

GOVT. GAJANAN MADHV MUKTIBODH COLLEGE, S. /LOHARA DIST. – KABIRDHAM (C.G.)

GREEN AUDIT REPORT 2022-23

Govt. GAJANAN N. DHAV MUKTIBON COLLEGE SAN SPUR LOHAR DIST - KAEIRDHAM (C.G.) PRINCIPAL
Government College
Sahaspur Lohara
Distt.-Kabirdham (C.G.)



GOVT.GAJANAN MADHAV MUKTIBODH MAHAVIDYALAYA S. /LOHARA DIST. KABIRDHAM (C.G.).

INTERNAL QUALITY ASSURANCE CELL (IQAC)

GREEN AUDIT REPORT 2022-23

> Submitted by: Dr. B. S. Chauhan Principal in charge

Editor Mr.Tuleshwar Verma

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Mr. Girish Sahu Gang

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Mr. Rupesh Kumar Verma

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INTRODUCTION:

Green Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of the institute. It aims to analyze environmental practices within and outside of the concerned place, which will have an impact on the eco-friendly atmosphere. Green audit is a valuable means for a college to determine how and where they are using the most energy or water or other resources; the college can then consider how to implement changes and make savings. It can create health consciousness and promote environmental awareness, values and ethics. It provides staff and students a better understanding of Green impact on campus. If self-enquiry is a natural and necessary outgrowth of a quality education, it could also be stated that institutional self-enquiry is a natural and necessary outgrowth of a quality educational institution. Thus it is imperative that the college evaluate its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent.

The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus for the institutes which will lead for sustainable development and at the same time reduce a sizable amount of atmospheric CO2 from the environment. The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory that all Higher Educational Institutions should submit an annual Green Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through carbon footprint reduction measures.

OBJECTIVES:

In recent time, the Green Audit of an institution has been becoming a paramount important for Self - assessment of the institution which reflects the role of the institution in mitigating the present environmental problems. The college has been putting efforts to keep our environment clean since its inception. Therefore, the purpose of the present green audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards. The main objectives of carrying out Green Auditor: To map the Geographical Location of the college To document the floral and faunal diversity of the college To record the meteorological parameter of Ludhiana where college is situated To document the ambient environmental condition of weather, air, water and noise of the college To document the waste disposal system To estimate the Energy requirements of the college To report the expenditure on green initiatives during the last five years.

<u>METHODOLOGY</u>:

The purpose of the green audit of GNDEC is to ensure that the practices followed in the campus Are in accordance with the Green Policy of the country. The methodology includes: collection of Data, physical inspection of the campus, observation and review of the documentation and data analysis.

ABOUT THE COLLEGE:

Value based education is the core component in the nation's reconstruction, wisdom, education, knowledge and information together serve as a solution for all socioeconomic problems. Higher education has great responsibility for motivating and guiding the youth in the right direction.

At present, the gross enrollment ratio in India is 19% and this in Chhattisgarh is 13.6%. The enrollment ratio for girls is extremely low therefore our aim is to increase the enrollment ratio for girls at least in Kabirdham district and at the same time we are intended to impart quality education to them.

Our aim is to empower the girls by motivating them in curricular, co-curricular and extracurricular activities.

I welcome you to this college for a warm and healthy atmosphere. Further, I wish you all success in all walks of life.



GOVT.GAJANAN MADHAV MUKTIBODH MAHAVIDYALAYA SAHASPUR LOHARA DIST.- KABIRDHAM (C.G).

VISION & MISSION VISION STATEMENT:

OUR VISION

VISION: To become a pioneering institution in this state with an aim of empowering students with education and helping them develop into responsible citizens with sound moral and ethical values and providing them the intellectual stimulus so that they can prove their worth in the cause of society and the country as a whole.

To present a larger picture of the world by imparting an education that will not only be in consonance with gainful employment but also makeup for areas neglected or overlooked in the past, so that the students march off into the world laden with a sense of confidence, vigor and enthusiasm to meet its challenges.

