GREEN AUDIT REPORT
2022-2023
OF
SASHI BHUSHAN RATH GOVERNMENT
(AUTONOMOUS) WOMEN'S COLLEGE,
BERHAMPUR, GANJAM,
ODISHA, INDIA
PIN - 760001.

CONDUCTED BY

IQAC & GREEN AUDIT TEAM

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ACKNOWLEDGEMENT

IQAC and Green Audit Assessment Team thanks to the Principal, S.B.R.Govt.(Auto.)Women's College, Berhampur for assigning the task of Green Audit of this college. We acknowledge the cooperation received from all the staff members and students during the process. Our special thanks are due to the Principal Dr. Kanhu Charan Padhy for all the support and encouragement from the beginning till the end of the process.

Dr.N.K.Mahapatra
Co-Ordinator,
Green Audit Team
S.B.R.Govt. (Auto.) Women's College, Berhampur

DISCLAIMER

Green Audit report is prepared on the basic of preliminary data collected from the different areas of the college. All reasonable care has been taken in its preparation based on information gathered.

Prepared by

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GREEN AUDIT

The purpose of Green Audit is to upgrade the environment condition in and around the college. It is carried out with the aid of performing tasks like waste management, energy saving and others to turn into an 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 humanhealth.
- To make sure that rules and regulations are taken careof.
- To avoid the interruptions in environment that are more difficult to handle and their correction requires highcost.
- To suggest the best protocols for adding to sustainabledevelopment.

BENEFITS OF GREEN AUDIT

- Would help to prepare plan to project theenvironment.
- Recognize the cost saving methods through waste minimization andmanagement.
- Empower the organizations to frame a better environmentalperformance.
- It portrays a good image of an institution which helps building better relationships with the group of interestedparties.
- Promotes the alertness for environmental guidelines andduties.

GREEN AUDIT EXECUTIVE SUMMERY REPORT

1. BRIEF ABOUTCOLLEGE

1. Name of the Institution: S.B.R.Govt. Auto. Women's College, Berhampur
2. No. of Departments:UG-20, PG: 08
3. No. of Students: Intake UG-1785, PG-347, Total:2132
4. No. of Faculty Members:-63
5. No. of Non-Teaching Members:20
6. Total campus area: 04 acres
7. College building Spread Area: 193023 Sq.ft.
    a) Girls Common Room:01
    b) Garbage collectionbins:20
    c) Labs:09
    d) Class rooms:132

2. ENVIRONMENTAL POLICY OF THECOLLEGE

S.B.R.Govt. Auto. Women's College, Berhampur always believes in maintaining its own standard in matter of environment and quality consciousness. It has taken number of initiatives to protect its own environment with a pollution free campus.

Being an environmental conscious college, the administration and the students of the college look after the environment carefully. The college owns responsibility to preserve the work carried out on the campus related to the environment.

ENVIRONMENTAL POLICY

Both the teaching and Non-teaching staff of S.B.R.Govt. Auto. Women's College, Berhampur are committed for carrying out its activity for sustainable development. This is achieved through the following :-

i. To sensitize the students and staff regarding the use of waterproperly.
ii. To bring in use the 'Rain Water Harvesting' on thecampus.
iii. To maximize the use of ICT and minimize the use of paper. It will help to move towards a 'Paperless Office'.
iv. To reduce the sound pollution in thecampus.
v. To protect the Flora and Fauna on thecampus.
vi. To maintain greencampus.

3. CONSTITUTION FOR GREENAUDIT

The Green Audit is carried out as per the environmental policy. The aim of the audit is to check the existing practices and provide advice for the development of environmental policy and practice in the areasof:

- ✓ Waste Management: i. Solid waste management ii. E-waste management
- ✓ Water conservation and management
- ✓ Tree plantations
- ✓ Bio-diversity and threatened/ endangered species
- ✓ Preservations Energy use and conservations
- ✓ Eco-friendly campus
- ✓ Green environment and cleancampus

