

Govt. Rajmata Vijaya Raje Sindhiya Kanya Mahavidyalaya ,Kawardha , Dist-Kabirdham(Chhattisgarh)

Email:- rvrsgirlscollegekwd@gmail.com

website:- http://www.rvrsgirlscollegekawardha.ac.in

INTERNAL QUALITY ASSURANCE CELL (IQAC)

Submitted to:

Dr. B. S. Chauhan (Principal In Charge)

Editor

Mr. Asit Kumar, Assistant Professor

GREEN AUDIT REPORT 2022-2023

Govt. Rajmata Vijayaraje Sindhiya Kanya Mahavidyalaya

Green Audit Assessment Team

- Mr. Asit Kumar, Assistant Professor of Zoology,
- Dr. Birendra Kumare, Assistant Professor of Chemistry,
- Mrs. Preeti Singh Parihar Gupta, Assistant Professor of Botany,
- Mr. .Raja Jhariya, Assistant Professor of physics.

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INTRODUCTION

Green Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of any Institution. It aims to analyze environmental practices within and outside of the Institution, which will have an impact on the eco-friendly ambience. Green audit can be a useful tool for a college to determine how and where they are using the most energy or water or resources; the college can then consider how to implement changes and make savings. It can also be used to determine the type and volume of waste,. It can create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of Green impact on campus.

Thus it is imperative that this college evaluate its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of our institutions in relation to environmental sustainability is more prevalent.

OBJECTIVES

The college has been putting efforts to keep our environment clean since its inception. But the auditing of this non-scholastic effort of the college has not been documented properly. 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 Audit are:

- 1. To map the Geographical Location of the college
- 2. To document the floral and faunal diversity of the college.
- 3. To record the meteorological parameter of Kawardha where college is situated.
- 5. To document the Waste disposal system.
- 6. To document the ambient environmental condition of air and water of the College.
- 7. To introduce and aware students to real concerns of environment and its sustainability.

METHODOLOGY

The purpose of the green audit Govt. Rajmata Vijayaraje Sindhiya Kanya Mahavidyalaya is to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution. The methodology include: physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. Some data have also been taken from the students Practical works carried out by various science departments of the college.

GEOGRAPHICAL LOCATION WITH CAMPUS MAP IN SCALE

Kawardha is small city in the western part of Chhattisgarh state, India. The city is known as "Temple of Bhoramdeo" for its historic temple located in the city center.

Kawardha, Chhattisgarh, , **India** is located at *India* country in the *Cities* place category with the gps coordinates of 22° 0′ 32.2236" N and 81° 13′ 27.6312" E.



The gps coordinates of college campus is 20.006480to 20.007718 N and 81.217462 to 81.219264 E.



LAND USE ANALYSIS

Govt. Rajmata Vijayaraje Sindhiya Kanya Mahavidyalaya (As on 31-12-2020)

GENERAL OVERVIEW OF THE CONCEPT OF LAND USE:

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 resource.

Remote sensing and GIS techniques are now providing new tools for advanced land use mapping and planning. Satellite imagery particularly is a valuable tool for generating land use map.

METHODOLOGY ADOPTED FOR LAND USE MAPPING

Three types of data that are Gps points, field survey data and Google earth data for Geo referencing and drawings of CGPWD Department have been used in this study.

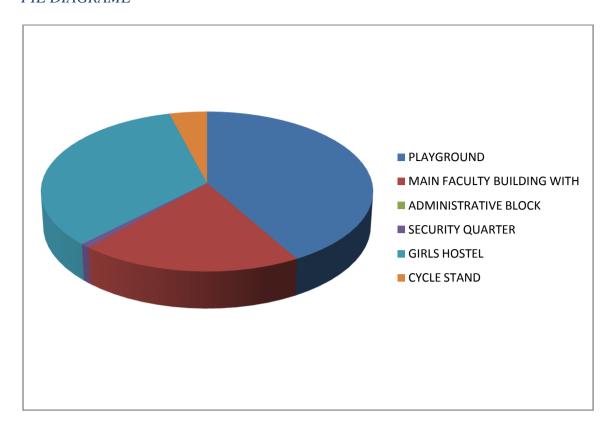
Attempt has been made in this study to map land use for Govt. Rajmata Vijayaraje Sindhiya Kanya Mahavidyalaya, Kawardha with a view to detect the land consumption in the built-up land area.

