audit policy, Green Audit Framework, Accurate implementation, and Result analysis of it. Strong Green Audit process can help to achieve the sustainability. Green Audit framework helps to achieve the goal set by an organization. Green Audit is linked to Sustainable development process. Green audit and sustainable development process help to reduce the wastage and associated cost as well as increases the product quality.

II. Literature Review

1 Mathews (1997) and Matiş and Ienciu (2010):

Mathews, Matis & Ienciu found that environmental accounting has known to be in four stages in its development (1970-1980,1981-1994, 1995-2001, 2002-onwards) at the current stage of the knowledge about the green auditing. Although if there are four stages of the development of environmental auditing our knowledge will approach only the last two stages because beneficial study was conducted in this period and also concept of environmental audit was started and developed in that period.[1]

2. Elkington (1990) , Smith and Billington(1993)& Specht and Buhr (1994):-

It is necessary that to found out guide to the environment audit. Ellington (1990) is the first scientist that provides comprehensive guide to the use of environmental audits. In this period three journals are

published that are concerning with environmental matter named as environmental auditors, European environment and business strategy and environment.[3]

In 2008 Porter, Simon &Hatchery is the first who clearly mention exactly what is the Green Audit? And after his explanation about the green audit these concept of auditing accepted worldwide. He defined as the concept 'Green audit' as "Environment management system (EMS) that is continuous increase in environment and communication of the results of the EMS activity with organization's directors.[5]

In 2008 Adeniji is the first who primarily concerned with environmental audit of the companies to the growing importance of green issues.[6]

III. Materials & Method

The above topic is selected to know the concept of Green Audit and how it is operated. So this study is conceptual study. The methodology is adopted for this paper by collecting the information from secondary sources. Personal views and opinion also included in this paper. The Green Audit of is Requirement of NACC Committee to the Junior college. It is necessary to conduct a green audit in college campus because student aware of the green audit, its advantages to save the planet & they become good citizen of our country. The green audit practically involves use of renewable sources, conservation of the energy, rain water harvesting program, and efforts of carbon neutrality, plantation of trees, E-waste management and hazardous waste management. The national & local governments keeping lots of efforts for maintaining a planet green. Also Environment is a compulsory subject to all batcher student and arrange various programme so that student are much aware of the save planet, keep it green & also save energy.

IV. Observation

Actual Case Study:

4.1 Name of Campus- Arts, Commerce & Science College, Manmad.

Sr. No.	Name and area of the Unit	Total Area
1.	Total Campus Area	36584 m2
2.	Built up Area.of the Building	3949.04m2
3.	Building Area of Administration	254.54 m2
4.	Chemistry Lab Area+ Store	122.98 m2 13.50 m2
5.	Botany Lab	41.54 m2
6.	Physics Lab.	83.4 m2
7.	Zology Lab	54.83m2
8.	Geography Department	66.36 m2
9.	Computer Lab/ Commerce Lab	27.11m2
10.	Library	257.33 m2
11.	Class rooms	592.34 m2
12	Canteen Area	55.76 m2
13.	Staff Room	111.02 m2
14.	Ladies Room	52.43 m2
15	Gymkhana Hall	87.5m2
16.	Guest Room	137.71m2
17.	MCVC Building	427.0 m2
18.	Ladies Hostel Building (proposed)	406.78 m2
19.	Toilet Block –1 Toilet Block –2 Toilet Block –3 Toilet Block –4	36.0 m2 36.0 m2 17.52m2 16.95 m2
20	Language Lab Math's Department Dept. Marathi/Hindi/Economics	27.11 m2 27.11 m2 27.11 m2
21.	YCMOU Dept.	42.0 m2
22.	NAAC Office/ VP Cabin	27.11 m2
	Total Built up Area is	3949.04 m2 Of G.F.+ F.F.
23.	Total Roof Area is .	1975 m2.
24.	Total Open Space	15000 m2

4.2 Water Consumption

1. Water Consumption m3 per Day is 6.5 m3/Day

Sr.No.	Water Used For	April 2014 February 2015
1	Domestic Purpose including canteen.	4 m3/day
2.	Agricultural Gardening	1.5 m3/day
3.	Laboratory Purpose.	1.0 m3/day

2. Laboratory water Consumption

	Laboratories consumption	Lab. Water Consumption /Day
1.	Chemistry Laboratory	600 lit
2.	Zoology Lab	200 Lit
3.	Botany Lab	200 Lit

1.3 Pollution Discharged to the Environment Per Unit of the output

About 1.0 m3 and 3.5 m3 of Laboratory Influent and Domestic influent were generated per Day respectively during the year 2013-14. The Industrial Influent was stored to treat. whereas the domestic influent was treated in septic tank and soak pit.

