

## LATE RAJA VIRENDRA BAHADUR SINGH GOVT COLLEGE SARAIPALI, DIST-MAHASAMUND C.G.



# GREEN AUDIT REPORT 2022-23

## **CONDUCTED BY**

IQAC & Green Audit team Late Raja Virendra Bahadur Singh Govt. College Saraipali

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#### ACKNOWLEDGEMENT

IQAC and Green Audit Assessment Team thanks to the Principal, Late Raja Virendra Bahadur Singh Govt. College Saraipali for assigning the task of Green Audit of this college to us. We appreciate the cooperation that we got from all the faculties and students during the entire process. Our special thanks are due to the Principal Mr. P.K. Bhoi for his warm support and encouragement. From the very beginning till the end of the process.

Mrs. Hemlata Patel Co-Ordinator, Green Audit Team Late Raja Virendra Bahadur Singh Govt. College Saraipali.

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#### **GREEN AUDIT**

The intention of organizing Green Audit is to upgrade the environment condition in and around the colleges, companies and other organizations. It is carried out with the aid of performing tasks like waste management, energy saving and others to turn into a better environmental friendly institute.

#### **GOALS OF GREEN AUDIT**

- The objective of carrying out Green Audit is securing the environment and cut down the threats posed to human health.
- To make sure that rules and regulations are taken care of.
- To reduce waste.
- To improve health and environmental standards.
- > To sustainable use of natural resources.

#### **BENEFITS OF GREEN AUDIT**

- Would help to prepare plan to project the environment.
- Recognize the cost saving methods through waste minimization and management.
- > Empower the better environmental performance.
- Promotes the alertness for environmental guidelines and duties.

#### GREEN AUDIT EXECUTIVE SUMMERY REPORT

#### 1. BRIEF ABOUT COLLEGE

- 1. Name of the College: Late Raja Virendra Bahadur Singh Govt. College Saraipali.
- 2. No. of Department: UG-12, PG-05
- 3. No. of Students Intake: Total-1542
- 4. No. of Faculty Members: 13
- 5. No. of Non-Teaching Members: 07
- 6. Total campus area: 6.288 Hectares
  - a) Girls common room: 1
  - b) Labs: 4
  - c) Class rooms: 13

#### **ENVIRONMENTAL POLICY**

Both the teaching and Non-teaching staff of Late Raja Virendra Bahadur Singh Govt. College Saraipali are committed for carrying out its activity for sustainable development. This we will achieve through the following:-

- i. To sensitize the students and staff regarding the use of water properly.
- ii. To bring in use the 'Rain Water Harvesting on the campus.
- iii. To maximize the use of ICT and minimize the use of paper. It will help to go towards 'Paperless Office'.
- iv. To use the solid waste through vermin-compost on the campus and use it as a fertilizer.
- v. To reduce the 'sound pollution in the campus.
- vi. To protect and maintain green campus.

#### 2. CONSTITUTION FOR GREEN AUDIT

The Green Audit is carried out as per the environmental policy of the Late Raja Virendra Bahadur Singh Govt. College Saraipali and Green audit check list. The aim of the audit is to check the existing practices and provide advice for the development of environmental policy and practice in the areas of:

- ✓ Waste Management
  - i. Solid waste management ii. E-waste
- ✓ Management Water conservation and management.
- ✓ Tree plantations.
- ✓ Bio-diversity conservation.
- ✓ Eco-friendly campus.
- ✓ Green environment and clean campus.

#### 3. MEMBERS OF GREEN AUDIT TEAMS

Sl.No.	Name of Auditor	Designation
1	Mr. P.K. Bhoi (Chairman)	Principal
2	Mrs. Hemlata Patel (Co-Ordinator)	Asst.Prof
3	Mr. Deepak Kumar (Member)	Asst.Prof
4	Mr. Rajkishor Patel (Member)	Asst.Prof
5	Mr. S.D. Bhoi (Member)	Lab.Tach. Botany