4. MEMBERS OF GREEN AUDIT TEAM

Sl. No.	Name of Auditor	Designation
1	Dr. KanhuCharanPadhy (Chairman)	Principal
2	**Dr. Smt N.K.Mohapatra** (Co-Ordinator)	Asst. Prof.in Home Science
3	Dr. Pramila Beck	Asst. Prof. in Home Science
4	Smt. Jamuna Majhi	Asst. Prof. in Botany
5	Dr. Pabitra Kumar Sahu	Asst. Prof. in Chemistry
6	Miss Usha Rani Das	Lab Asst.-Cum-Store Keeper in Physics

EXECUTIVE SUMMARY

SASHIBHUSAN RATH GOVERNMENT AUTONOMOUS WOMENS COLLEGE, Berhampur is one of the leading educational institutions of South Odisha. It has been surging ahead successfully towards actualizing its much cherished goal of imparting value-based education ever since its establishment in 1958. The college is devoted to its aim of empowering women by evolving their personality holistically so as to enable them to face real life and be role models of the society.

The college started functioning modestly in the year 1958 under Utkal University and in 1967 it got affiliated to the Berhampur University and in 2015 the Govt. has established Khallikote Cluster University and the college has become a constituent college under the new university and the affiliation was transferred to Khallikote University. However since the year 2020 the college is reaffiliated to Berhampur University after the Khallikote University became a unitary university.

The college has been striving endlessly to live up to the governing goals of empowering women. The history of the college bears testimony to the fact that it has made enviable strides in academic, curricular, and extracurricular field. Autonomy was conferred on it in **04.05.2006**. The college has been accredited by NAAC, Bangalore with Bgrade in the year **2003**. As on to-day the College is catering to the needs of around 3,000 students hailing from 07 southern districts of Orissa.

The College at present has 18 departments out of which P.G. teaching facilities are available in 4 departments. It runs 01 Self-Financing Courses along with the traditional courses. It has a magnificent campus with library having huge stock of books, a gym, canteen, well equipped laboratories and English language laboratory, a student counseling cell as well as a Girls' hostel to accommodate approximately 272 students.

The college has adopted CBCS pattern of education as per UGC norms. Seminars, project works and field studies form a part of its curriculum. It has also introduced continuous evaluation system.

Various programme such as awareness campaigns, Blood donation Camps, health camps, citizenship programmes are taken up by the NSS, NCC and YRC wing of the college. The college also organizes self-defence training programme for its students and it has been a nodal center for the Ganjam district to organize self defence training for students of all the colleges of the district.

In the last fifty years the college has produced a number academician, doctors, sports persons, journalists and politicians who have contributed a lot in the task of nation building.

The institution has a glorious past and it envisions further expansion of its infrastructures, modernization of existing laboratories, Library, curricular development keeping in mind the demands of time.

Goal

To extend the true education and uplift women of Odisha and create employment potential along with all round growth.

Objectives

To cater to the educational need of girls from the remote corners, tribal, rural, semi-urban and urban areas irrespective of class, caste and creed.

To provide quality education in order to enable the students to meet the challenges of 21st century.

To infuse among the students a genuine sense of equality, social justice rationalism, secularism, national integration and encourage them to be a catalyst in the socio-economic and cultural transformations.

MISSION AND VISION OF THE COLLEGE

Vision:

1. To cater the educational needs of girls from the remote corners, tribal, rural, semi- urban and urban areas irrespective of class, caste and creed.
2. To provide quality education in order to enable the students to meet the challenges of the 21st century to enrich the institution to reach its ultimate height.
3. To imprint in the minds of the students a genuine sense of equality, social justice, rationalism and encourage them to be a catalyst in the socio-economic and cultural transformation.
4. The college envisions a student centric, goal-oriented holistic education to all the aspiring girl students particularly to economically and socially backward learners to meet the challenges of a rapidly evolving society. Our Institution is indeed an Institution with unmatched commitment to the pursuit of academic excellence, social responsibility and national development.

***Mission*:**

Being the oldest women's college of the southern districts of the State it aims to to become the most preferred institution of choice of students, faculty and the general public and impart education by imbibing scientific temperament, rational approach, analytical mindset, organizing abilities and human values in the growth and development of women in the society.

5. GOOD POINTS OBSERVED

1. College has prepared Green Environmental policy and has taken efforts for sustainable development on the college campus.
2. College has formed the team of faculty and student which works to maintain biodiversity on the campus and also participates in preventing pollution in society through variousdrives
3. College has a plane to install solar panels.
4. College has plan to include environment protection and management as a subject in curriculum.