LAND USE DATA OF GOVT. RAJMATA VIJAYARAJE SINDHIYA KANYA MAHAVIDYALAYA

The total area of Govt. Rajmata Vijayaraje Sindhiya Kanya Mahavidyalaya, Kawardha is 19964 sq metres out of which the built up area is 13.87% (i.e 2770 sq meters) and open space & plantation area is 86.12% (i.e 17194 sq metres).

LAND USE (BUILT UP AREA) ANALYSIS:

CATEGORIES OF LAND USE (BUILT	AREA IN SQ METRES
UP AREA)	
PLAYGROUND	1987.59
MAIN FACULTY BUILDING WITH ADMINISTRATIVE BLOCK	937.00
SECURITY QUARTER	40.00
GIRLS HOSTEL	1600.00
CYCLE STAND	192.77
TOTAL	4757.36



FLORAL DIVERSITY OF GOVT. RAJMATA VIJAYARAJE SINDHIYA KANYA MAHAVIDYALAYA, KAWARDHA

Govt. Rajmata Vijayaraje Sindhiya Kanya Mahavidyalaya, Kawardha, is situated within the geo-position between latitude 20.006480 to 20.007718 N and longitude 81.217462 to 81.219264 E in Kawardha, Chhattisgarh India. It encompasses an area of 4.93 acre. 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 programmes 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 saround 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 animals are dependent on these trees mainly for food and shelter. Flowers and fruits are eaten by monkeys, and nectar is a favorite of birds and many insects. Leaf – covered branches keep many animals, such as birds and squirrels, out of reach of predators. Even individual trees vary their appearance throughout the course of the year as the seasons change. We often. A thick belt of large shady trees in the periphery of the college have found to be bringing down noise and cut down dust and storms. A recent study has revealed that the rich diversity of

tree species of about 50 species present in campus. Thus, the college has been playing a significant role in maintaining the environment of the entire surrounding areas. The following are the floral species with whom we are being attached-

Table: List of tree species of Govt. Rajmata Vijayaraje Sindhiya Kanya Mahavidyalaya,Kawardha

S.No.	Name of the plant species	Number	Common Name
1	Alove vera	30	Ghrikwar
2	Alstonia scholaris	1	Chhatim
3	Annona squamosa	4	Seetaphal
4	Azadirachta indica	4	Neem
5	Bryophylum pinnatum	20	Patharchatta
6	Castanea mollissima	6	Chinese chestnut
7	Carissa carandas	2	Karaunda
8	Casacabela thevetia	11	Kaner
9	Cassia fistula	1	Amaltas
10	Catharanthus roseus	4	Sada suhagan
11	Chamaecostus cuspidatus	8	Fiery costus or spiral flag,
12	Chlorophytum comosum	7	Spider plant
13	Chrysanthemum	12	Sevanti
14	Citrus limon	5	Nimbu
15	Jasminum officinale	7	Common Jasmime
16	Curcuma longa	6	Haldi
17	Cympogon citrates	16	Lemon grass
18	Dalbergia sissoo	7	Sisam
19	Demodium glabeltum	7	Vishnu patty
20	Dracaena trifasciata	7	Snake Plant
21	Epipremnum aureum	11	Money plant
22	Eucalyptus grandis	3	Nilgiri
23	Euphorbia rosssi	16	Spurge
24	Euphorbia tithymaloides	12	Redbird flower, devil's-backbone
25	Ficus religiosa	1	Pipal
26	Hibiscus rosa sinensis	13	Gudhal
27	Jasmine sambac	13	Mongra
28	Mangifera indica	3	Mango
29	Magnolia champaka	3	Champa
30	Melia azedarach	2	Mahaneem
31	Millettia pinnata	5	Karanj
32	Moringa oleifera	3	Munaga
33	Ocimum tenuiflorum	18	Tulsi
34	Opuntia	5	Ganfuni
35	Pithecellobium dulce	1	Gnga Imli
36	Psidium guajava	6	Amrud
37	Rosa indica	15	Gulab
38	Saraca asoca	5	Ashok tree
39	Coleus scutellarioides	10	Coleus
40	Asparagus officinalis	9	Asparagus
41	Tabernaemontana divaricata	5	Pinwheel flower,
42	Thuja standishii	4	Vidya patti
43	Tecoma stans	8	Yellow trumpetbush, yellow bells
44	Tinospora cordifolia	6	Giloy
45	Tradescantia pallid	11	Purple-heart,
46	Vaccinium erythrocarpum	8	Mountain cranberry
47	Vachellia nilotica	15	Babul
48	Zephyranthes minuta	8	Water lili
49	Agave attenuata	7	Fox tail agave