#### **EXECUTIVE SUMMARY**

In this College from 1972 to 1982 UG classes in Hindi Literature, Economics, History and Political Science were being taught under Arts Faculty. From 1982 to 1988 B.Com & M.A. (Hindi Litt.) have been introduced after acquisition by Government of Madhya Pradesh but due to some technical glitches these classes were discontinued. Since December 1987 Geography in UG and Political Science in PG Level were introduced. Since Dec 1992 under Science Faculty Biology & Mathematics subjects in UG Level have been started. Along with these classes under Self Financial Scheme. PGDCA and B.Sc. (Computer Science) have been started. From session 2018-19, M.Sc. (Chemistry), B.Com. & DCA have been introduced. Since 1972 this College is being run in Govt. B. T. I. Building due to lack of infrastructure. Now this old campus has been utilized as infrastructure for Laboratory (experimental classes) for Science faculty. This College has been allotted 6.288 Hectares Land in which new building has been constructed since 2006 with small infrastructure of 8 rooms and now has been extended to 12 more classrooms

#### **VISION**

To achieve Academic Excellence by giving impetus and adapting to measures for Enhancing Effective Quality Sustenance and Progression on all key facets of Education. Providing a dynamic and conducive Environment for all in order to Inculcate, Infuse, Imbibe, Equip and Disseminate Value Oriented Learning, Creativity, Innovation Social Consciousness to achieve Sustainable Livelihood.

#### **MISSION**

- To inculcate Love/Inclination for learning by adapting to Latest Teaching Learning Methods for Enhanced Learning & Creativity.
- To Value and by Introducing & Integrating Skill in the Knowledge Content for gaining Competitive.
- To promote and support Research Oriented Activities.
- To train Students to be Creative and Competitive to face Real World Challenges.
- To develop as through Co-curricular, Extra-Curricular and Outreach Activities.

#### 1. METHODOLOGY

In order to perform green audit, the methodology included different tools such as preparation of questionnaire, physical in section of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. The study covered the

following areas to summaries the present status of environment management in the campus.

## > Water management

- ✓ Drinking Water
- ✓ Laboratory Waste Water
- ✓ Sewage Water
- ✓ Rain Strom Drain Water

## > Waste management

✓ Green area management

#### 2. FOCUS AREA OF STUDY

- ✓ Water management
- ✓ Air Pollution Management
- ✓ Noise Pollution Management
- ✓ Waste Management
- ✓ Bio-diversity

## WATER MANAGEMENT

#### **USES AND MANAGEMENT**

#### **SOURCE OF WATER**

SL. No.	Resource	Quantity
1	No of Bore-well	02
2	No of Hand pump	Nil
3	Water reserve tank	06

#### WATER USERS IN CAMPUS

#### QUANTITY OF WATER USED IN DIFFERENTSECTIONSOFTHE CAMPUS

Sl. No.	Sections	Water Use (Litter/day)
1	Academic building	1000
2	Canteen	1000
3	Urinals and Toilets	3000
4	Departments	500
5	Laboratories	1500
6	Garden	500
7	Drinking	2000
8	Hostel	Nil
9	Leakage	800

#### RECOMMENDATIONS

College administration may consider the following priority:-

- 1. To establish and implement the Water Conservation and Management Plan as per Environment Protection Act 1986.
- 2. The water Conservation Awareness Program to be conducted on World Water Day on 22<sup>nd</sup> March every year.
- 3. Display boards for switching off the taps to be put on at appropriate place.
- 4. Rain Water Harvesting as per the guidelines of Central Ground Water Board shall be done.

#### AIR POLLUTION MANAGEMENT

## PERIODIC AWARENESS PROGRAMME FOR STAFF, STUDENTS AND SOCIETY

The College has been continuously conducting awareness programs for staff, students and society for protecting and maintaining environment. The awareness is also done by arranging programs. The college students and faculty members are involved in the activities through NSS/NCC, but audit team could not find any display board for conservation of Environment in the college premises.

#### RECOMMENDATIONS

The College may consider the following priority:-

- World Environment Day to be celebrated in college premises every year on 5th June and whole
  college students and staff shall get involved and take OATH for ENVIRONMENT
  CONSERVATION not only in college but also in every span of life.
- 2. Chemistry and Botany Department shall monitor the Ambient Air Quality as per the guidelines of "Air (Prevention and Control of Pollution) Act1981
- 3. Parking zone of college shall be neat & clean.
- 4. Use of bicycle in campus to be promoted.

#### NOISE POLLUTION MANAGEMENT

#### A) NOISE CONTROL IN THE COLLEGE

The college adopts no honking policy and prevents use of any honk and noise in campus.