6. MAJOR RECOMMENDATIONS

1. College should install solar panel as early aspossible.
2. More number of Energy and flow meters to be installed for monitoring of energy and water consumption building wise/departmentwise.
3. PUC certificate for all the vehicles entering the campus to be made mandatory and to be checked bysecurity.
4. College should maintain the legal register for the applicable environment related regulations and comply with this as per therequirement.
5. Bio-waste: Composting system to beadopted.
6. E-waste management system needs to be adopted.

7. OBJECTIVES OF THE STUDY

The main objective of the green audit is to promote the Environment Management and Conservation in the College Campus. The purpose of the 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:

- ✓ To secure the environment and cut down the threats posed to human health by analysing the pattern and extent of resource use on thecampus.
- ✓ To establish a baseline data to assess future sustainability by avoiding the interruptions in environment that are more difficult to handle and their corrections requires highcost.
- ✓ To bring out a status report on environmentalcompliance

8. METHODOLOGY

In order to perform green audit, the methodology included different tools such as preparation of questionnaire, physical inspection 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 summarise the present status of environment management in the campus

- **Watermanagement**
  - ✓ RawWater
  - ✓ DrinkingWater
  - ✓ Laboratory WasteWater
  - ✓ SewageWater
  - ✓ Rain Strom DrainWater
- **Energy Conservation**
  - ✓ Petrol
  - ✓ Diesel
  - ✓ LPG
  - ✓ Electricity
  - ✓ Batteries
- **Wastemanagement**
  - ✓ Green area management

9. FOCUS AREA OF STUDY

- ✓ Watermanagement
- ✓ Air PollutionManagement
- ✓ Noise PollutionManagement
- ✓ Energy use &conservation
- ✓ WasteManagement
- ✓ Green Belt area &Bio-diversity
- ✓ EnvironmentalInitiative

WATER MANAGEMENT

Water is a valuable natural resource for all living organisms. It is freely available depending on the climate and topographic features of a region. Although water is natural freely available but portable (drinkable) water is not available freely for human consumption. In our planet 70% area is covered by water but only 3% of it is fresh water. Around 1.1 billion people of the word face water crisis. Water pollution and wastage plays a vital role in water crisis. Water contaminations are taking place at an alarming rate. Drinking or using contaminated water leads to many diseases or death. That is why it is important to ensure that drinking water is safe, clean and free from bacteria and disease. It is also important to conserve protect and manage the water resources availability and usage so that it is sustainably used. Water auditing is conducted for the evaluation of facilities of raw water intake and determining the facilities for water treatment and reuse. The concerned auditor investigates the relevant method that can be adopted and implemented to balance the demand and supply ofwater.

USES AND MANAGEMENT

SOURCE OF WATER

SL. No.	Resource	Quantity
1	PWD (Water Supply)	300000
2	No. of Bore-well	01
3	Water reserve tank	03

WATER USERS IN CAMPUS

Sl No.	Person in different section	Strength (No. of person)
1	Staff	75
2	Hostel Boarders	272
3	College Quarter Members	60
4	Visitors	Approx.200
5	Construction Work	Approx.100

The visitors of the college vary with respect to different activities conducted in the college campus. During admission and different competitive exam conducted in the college campus. The total number of visitors of the college increases up to **5000** on such day. There are good numbers of visitor inflow to the college for OSOU inquiry and study purpose. Thus, average visitors per day approximately **200.**

QUANTITY OF WATER USED IN DIFFERENT SECTIONS OF THE CAMPUS

Sl. No.	Sections	Water Use (Litter/day)
1	Main Building	50000
2	Physical Sciences Block	20000
3	Canteen	4000
4	Urinals and Toilets	80000
5	Departments	65000
6	Laboratories	20000
7	Garden	5000
8	Drinking	12000
9	Hostel	135000
10	Residential Quarters	32000
11	Construction Work	150000

