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MANAGEMENT OF GLOBAL WARMING- A MICRO STUDY OF RMG COLLEGE CAMPUS

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Abstract

According to scientist, Global warming is the term used to describe a gradual increase in the average temperature of the Earth's atmosphere and its oceans and a change that is believed to be permanently changing the Earth's climate.

Scientists from the Intergovernmental Panel on Climate carrying out global warming research have recently predicted that average global temperatures could increase between 1.4 and 5.8 °C by the year 2100. Changes resulting from global warming may include rising sea levels due to the melting of the polar ice caps, as well as an increase in occurrence and severity of storms and other severe weather events at tripping points.

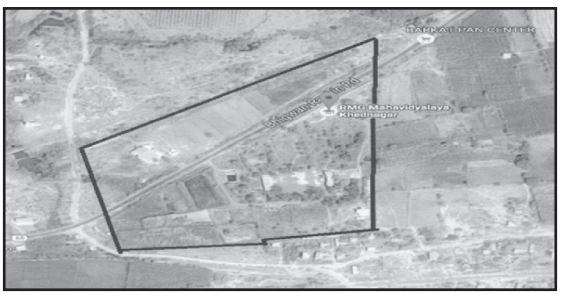
Global Warming is a well-known global issue of environment. There are various ways and means to internalize this externality by corporate institutes or organizations. The present study attempts document such efforts taken by a college situated in the drought prone zone of Maharashtra,in India. The institute conducts environmental audit every year, which helps to shape the programs to mitigate the problem. This may be an example stating how local community's participation can help to conserve environment through good campus practices. The programme like Management of Global Warming- A Micro Study of RMG College Campushave been explained in the paper.

Key words: Environment, Global Warming. Climate Change, Green House Gas (GHG), RMG College.

1. Introduction

The change in climate and or global warming is the greatest environmental threat that we have never faced before. It is the high time as to how we have to respond to this crisis will have great impact on both current and future generations and all other species in the world also. The global carbon dioxide equivalent of Green House Gases (GHG) in the atmosphere has been exceeded 400 parts per million, what is considered as a tipping point level. From studies, the changes in temperature and sea level over the last million years, we witness that the climate system has tipping points.

Climate change is caused by anthropogenic activities causing burning of fossil fuel has become important issue worldwide. There are various suggestions made by scientists and management experts to control the impact of this disaster. It is popular notion that "think globally and act locally". The students of a college can attempt to answer this issue at local level. The case study of the efforts made by RMG College situated in drought-prone area may be worth mentioning. The present paper is carryout the assessment of the same.



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Rashtrapita Mahatma Gandhi (RMG) College is situated in a small village called KhednagarinKarjattahasil of Ahmednagar district. The campus covers 26 acres of landis anecho friendly, green building premier educational institution based on social movement. Established in the year 2001, has to its credit of providing higher education to the rural people. A group of educationists, researcher, academicians, artists and social workers led by Dr. Kumar Saptarshi the stanch follower of Mahatma Gandhi and Jayprakash Narayan established Indian Institute of Social Development and Research (IISDR) in Pune in 1978. He has a long backround of social reform, up keeping of environment and movement against injustice to the rural poor and oppressed castes.IISDR purchase a 10.5 Hectares (26 acres) of land which was having murm soil with boulders. The rainfall is about 50 cm with high standard deviation (>25 cm). This area observes frequent famine and hence included severely drought affected Zone of Maharashtra. The campus is blessed by great personalities like Jayaprakash Narayan, former Prime Minister Chandrashekhar, Baba Amate, Vikas and PrakashAmate, former speaker BalasahebBharade, respected persons like S. M. Joshi, Anna Hajare, Nanasaheb Gore, Film actors such as Nana Patekar, NiluPhule and many more from the field of education, social and environment work, Industry and Politics.

Climate embraces the temperature, humidity, atmospheric pressure, wind, rainfall and numerous other meteorological elements in a given region over long period, and can be contrasted to weather.

The most dangerous changes in climate may still be avoided if we transform our hydrocarbon based energy systems. By taking initiation to rational and adequate financed adaptation programmes to forestall disasters and migrations at unprecedented scales. With the available tools, we must apply immediately and aggressively, as the global temperature is now at the high in four thousand years.

With this background, the institution has able to manage and responded in achieving the environment protection programs in the campus such as, tree plantation, plastic free, rain harvesting, water percolating, fodder development, optimal use of water for agriculture without using chemical fertilizer, green building, nursery development, vermin culture, fish farming, organic farming, mushroom cultivation, hydroponic fodder, solar energy,biodiversity conservation,people's participation and so on.

Objectives:

1. The main objective of the study is- To analyse the impact of Global Warming and Climate change. The other objectives are-
2. To analyse the management of echo friendly programs.
3. To analyse the management of campus developmental activities.
4. To find the appropriate solutions for climate change.

Methodology:

The study is diagnostic and exploratory in nature and makes use of secondary data. The primary data collected by survey method andthe relevant secondary data have been collected mainly through the data bases published by live science, thought .com and journals in the relevant study area.