MISSION

- > To create a teaching-learning environment that is in consonance with the pursuit of knowledge and the building up of corresponding skills.
- > To acquaint the student with the development of education and incorporate such developments in the curriculum.
- > To focus in the area of personality development of each student and to inculcate a positive attitude by developing leadership qualities in them.
- Making them aware of the responsibilities that they must shoulder towards society at large and also sensitizing them of their duties towards the lesser privileged sections of society.
- > To promote awareness on ecological and environmental issues.

GREEN AUDITING:

The college has adopted the 'Green Campus' system for environmental conservation and sustainability. There are main three pillars i.e. zero environmental footprint, positive impact on occupant health and performance and 100% graduates demonstrating environmental literacy. The the goal is to reduce CO2 emission, energy and water use, while creating an atmosphere where students can learn and be healthy.

OBJECTIV:-

- 1. To study the plant diversity in the college campus.
- 2. To explore the ethobotanical data of plant surveyed.
- 3. To prepare herbarium of plants surveyed and identified.

LAND USE ANALYSIS

GENERAL OVERVIEW OF THE CONCEPT OF LANDUSE:-

Land use refers to man's activities and the various uses which are carried on and derived from land. Viewing the earth from space, it is now very crucial in man's activities on natural resources. In situations of rapid changes in land use, observations of the Earth from space give the information of human activities and utilization of the landscape.

Remote sensing and GIS techniques are now providing new tools for advanced land use mapping and planning. The collection of remotely sensed data facilitates the synoptic analyses of earth system, functions, patterning, and change in the local, regional as well as at global scales over time. Satellite imagery particularly is a valuable tool for generating land use maps.

METHODOLOGY ADOPTED FOR LAND USE MAPPING:-

Three types of data that are GPS points, field survey data and Google earth data for Geo referencing has been used in this study. Land use map of the study area has been prepared using the above three types of data with the help of ArcGis Pro Software.

S. NO.	TYPE OF LAND USES
1.	College building
2.	College Garden
3.	Cycle stands
4.	Waste disposal chamber
5.	Water conservation

GEOGRAPHICAL LOCATION WITH CAMPUS MAP IN SCALE

Govt. Gajanan Madhav Muktibodh Mahavidyalaya, Sahaspur, Lohara College (GGMMBM) located at Sahaspur Lohara, Dist- Kabirdham CG Sahaspur Lohara Kabirdham Chhattisgarh is one of the popular colleges in India.

Campus location 21°51'42.8"N, 81°9'32.9"E



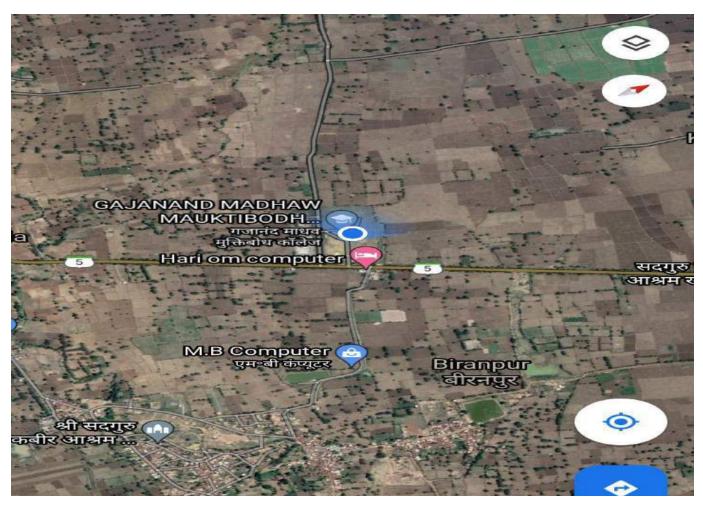
Open in Maps



Biranpur, Chhattisgarh

21.862, 81.159





OBSERVATIONS OF COLLAGE CAMPUS OF GOVT.GAJANAN MADHAV MUKTIBODH COLLEGE SAHASPUR LOHARA DIST-KAWARDHA CHHATTISGARH:-

Set up in the year 1989,govt.gajanan madhaw muktibodh mahavidyalaya sahaspur lohara is consistently pushing forward on the way of progress and is affiliated to hemchand yadav vishwa vidyalaya durg Chhattisgarh.the floristic data of the college has been studied and found many medicinal and ornamental plants which are not only important but also has an identity of the college.