Certain areas like library, class room are declared as Silence zone and noise pollution is kept to minimum on college campus.

#### B) SOLAR SET FOR POWER BACK-UP

The college has solar set as power backup and used whenever there is power cut-off due to load shading or maintenance of electricity in college campus.

#### RECOMMENDATIONS

The College administration may consider on top priority

- Noise Level Monitoring shall be done as per the guideline of "Noise Pollution (Regulation and Control) Rules 2000.
- 2. Vehicular exhausts shall be examined regularly in the collage as per Central Motor Vehicle Act 1988.

#### **BIO-DIVERSITY**

Campus is located in the vicinity of different types (species) flora and fauna. Various tree plantation programs are being organized during the month of July and August at college campus and surrounding villages through NSS unit. This program helps in encouraging eco-friendly environment which provides pure oxygen within the institute and awareness among villagers. The plantation program includes various types of indigenous species. Instead of maintaining bio diversity the similar species planted is

observed for example "NEEM".

#### Types of trees planted which are environment friendly are:

Neem, Peepal, Banyan, Teak, Babul, Tamarind etc.

#### RECOMMENDATIONS

The Management of College may consider on top priority that

- ✓ Total33% area is to be reserved for plantation.
- ✓ The Biodiversity is to be maintained while considering the plantation in future.
- ✓ The selection of trees species to be based on environmental conservation.
- ✓ Artificial nests and water ponds are recommended to attract different birds in their migrating .
- ✓ Watering schedule to be planned according the season.
- ✓ Special Tree Plantation shall be celebrated every year on environment day and also competitions for bird species identification and knowing the tree values in terms of medicinal and environment conservation.

## **Plant Diversity**

A survey was carried out to find plant diversity in the college campus of our college. The survey was focused on the diversity of plants on the basis of their classification and economic importance.



**Moss Plant (Funaria hygrometrica)** 



WATER FERN (Marsilea quadrifolia)



FERN (Dryopteris) F-Dryopteridaceae



ASHWAGANDHA (Withaniasomnifera) F-Solanaceae

Parts used: Root, leaves

Uses: Rheumatism, Removes functional obstruction of body, Ulcer, Nerves disorder, Useful for

Sexual & general weakness, Improves vitality, Premature ageing, Emaciation, Debility, Memory loss, Thirst, Dehydration, Constipation, Chronic fatigue.



ALOEVERA (*Aloe barbadensis*) F-Liliaceae

Parts used: Leaves

Uses: Gastroenteritis, Skin, Constipation, Irregular Menstruation, Piles, Worms, Rheumatism, Jaundice, Acne & liver ailments, Healing of skin wound, Scald, Sunburn, Sores, Shingles, Psoriasis, Warts. Conjunctivitis, Sties, Allergic reactions, Vaginal infections, Insect bites.



BHRINGRAJ (*Eclipta alba*) F-Asteraceae

Parts used: whole Plants

Uses: Worms, Ulcer, Skindisorders, EnlargedS pleen, Fever, Indigestion, Headache, Filaria, Hypertension, Cough, Asthma, Eye&Earache, Epigastricpain, Nausea, Vomiting, Toothache, Bleeding, Itching, Hepatitis, Diphtheria, Diarrhea, Haemoptysis.



BISALYAKARANI (*Tridax procumbens*) F-Asteraceae

Parts used -Whole Plant

Uses—Antiviral, Antibiotic, Wounds, Antiinflammatory, Bleeding, Diabetes, Typhoid, Co ugh, Asthma, Epilepsy, Diarrhea, Stomachtroub les, Dysentery, As Insecticide.



BASANGA (*Justicia adhatoda*)F-Acanthaceae

Parts used: Leaves

Uses:Asthma,Cough,Fever,Vomiting,Indiges tion,Wound,asexpectorant,Softenthick,sputu m, Bronchitis.



BAJRAMULI (*Sida Cordifolia*) F-Malvaceae

Parts used –whole plant

Uses-

Rheumatism, Heartproblems, Elephantiasis, Fever, Cold, Obesity, Hemiplegic, Nervous & Urinary disorders, Ear, Nose, & oath diseases, Cystitis, Gonorrhea, Leucorrhoea, Dysentery, Bleeding Piles, Wound healing, Paralysis, Colic pain, Sexual strength.