WATER CONSUMPTION IN DIFFERENT ACTIVITY IN COLLEGE CAMPUS

Activity	Water used per activity (in Litter)	No. of times Activity performed in a day	Average water used Person/Day	No. of people using water	Total water consumption per Day
Hand and face wash	4-6 L	4	16-24L	4000	160000
Drinking Water	0.2-0.4L	6	1.2-2.4L	4000	7.200
Toilet Flush	8-10L	4	32-40L	3714	133704L
Bath	30-40 L	1	30-40 L	1500	52500L
Cooking & Washing In resident	150-250L	2	300-500L	20	7200L
Cooking & Washing Hostel	350-450L	2	700-900L	05	4000L
Cloth Washing	100-200L	1	100-200L	1414	212100L
Total					576704

MAJOR OBSERVATIONS IN REGARD OF WATER USAGES AND CONSERVATION PLAN

1. At present waste water is not recycled or reused in any form in the collegepremises.
2. The garden is also watered with water pipe,two times a day for 02 hours eachtime.
3. College does not have any vehicle and hence there is no water usage for vehiclemaintenance.
4. The rain water is drained by storm water drain and released to Nallha inside the boundary of the college at lowterrain.

RECOMMENDATIONS

College administration may consider theses on top priority -

1. To establish and implement the Water Conservation and Management Plan as perEnvironment Protection Act1986.
2. The water Conservation Awareness Program to be conducted on World Water Day on 22nd March everyyear.
3. Display boards for switching off the taps to be put on at appropriateplace.
4. To eliminate the spillage and over usage of water in washbasins, urinals and toiler push tapsare highlyrecommended.
5. Automatic Leak detection systems for conservation ofwater.
6. Rain Water Harvesting as per the guidelines of Central Ground Water Board shall bedone.
7. 80% of total quantum of ground water extracted shall be recharged to ground either by Artificial Recharge Structures within the collegepremises.
8. Water meters to be installed on Dug Well as well as Bore Well water extractionsystem.
9. Special Internal Water Audit to be conducted quarterly.

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AIR POLLUTION MANAGEMENT

PERIODIC AWARENESS PROGRAMME FOR STAFF, STUDENTS AND SOCIETY

The College has been continuously conducting awareness programmes for staff, students and society for protecting and maintaining environment. The awareness is also done by arranging programmes, rallies on various issues related to environment and health. The college students and faculty members are involved in the activities through NSS/NCC.

Every day there are 500 Two wheelers and 10 four wheelers are coming in college premises but there is no system observed to check for PUC certificate, Vehicle Exhaust Gas Analysis and Vehicular movement noise and vibration pollution. The air pollution at the time of ignition off and on is more than it is in riding mode.

RECOMMENDATIONS

The College may consider these on top priority: -

1. 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 oflife.
2. Chemistry and Botany Department shall monitor the Ambient Air Quality as per theguidelines of “Air Prevention and Control of Pollution Act1981.
3. Exhaust gases shall be monitored, analysed and checkedregularly.
4. Parking zone of college shall be neat &clean.
5. Use of bicycle in campus to bepromoted.

NOISE POLLUTION MANAGEMENT

A) SILENCE ZONES IN THECOLLEGE

Various display boards have been placed in the library and other places for awareness to maintain silence in the college.

B) NOISE CONTROL IN THECOLLEGE

The college adopts no honkingpolicy and prevents use of any honk and noise inside campus.

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

RECOMMENDATIONS

The College administration may consider on top priority

1. Noise Level Monitoring shall be done as per the guideline of “Noise Pollution (Regulation and Control) Rules2000.
2. Vehicular exhausts shall be examined regularly in the collage as per Central Motor Vehicle Act 1988.
3. Vehicular movement shall be restricted by putting boundary limit and beyond that limit bicycles usage shall be promoted to all students and staff.

ENERGY USE AND CONSERVATION

This indicator addresses energy consumption, energy sources, energy monitoring, lighting, appliance, natural gas and vehicles. Energy use is clearly an important aspect of campus sustainability and thus requires no explanation for its inclusion in the assessment.