FLORAL DIVERSITY:-

The area is immensely diverse with a variety of tree species performing a variety of functions. Most of these tree species are planted in different periods of time through various plantation programmers organized by the authority and have become an integral part of the college.

The trees of the college have increased the quality of life, not only the college fraternity but also the people around of the college in terms of contributing to our environment by providing oxygen, improving air quality, climate amelioration, conservation of water, preserving soil, and supporting wildlife, controlling climate by moderating the effects of the sun, rain and wind.

Leaves absorb and filter the sun's radiant energy, keeping things cool in summer. Many species of birds are dependent on these trees mainly for food and shelter. Nectar of flowers and plants is a favorite of birds and many insects. Leaf –covered branches keep many animals, such as birds and squirrels, out of reach of predators. Different species display a seemingly endless variety of shapes, forms, texture and vibrant colors.

Even individual trees vary their appearance throughout the course of the year as the seasons change. The strength, long lifespan and regal stature of trees give them a monument – like quality. They also remind us of the glorious history of our institution in particular.

We often make an emotional connection with these trees and sometimes become personally attached to the ones that we see every day.

A thick belt of large shady trees in the periphery of the college have been found to be bringing down noise and cutting down dust and storms.

Thus, the college has been playing a significant role in maintaining the environment of the entire campus.

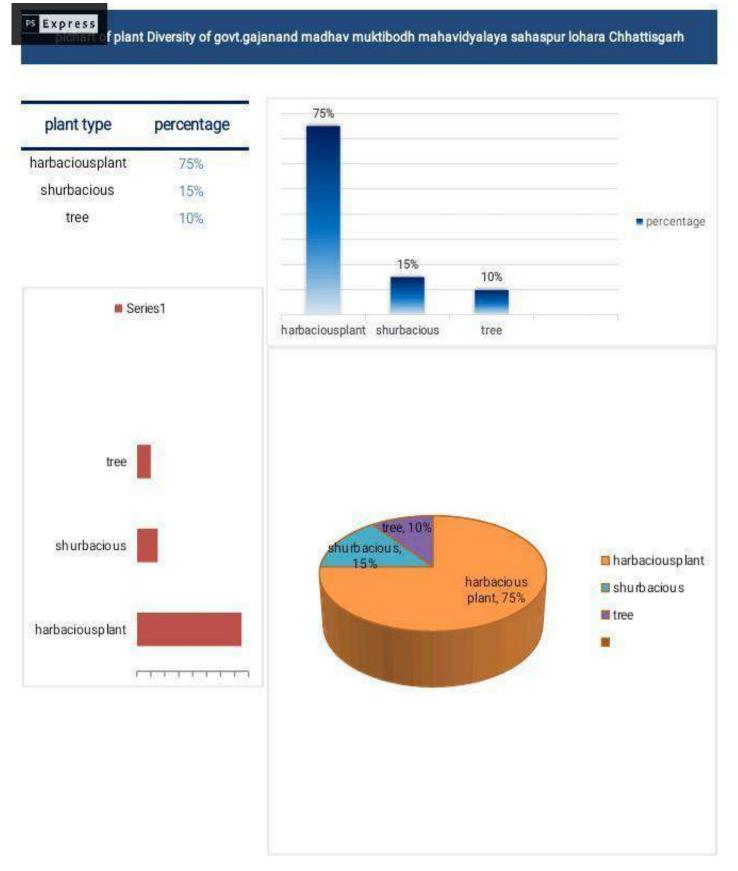
TABLE:-(01) INDORE FLORA SPP.