Ziziphus mauritiana 9 Indian jujube



FAUNAL DIVERSITY IN GOVT. RAJMATA VIJAYARAJE SINDHIYA KANYA MAHAVIDYALAYA,KAWARDHA CAMPUS

Govt. Rajmata Vijayaraje Sindhiya Kanya Mahavidyalaya is located in Kabirdham district of Chhattisgarh, at the Southern bank of river **Sakri**, at the Border of **Maikal** mountain range from which **Bhoramdeo wild life Sanctuary** is very near .Govt. Rajmata Vijayaraje Sindhiya Kanya Mahavidyalaya of Kabirdham district falls in the Tropical climate region, and enjoys monsoon type of climate. The highest temperature is recorded just prior to the onset of monsoon (around late May-June). monsoon rain is low due to rain shadow area, and is principally caused from late June to August by the moisture-laden South-West Monsoon, on striking the Maikal foothills of the north. The climatic condition of the Kawardha district as a whole and Govt. Rajmata Vijayaraje Sindhiya Kanya Mahavidyalaya in particular is very suitable for a wide variedly of flora and fauna to support its rich biodiversity. The faunal Diversity Govt. Rajmata Vijayaraje Sindhiya Kanya Mahavidyalaya campus has been studied and documented as below-

Sr.No.	FAUNAL GROUP	SCIENTIFIC NAMES/COMMON NAMES	
1.	Annelides	Genus Pheretima	
2.	Arachnids	Genus Araneus, Argiope, Nesticodes, Parasteatoda etc.	
		Hottentotta tumulus, Buthus occitanus	
3.	Insects	Many species of beetles ,Butterflies,Dragonflies,Damselflies.Mantis,	
		Grass hoppers, Crickets etc.	
4.	molluscs	Species of Garden Snails ,Slugs, Lymnaea etc.	
5.	Amphibians	Bufo, Rana,Hyla etc.	
6.	Reptiles	(Hemidactylus frenatus), Podarcis muralis, Calotes versicolor,	
		Varanus bengalensis, Eutropis carinata,	
		Ptyas mucosa, Bungarus caeruleus, Bungarus fasciatus, Fowlea	
		piscator, Indotyphlops braminus, Amphiesma stolatum Naja naja etc.	
7.	Birds	House sparrow,Bulbul,Robin,Magpie robin,Crow,Cuckoo, greater	
		coucal, kite,Sun bird, Drango,Hudhud,Grey hornbill etc.	
8.	Mammals	Squirrels,Langoor,Cat etc.	

FINDINGS:

Govt. Rajmata Vijayaraje Sindhiya Kanya Mahavidyalaya, Kawardha,

Which was established in the year 2005, has an eco-friendly environment. It has a long legacy of healthy environmental practices including periodic plantation, their preservation and maintenance. Its land use is such that about 86.12% of the total area is occupied by open land and plantation that generates a better and sustainable campus environment.