OBSERVATIONS

Following Energy Sources are used in the college

- ✓ Electrical
- ✓ Diesel
- ✓ Petrol
- ✓ LPG
- ✓ Batteries

RECOMMENDATIONS

The College administration may consider on top priority

1. To use Public transport instead of individual vehicle to conserve fossilfuel.
2. Energy Consumption for each building should be estimated to design the energyconservation plan.
3. GED of the Govt. must ensure proper regular maintenance of electrical installations.
4. Energy saving awareness shall be done by displaying the boards at appropriateplace.
5. Encourage natural ventilation and illumination by alteration in the building structures whenever going for newconstructions

GREEN BELT AREA & BIO-DIVERSITY

The Green Belt Area is meant for conservation of nature and aesthetic value of the college hostel premises. The Green Area in the college includes the plants, greenery and sustainability to ensure that the buildings conform to green standards This also helps in ensuring that the Environmental Policy is enacted, enforced and reviewed using various environmental awarenessprogrammes.

OBSERVATIONS

Campus is located in the vicinity of approximately 50 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 of ornamental and medicinal. Instead of maintaining biodiversity the similar species planted is observed for example “NEEM”. The dominant species in green belt are Neem, Indian Blackberry Tree, Mango Tree, Jack Fruit Tree, Teak and Spanish cherryPlant.

RECOMMENDATIONS

The Management of College may consider on top priority that

- ✓ Total 33% area is to be reserved forplantation.
- ✓ The Biodiversity is to be maintained while considering the plantation infuture.
- ✓ The selection of trees species to be based on environmental conservation and carbon sequestrationvalue.
- ✓ Artificial nests are recommended to attract different birds in their migrating and breedingseason.
- ✓ Watering schedule to be planned according theseason.
- ✓ Drip irrigation is strongly recommended to conserve thewater.
- ✓ Reuse of the water shall be done instead of use of freshwater.
- ✓ 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 environmentconservation.

ENVIORNMENTAL AWARENESS INITIATIVE

The College conducts regular trainings to staff and faculties regarding use of bicycles, controlled use of paper, plantation target and implementation. Display of environment protection banners, posters like save water, save energy at prominent places, waste disposal bins for wet and dry waste disposal are

some of the initiatives been taken.

OVERALL RECOMMENDATIONS

1. Lab waste water quantity is not measured and drained to municipal drainagesystem.
2. Planning of chemical consumption and purchase to beensured.
3. Composting of bio degradable waste to be scientificallydone.
4. Septic tank sewage water analysis is to bedone.
5. Plan for green belt development to beprepared.
6. Drinking water analysis shall be done as per IS10500.
7. Rain water Harvesting (RWH) is to be donetechnically.
8. Reduction of woodpolicy.
9. Department wise electrical load consumption is to be done.
10. Energy used by each appliance is to beestimated.
11. List of equipment/instrument and their consumption of (energy/water) is to beestimated.
12. Awareness for energy and water conservation among students and staff by displayingboards.
13. Automatic leak detections in water flowingpipeline.
14. Water usage reduction techniques to beused.
15. Tree plantation shall be done to maintain biodiversity as well as artificial nesting shallbe installed.
16. Exhaust gas analysis shall bedone.
17. Awareness among students and staff about green environment shall be done use tools like displayboards.

Plant Diversity

A survey was carried out to find plant diversity in the college campus of SashiBhushanRath Govt. (Auto.) Women's College.The survey was focused on the diversity of plants on the basis of their classification and economic importance.

BRYOPHYTA

Moss plant (funariahygrometrica)
f- funariaceae

Water Fern (Marsileaquadrifolia)
f- marsileaceae

PTERIDOPHYTA

Fern (dryopteris)
f- dryopteridaceae

GYMNOSPERM

Sago Palm (Cycascirnialis)
F- Cycadace

MESOPHYTES

(Medicinal Plants)

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.

ARAKH (White)(*CalotropisProcera*)
F –Apocynaceae

Parts Used: Root, Latex, Flower, Leaves

Uses: Bronchitis, Asthma, Leprosy, Eczema, Elephantiasis, Hair fall, Toothaches, Intermittent fever, Joint swellings & pain, Paralysis, Eye tonic, Deafness, Skin diseases.

BISALYAKARANI (*Tridaxprocumbens)*
F- Asteraceae

Parts Used – Whole Plant
Uses – Antiviral, Antibiotic, Wounds, Anti-inflammatory, Bleeding, Diabetes, Typhoid, Cough, Asthma, Epilepsy, Diarrhea, Stomach troubles, Dysentery, As Insecticide.