S. NO.	VERMACULAR NAME	SCIENTIFIC NAME	FAMILY	ТҮРЕ
1.	Lilly plant	Lilium	Liliaceae	Herbaceous
<u>2.</u>	Money plant	Epipremnum aureum	Araceae	Climber
<u>3.</u>	Sewanteen	Chrysanthemum	Asteraceae	Herbaceous
<u>4.</u>	Euphorbia	Euphorbia hirta	Euphorbiaceae	Herbaceous
<u>5.</u>	Thuja	Thuja spp.	Cupressaceae	Shurbacious
<u>6.</u>	Aloevera	Aloe vera spp.	Asphodelaceae	Herbaceous
<u>7.</u>	Giloe	Tinospora cordifolia	Menispermaceae	Herbaceous
<u>8.</u>	Agave	Agave americana	Asparagaceae	Herbaceous
<u>9.</u>	Tulsi	Ocimum tenuiflorum	Lamiaceae	Herbaceou
<u>10.</u>	China rose	Rosa chinensis	Rosaceae	Surbacious
<u>11.</u>	Rose	Rosa spp.	Rosaceae	Surbacious
<u>12.</u>	Palm	Palm spp.	Araceae	Tree
<u>13.</u>	Opuntia	Opuntia	Cactaceae	Herbaceous
<u>14.</u>	Tradescantia	Tradescantia Spp.	Commelinales	Herbaceous
<u>15.</u>	Oxalis	Oxalis; L.	Oxalis	Herbaceous
<u>16.</u>	Brinjal	Solanum melongena	Solanaceae	Shurbacious
<u>17.</u>	Merry gold	Tagetes	Asteraceae	Herbaceous
<u>18.</u>	Cycus	Cycas spp.	Cycadaceae	Tree

TABLE :- (02) OUTDORE FLORA SPP.

01.	Sugarcane	Saccharum officinarum	Poaceae	Herbaceous
02.	Agave	Agave americana	Asparagaceae	Herbaceous
03.	Babool	Vachellia nilotica	Fabaceae	Tree
04.	Australian babool	Acacia auriculiformis	Fabaceae	
05.	Kaner	Nerium oleander	Apocynaceae	Shurbacious
06.	Kadam	Neolamarckia cadamba	Rubiaceae	Tree
07.	Carpet grass	Stenotaphrum secundatum	Poaceae	Grass
08.	Gulmohar euphorbia	Delonix regia	Fabaceae	Tree
09.	Blumea	Blumea Spp.	Asteraceae	Herbaceous
10.	Indigofera	Indigofera tinctoria	Fabaceae	Herbaceous
11.	Charota	Cassia tora	Fabaceae	Herbaceous
12.	Dub grass	Cynodon dactylon	Poaceae	Herbaceous
13.	Sporobolus	Sporobolus	Poaceae	Herbaceous
14.	Cyprus(Nut grass)	Cyperus rotundus	Cypreceae	Herbaceous
15.	Alternanthera	Alternanthera sessilis	Amaranthaceae	Herbaceous
16.	Amaranthus	Amaranthus	Amaranthaceae	Herbaceous
17.	Achyranthes	Achyranthes aspera	Amaranthaceae	Herbaceous

Pichart of plant Diversity govt. Gajanan madhav muktibodh mahavidyalaya sahaspur lohara dist.-kabirdham (chhattisgarh) :-



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Epipermnum aureum



Hibisuca rosa chinensis

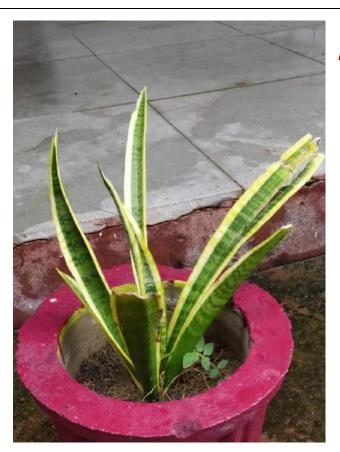


Opuntia cocheniliphera



Brayophyllum spp.

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Dracaena trifaciata



Pedilanthus spp.



Tinospora cordifolia



Brayophyllum spp.



Brayophyllum pinnatum



Aloavera



Caladium spp.



Euphorbia milii



Alkanna tinctoria



Delonix regia



Saccharum spp.



Canna flaccid



rosa spp.



Kalanchoe blossfeldiana



Hibiscus spp.