HIBISCUS (*Hibiscus rosa-sinensis*) F-Malvaceae

Parts used –Whole Plant

Uses-Hair loss, Hypertension, Cough, Induce Abortion, Headache, Lower Cholesterol, Liver disorders, As Aphrodisiac and bilious disorders.



KANAK CHAMPA (Belamcanda chinensis) F-Iridaceae

Parts used-Rhizome

Uses – Asthma, Throat troubles, Swollen Liver, Spleen, Gonorrhea, Malaria, Cancer, Cough, Bronchitis, Mumps, Wheezing, Fever, Inflammation, snakebites, Anti-bacterial & Anti-fungal, Liver problems.



LEMON GRASS (Cymbopogon citratus) F-Poaceae

Parts used:

Leaves

Uses: Cough, Colds, Fever, Anti-poison, Indigestion, Spleen, Tiredness, Headache, Worms, Vomiting, Skin, Urinary, Flatulence, Flavouringagent, Cancer, Nasalcongestion,.



PUDINA (Mentha arvensis) F-Lamiaceae

Parts used: Whole plant

Uses- Flatulence, Vomiting, Diarrhoea, Nausea, Headache & pains, Stimulant, Acne, Itching, Inflammations, Cold, Flu, Fever, Biliousness, Colic, Antibacterial, Thirst, Sorethroat, Stomachpain, Swellings, Indigestion, Rheumatism, Toothache, Arthritis, As flavor & Culinary uses.



STEVIA (Stevia rebaudiana) F- steraceae

Parts used: Leaves

Uses: Diabetes, High Blood Pressure, Obesity, Indigestion, Throat infection, Wounds, Cold, Teeth, Osteoporosis, Eczema, Dermatitis.



SADABAHAR (Vincarosea) F-Apocynaceae

Parts used: Leaves

Uses: Cancer, Hypotension, Diabetes, Waspstings, Tumour, Toothache, Memoryloss, Malaria, Leukemia, Hodgkins diseases, Nausea, Hair loss, sorethroat, Pain.



SARPAGANDHA (Rouvolfia serpentina) F-Apocynaceae

Parts used: Roots & leaves

Uses: Sedative, Hypnotic, Fever, Snake bite, Hypertension, Epilepsy, Poisons, Eczema, Hysteria, Insomnia, Insanity, Mental illness,

Traumas, Weakness, Worms.



APARAJITA (*Clitoria ternatea*) F– Fabaceae

Parts used –whole plant

Uses—Skin diseases, Guinea worm infestation, Appetizer, Gout, Jaundice, Piles, Headache, Arthritis, Wounds, Nervous disorder, Blood purifier, Haemorrhagic disorders, Smallpox, Cold, Cough, Asthma, Increase physical strength.



BETEL (Piper betle)

F - Piperaceae



Banyan Tree (Ficus Benghalensis) F-Moraceae



Papaya (*Caricapapaya*)



Rubber

RUBBER (Heveabrasiliensis)F-Euphorbiaceae



Shelter

Peepal tree (Ficusreligiosa)F-Moraceae



GUAVA (Psidiuim gruajava)



Rose (Rosaindica)

## RAIN WATER HERVESTING







PESTABADAM (*Terminalia catappa*) F-Combretaceae

Parts used: Leaves, Kernel, Bark

Uses: Cough, Tuberculosis, Dyspepsia, Worms, Mammarypain, Gonorrhea, Rheumatism, Headache, Colic, Scabies, Sexual dysfunction, Diarrhea, Dysentery, Biliousness, Flatulence, Liver disease, Leprosy



TULSI (Ocimum sanctum) F-Lamiaceae Parts used: & Seeds

Uses: Bronchitis, Catarrh, Digestive Complaints, Skin diseases, Cold, Cough, Bronchial asthma, Bleeding disorders, Antibacteria, Heart disease, Earache, Headache, Insect bites, Diarrhoea, Dysentery, Arthritis, Blood pressure, Inflammations, Cancer, Anti fertility.