It is suggested to treat effluent from Applied Science lab in small Effluent Treatment Plant of Capacity 500 Lit during next financial year- 2014-15

1.4 Electricity Consumption

Electricity Consumption per Year was 1301 KWH..Avg. Electrical Consumption per Month was 108.4 KWH. Avg. Electrical Consumption per Day was 4.33 KWH

4.5 Solid wastes

Sr.No.	Source Of Waste	Total Quantity
1.	a. Canteen waste. b. solid waste from tree droppings and lawn	10 Kg/Day.
2.	Plastic waste	0.2 kg/Day.
3.	Solid Waste from Chemistry, Botany and Zoology Lab.	5 Kg/week.

4.6 Characteristic and Disposal Practices of Solid Wastes Waste Management

1. The waste is segregated at source by providing separate dust bins for Biodegradable and Plastic waste.
2. Segregation of chemical waste generated in chemistry and zoology lab.

Sr.No.	Waste Category	Constituent Parameter	Method of Disposal
1	a. Canteen waste. b. solid waste from tree droppings and lawn	Not Analyzed.	Vermi Composting Organic Manure
2.	Plastic Waste	Nil	Through Authorized recycler after segregation
3.	Solid Waste from Lab	Not analyzed.	Composting Organic Manure Proposed during year 2014-15

4.7 E- Waste Management

The total Number of Computers in the Institute are 23 nos. Printers – 11 nos, Xerox Machines are 3 nos.

1. The E-waste and defective item from computer lab is being stored properly.
2. The institution has decided to contact approved E- waste management and Disposal facility in order to dispose E-waste in scientific manner.

4.8 Plantation Awareness Program

The institute has organized various has organized Tree Plantation program at College Campus and surrounding villages through NSS unit within the Institute. The plantation program includes plantation of variotypes of ornamental and medicinal wild plant species in large numbers in each surrounding villages? This activity is done during the month of August. This program helps in maintaing eco-friendly environment as well as provides pure oxygen within the institute

4.9 Vermiculture Composting Culture

The institute is has started vermi culture composting culture in house during 2010-11 on 30 Sq. meter land. The main purpose of this is to reduce disposable waste in the college campus and after complete process of vermin composting it is used as manure and awareness in farmers. The main benefits of the process are to reduce the waste in the environment and also it is cost savings process. This is mainly carried out by

1. Villages field visits .
2. To understand the benefits of composting and organic farming.

4.10 Environment Awareness Program

While maintain the environmental awareness program in the campus it is compulsory subject to all second year student which is irrespective of particular branches.

Syllabus topics must consist of following:

a. Air Pollution its causes, effects & installation of various devices that reduces the air pollution.
b. Water Pollution its causes, effects & various methods to prevent the it.
c. Sound Pollution its causes, effects & installed equipments that reduces it.
d. Noise Pollution its effects on surroundings.

4.11 Awareness of Carbon Consumption

1. Students and are Staff members and made totally aware of pollution that are caused by use of vehicles & bicycles.
2. In the college campus almost 90% of students are using bicycles.
3. The carbon consumption awareness programmer improves to help in carbon emission at individual as well as social level and avoids Air and Noise pollution in the campus due to vehicles or any activity in it
4. Due to awareness programme in the campus air quality within it is non polluted.

V. Conclusion

Green Audit is the most efficient & ecological way to slove such a environmental problem. The experiments on the nature by avoiding natural rules, this can be a one major reason behind Green audit process. Green Audit is one kind of professional care which is the responsibility of each individual who are the part of economical, financial, social, environmental factor. The Green Audit of is Requirement of NACC Committee to the Junior college. It is necessary to conduct a green audit in college campus because student aware of the green audit, its advantages to save the planet & they become good citizen of our country. Thus Green audit Become necessary at the college leve.

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