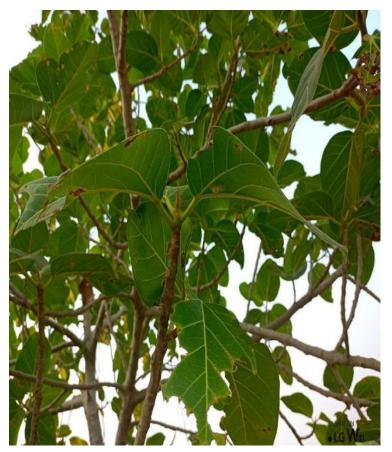
Tabernaemontana divaricata, commonly called pinwheel flower, crape jasmine, East India rosebay and Nero's crown is an evergreen shrub or small tree native to South Asia



Acacia auriculiformis, commonly known as auri, earleaf acacia, earpod wattle, northern black wattle, Papuan wattle, and tan wattle, akashmoni in Bengali, is a fast-growing, crooked, gnarly tree in the family Fabaceae.



Apocynaceae. Thevetia. Cascabela thevetia. Broadleaf evergreen shrub or small tree to about 25 ft (~8 m) tall. Leaves alternate, simple, 15 × 0.7 cm, linear-lanceolat, tapering tip, conspicuous midvein, other veins obscure, margin turned under (revolute).



Neolamarckia cadamba, with English common names burflower-tree, laran, and Leichhardt pine, and called kadam or cadamba locally, is an evergreen, tropical tree native to South and Southeast Asia. The genus name honours French naturalist Jean-Baptiste Lamarck.



Acacia, commonly known as the wattles or acacias, is a large genus of shrubs and trees in the subfamily Mimosoideae of the pea family Fabaceae.



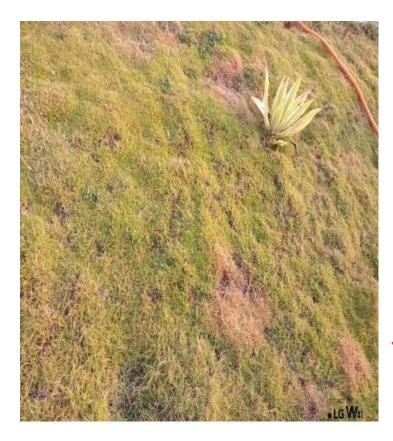
Hygrophila auriculata is a herbaceous, medicinal plant in the acanthus family that grows in marshy places and is native to tropical Asia and Africa.



Grass spp.



Calotropis gigantea, the crown flower, is a species of Calotropis native to Cambodia, Vietnam, Bangladesh, Indonesia, Malaysia, the Philippines, Thailand, Sri Lanka, India, China, Pakistan, Nepal, and tropical Africa. It is a large shrub growing to 4 m tall.



Stenotaphrum secundatum



Tradescantia spathacea, the boatlily or Moses-in-the-cradle, is a herb in the Commelinaceae family



Tagetes tenuifolia, the signet marigold, golden marigold or lemon marigold, is a species of the wild marigold in the daisy family.



Tridax procumbens, commonly known as coatbuttons or tridax daisy, is a species of flowering plant in the daisy family.







Cosmos sulphureus is a species of flowering plant in the sunflower family Asteraceae, also known as sulfur cosmos.





Opuntia spp./ Caladium spp.



Rosa 'Getrude Jekyll' is a pink shrub rose cultivar, bred by British rose breeder



Ruellia tuberosa, also known as minnieroot, fever root, snapdragon root and sheep potato, is a species of flowering plant in the family Acanthaceae. Its native range is in Central America but presently it has become naturalized in many countries of tropical South and Southeast Asia

FAUNAL DIVERSITY

S.NO	FAUNAL SPP.	SCIENTIFIC NAME
1.	CARPENTER ANTS	Camponotus
2.	GRASSHOPPER	Schistocerca americana
3.	HOUSES FLY	Musca domestica
4.	BUTTERFLY	Rhopalocera
5.	SCORPION	Heterometrus swammerdami,
6.	cow	Bos taurus
7.	WASP	Polistes bellicosus
8.	DRAGON FLY	Diplacodes trivialis
9.	мотн	Chionarctia nivea
10	Common house gecko	Hemidactylus frenatus
11.	DHAMAN SNAKE	Ptyas mucosa



CARPENTER ANTS



The housefly (Musca domestica) is a fly of the suborder Cyclorrhapha.