## WASTE MANAGEMENT TOOL







Jungle Flame Ixora (Ixora coccinea)



Adenium (Adenium obesum)



Jasmine (*Jasminium sambac*)



Areca Palm (*Dypsis lutescens*)





Snake Plant (Dracaena trifasciata)



Dahlia (Dahlia pinn)



Roheao (Rhoeo discolor)

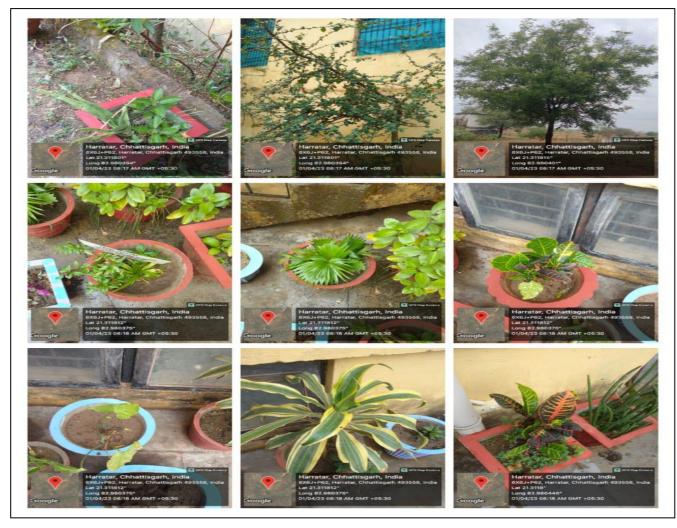


Chrysanthemum (Chrysanthemum indicum)



Marigold (Tagetics erecta)





## **Bird Diversity**

A survey was carried out to find the animal diversity in the campus of our College, Saraipali. The survey focused on the diversity of birds, butterfly, reptiles and Amphibia.



Scientific name: Acridotherestristis Common Name: Commonmyna



Scientific name: Centropussinensis Common Name: Greatercoucal



Scientific name: *Bubuusibis* Common Name: Cattleegret



 ${\it Scientific\ name:} {\it Columbalivia}$ 

Common Name: Bluerock pegion



Scientific name: Corvussplendens Common

Name: House crow



Scientific name: Dicrurusmacrocercus Common Name: Black drongo

Scientific name: *Cuculuscanorus*Common Name: Indiancuckoo



Scientific name: Eudynamysscolopacea Common Name: Asiankoel



Scientific name: Diceumagile
Common Name: Thick-

billedflower catcher



Scientific name: Nectariniaasiatica Common

Name: Purple sunbird



Scientific name: Passer domesticus Common Name: Housesparrow



Common Name: Rose-ringedparakeet



Scientific name: Ploceusphilippinus Common Name: Baya weaver



Scientific name: Pycnonotuscafer Common Name: Red-ventedbulbul



Scientific name: Psittaculakrameri



Scientific name: Streptopeliachinensis Common Name: Spotteddove



Scientific name: Turdoidesstriata Common Name: Junglebabbler



Scientific name: Danausgenutia

Common Name: Stripedtiger

## **Butterflies**



Scientific name: Abisaraecherius Common Name: Plum Judy



Scientific name: Euploeacore
Common
Name: Common Crow



Scientific name: *Acraeaviolae* Common Name: Tawny Coster



Scientific name: Junonialemonias Common Name: Lemon Pansy



Scientific name: Pseudozizeeriamaha Common Name: Pale Grass Blue



Scientific name: Papiliodemoleus Common Name: Lime Butterfly



Scientific name: *Spialiagalba*Common Name: Indian Skipper



Scientific name: Pareroniavaleria Common Name: Common Wanderer



Scientific name: Neopithecopszalmora

Common Name: Quaker



Scientific name: Athymaperius Common Name: Commonsergent



Scientific name: Rattusrattus Common Name: House Rat

## **Mammals**



Scientificname:Bandicotabengalensis Common Name:Lesser Bandicoot-rat

## **Reptiles**



Scientific name: Calotesversicolor Common Name: Indian Garden Lizard



Scientific name: Musmusculus Common Name: House Mouse



Scientific name: Hemidactylusbrookii Common Name :House Gecko



Scientific name: Eutropiscarinata Common Name: KeeledIndian Mabuya



Scientific name: Najanaja Common Name: Indian Cobra

## **Amphibians**



Scientific name: Ptyasmucosus Common Name: Rat snake



Scientific name: Duttaphrynusmelanostictus Common Name: AsianToad



Scientific name: Bungaruscaeruleus Common Name: Commonkrait



Scientific name: Hoplobatrachustigerinus Common Name: Indian Bull Frog

#### HARIYAR KRANTI