Scope of study

The study covers campus area of IISDR's RMG College Khednagar, TalukKarjat, District-Ahmednagar, State- Maharashtra (India).

Location

Khednagar is located 560m (1,840 ft) above sea level on the western margin of the Deccan plateau. It is situated on the leeward side of the forms a barrier from the latitude 18* 34* North and Longitude 73*58*East.

1. Environment protection Activities:

a. Density of trees: to develop campus eco-friendly and to create healthy environment for learning.

Objective-

plants provide natural oxygen, plants keeps surrounding environment clean and cool, plants protect from dust collected on foliage, trapping of dust on leaves creates dust free environment in building, increase aesthetic view of the campus and plants are important it creates natural habitat for birds and animal.

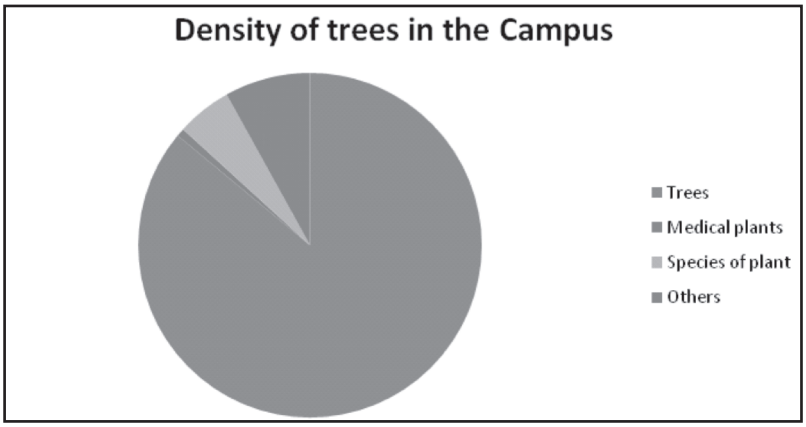
Activity:

The College has 600 plants that are labeled and their growth is monitored. The entire campus has been developed into beautiful garden patches with variety of herbs (180 of 18 types), shrubs (130 of 15 types), trees (600 of 40 types), and climbers (20of 4 types). Efforts are made to increase the number of plants that can survive under advance adverse condition of soil and scarcity of water.

Totaltrees – 898, No. of Medical Plants in the campus- 08,

Important species of plants- 54, Othertrees- 100

Theme Localities



Sr. No.	Theme	Location	Plants
1	Oxygen rich	Throughout the campus	Tulsi, Pimpal, Neem
2	Beauty	Front of College	Ficus, Croton, Cynadon (Lawn gras), Shampion palm, Ixora
3	Medicinal plants	Nursery	Bahava, Adulsa , Tulsi, Ekhand, Ran owa, Korpad
4	Climbers	Compound wall	Quisqualis, gulvel
5	Shade	Avenue in the Campus	Teak, Melingtonia, Neem, Thewetia, Bakul, Almond
6	Avenue	College road and way to Guest House	Biti, Gulmohar, Tick, Akashneem, Raintree
7	Palms	College Porch	Areca palm, fish-tail palm
8	Gymnosperms	Nursery	Cycas, Thuja, X-mas tree
9	Pteridophytes	Nursery	Tree fern, Nephrolepis
10	Aquatic plants	Nursery	Eichornia, Salvia, Azolla
11	Bund	Left side of the College	Areca palm
12	Organic Farming	Both side of the campus	Specially organic sugercane

Source: Field survey

a. Solid waste management: objective: Air pollution control, disposal of solid organic waste, to control air, water, soil pollution and production of green manure and vermin compost.
Activity: Solid waste is the organic waste obtains from canting, fallen leaves etc. produce in the campus. If it is not disposed properly it creates air pollution, to avoid this, the institution implemented solid waste management activity. This will run into two levels. One is decomposition of solid waste through the composting in pit, vermin-compost form solid organic waste and the second is to training to students and farmers about production of organic manure like vermin composer, production of mushroom from the solid organic agricultural waste. Further the best biofertilizer is used for plants of college campus which enhances greenery leads environment clean and fresh.
b. Rain Water harvesting:Objective: conservation of rain water for future use, to use rain water for gardening and to use rain water as replacement of distilled water.
Activity: the institution harvesting rain by two methods –
1. Collection of water in Percolation Water Tank.
2. Rain water collection for trees and fish farming.
c. Recycling of Waste water: Objective: minimization of air and water pollution. Reuseof drainage water. To fulfill the requirement of water for gardening and to minimize expenses on water for gardening.
Activity: RMG College campus includes hostel, school, college, staff quarter, ladies hostel, administrative building and about1530 population live in this campus, due to lack of drainage system of the GramPanchayat disposal of water was a challenge, but through the establishment of the waste water treatment plant, it became possible to avoid the air, water and soil pollution.Every day about 10,000 liters of waste water is collected and supplied for treatment in percolation tank for reuse for plant, after the treatment it is circulated through pipe in garden for growing of plant in the campus which keeps environment clean and eco-friendly.