Polistes bellicosus is a social paper wasp from the order Hymenoptera typically found within Texas, namely the Houston area. ... Like other paper wasps

. . .



Zizeeria chapman



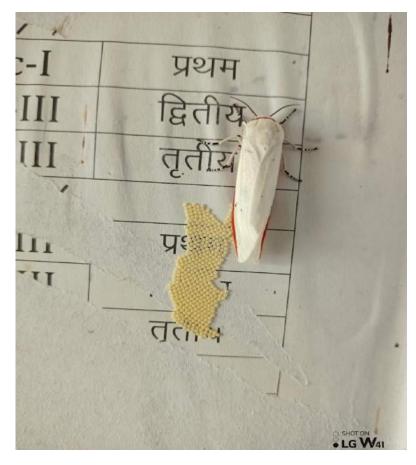
Mantises are an order of insects.

Mantises are distributed worldwide in temperate and tropical habitats.



Diplacodes trivialis is a species of dragonfly in the family Libellulidae known as the chalky percher or ground skimmer.





Chionarctia nivea is a moth of the family Erebidae.



Ptyas mucosa, commonly known as the oriental ratsnake, Indian rat snake, darash or dhaman, is a common non-venomous species of colubrid snake found in parts of South and Southeast Asia.

Dhamans are large snakes.



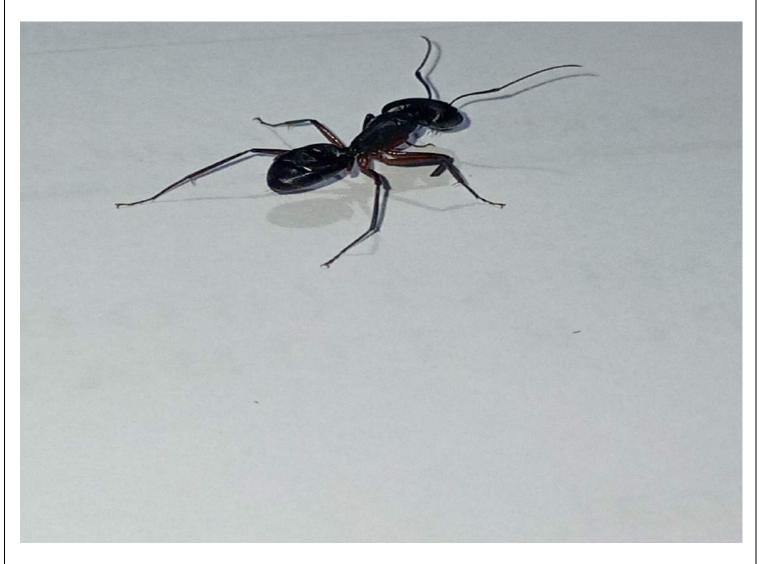
Heterometrus swammerdami, commonly called the giant forest scorpion, is a scorpion belonging to the family Scorpionidae.



Butterflies are insects in the macrolepidopteran clade Rhopalocera from the order Lepidoptera, which also includes moths. Adult butterflies have large, often brightly coloured wings, and conspicuous, fluttering flight



The common house gecko, is a gecko native to South and Southeast Asia. It is also known as the Asian house gecko, Pacific house gecko, wall gecko, house lizard, Tayoto or moon lizard. Most geckos are nocturnal, hiding during the day and foraging for insects at night



Camponotus herculeanus is a species of ant in the genus Camponotus, the carpenter ants.

The audit team has inspected the campus and verified that all the dominant plants and different varieties of plants mentioned in the report in college campus as on 25 august 2022-23 and no deviation has been found with the report.

PRINCIPAL
Government College
Sahaspur Lohara
Distt.-Kabirdham (C.G.)