a. **E- Waste Management: Objective:** e-waste is the future coming environmental problem will create hazards to our environment, it is non- degradable waste can pollute water, soil and air. With this view, institution is aware about destructive material mainly metal, insulating materials, plastic in the e-waste like CD, scrap mobile like devices, computer waste like wiring, metals and unused pen drive.
Activity: To minimize the pollution created through the e-waste, it has carried out the scientific

disposal of e-waste by two ways-

1. Collection of e-waste in e-waste box.
2. Reuse of the component of unused electronic devices.

b. Eco-friendly Programmes:

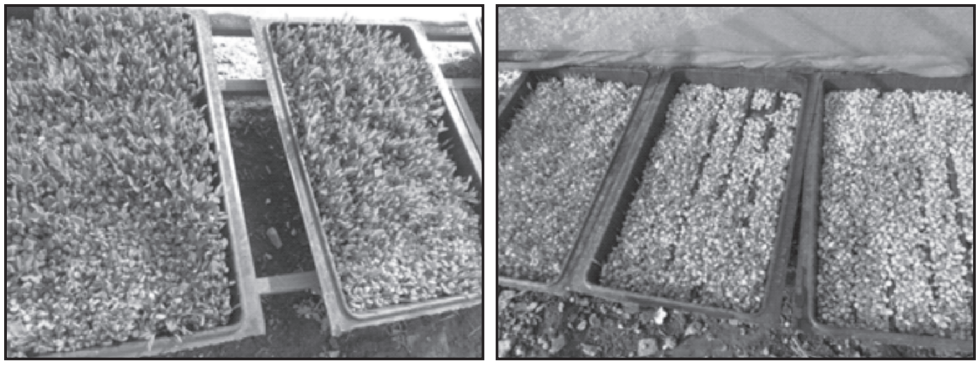
1. Organic farming: 5 acres of special organic sugarcane is grown in the campus which is sold at the highest price in the market for preparation of organic Jaggary.


Fish farming: There are 3 fish ponds in the campus and about 15,000 fish seeds have been dropped. Variety of fishes is mainly consistingof Chilapi-3000, Cultla-6000, and Rahu-6000 etc.

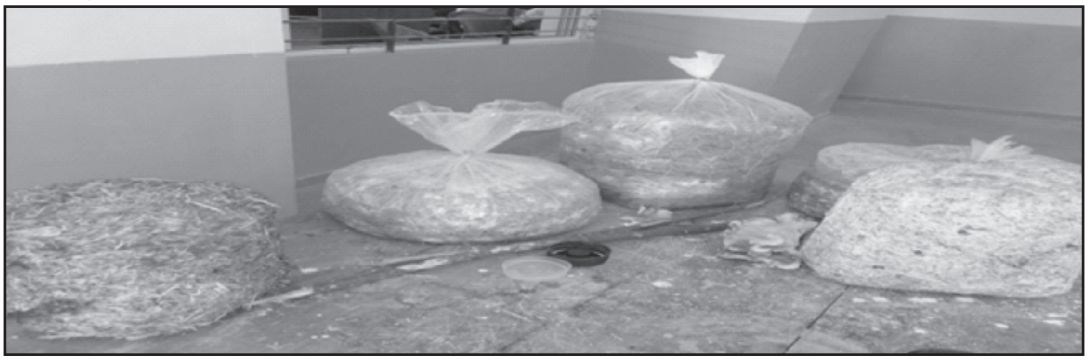

Nursery development: A nursery farm is developed in the campus having plants such as Bahava, Adulsa, Tulsi, Ekhand, Ran owa, Kopard,Cycas, Thuja, X-mas tree, Tree fern, Nephrolepis, Eichornia, Salvia, Azolla etc.


3. Vermin culture: This is implemented through solid waste management activity run at two levels;first the decomposition of solid waste through the composting inpit, vermin-compost and the other is training to students and farmers.

4.Hydroponic fodder: Farmers will be given training about the importance and how the hydrophonic fodder plates are prepared in their farm.



Mushroom cultivation:Production of mushroom from the solid organic agricultural waste which ultimately conversion of best from waste



The institution has installed 5kv solar plate at the roof of the main building.


Objective:

1.To plan, organize and implement programmes like landscape and plantation, water management and conservation and rain water harvesting.

2.To provide environmental education that prepares students for leadership and social responsibility; teaching them to think and communicate effectively and develop a global environmental awareness, responsibility and sensitivity.

3.To introduce environmental education programmes for strengthen the existing ecological and environment related training infrastructure.

4.To provide consultancy to farmers and organizations.

5.To organize training programmes for vocationalisation environment careers.

6.To strengthen Global Environmental education programmes for standardization of greening activities.

7.To make special plans for the studies on vermin culture, plantation, nursery development, water and energy conservation and management, rain water harvesting and other related fields.

With keeping in view achieving aim and objective of the environmental program, the institution had implemented various activities.

Conclusion:

Management of Global Warming is responded by RMG College in the campus through understanding the present environmental status and to find out ways to internalize environmental issues which are well felt externally. It is also an attempt to develop initiative of all stakeholders, viz. Management, Principal, Staff, students and parents to develop campus which ensures clean, cool and green environment for learners.

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