CHITAKUTI (*Euphorbia hirta*)
F–Euphorbiaceae

Parts Used – Leaves

Uses : Cough, Cold, Bronchitis, Asthma, Diarrhea, Promote formation and flow of breast milk, Hair growth, Skin Disorders, Gonorrhoea, Venereal diseases, Impotency, Premature ejaculation.


B. PATH. GOVT. WOMEN'S COLLEGE
BERHAMPUR

CURRY LEAF (*Murraya*Koenigii)

F -Rutaceae

Parts used– Leaves, Barks, Roots

Uses : As stimulant, Eruptions, Bites of poisonous animals, Dysentery, Vomiting, Anti-bacterial, Anti-fungal, Diabetes, Anti-oxidant, Anti inflammation.

Durlava(Ocimumbasilicum)
F –Lamiaceae

Parts used – WholePlant

Uses : Antimicrobial, Antiemetic, Sedative, Blood pressure, Lower cholesterol, Blood sugar, Anti- inflammation, Antispasmodic, High Vitamin &minerals, ascarminative.

DRUMSTICK (*Moringaoleifera*)

F -Moringaceae

Parts used – Root, bark, Leaf, flowers, seed & gum

Uses : Teeth & eye disease, Leprosy, fever, constipation, weakness, worms, scurvy, Acne, low blood pressure, cough & cold, venereal disease, dermal & internal infection, cancer, Scabies, Appetizer.

DATURA (*Daturametel*)

F-Solanaceae

Parts used: Whole Plant

Uses: Inflammation of Breast caused by excessive formation of Milk, Bronchitis, Asthma, Controls Saliva, Hydrophobia, impotence, chronic pain, Fever, Skin diseases.

GANGASIULI (*Nyctanthes arbor-tristis*)

F –Oleraceae

Parts used – Leaves, Seed

Uses :Diabetes, Rheumatism, Anti-inflammation, Anthelmintic, Piles, Gout, Dry cough, Ringworm, Intestinal worms, Gynecological troubles, Chronic fever.

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.

LEMON GRASS (*Cymbopogoncitratus)*
F-Poaceae

Parts used:Leaves

Uses : Cough, Colds, Fever, Anti-poison, Indigestion, Spleen, Tiredness, Headache, Worms, Vomiting, Skin, Urinary, Flatulence, Flavouring agent, Cancer, Nasal congestion, Anti-fungal and antimicrobial, as insecticide.

LIME (*Citrus lemon*)

F-Rutaceae

Parts used - Fruit, Leaves, Flowers

Uses : Indigestion, Cough, Bile, Rheumatism, Stomach disorder, Malaria, Skin, Jaundice, Cold, Fever, Eye diseases, Headache, High Blood

pressure & Infections, Stomatitis, Inflammation, Scurvy.

PUDINA (*Menthaarvensis*)
F –Lamiaceae

Parts used: Whole plant

Uses-Flatulence, Vomiting, Diarrhoea, Nausea, Headache& pains, Stimulant, Acne, Itching, Inflammations, Cold, Flu, Fever, Biliousness, Colic, Antibacterial, Thirst, Sore throat, Stomach pain, Swellings, Indigestion, Rheumatism, Toothache, Arthritis, As flavour& Culinaryuses.

PEPPERMINT *(Menthapiperita)*
F – Lamiaceae

Parts used – Whole plant

Uses :Colic, Flatulence, Indigestion, Diarrhea, Vomiting, Biliary tract disorder, liver & gall bladder problems, treatment of muscle &nerves, Aches, Respiratory catarrhs, Nausea, Headache, Cold, Relieve menstrual cramps, Chickenpox, Neuralgia,Myalgia.

PALUA (*Marantaarundinacea)*
F – Marantaceae

Parts used – Rhizome
Uses : Irritations of alimentary canal, Fever, Inflammation, Diarrhea, Gastroenteritis, Wounds, Scorpion Bites, Vegetable Poisons, Small-pox, Stomach disorders.

PEDIPEDICA– (*Abutilon indicum*)
F –Malvaceae

Parts used – Whole plant

Uses : Jaundice, Diabetes, Thirst, Painful menses, Diarrhea, Worms, Ulcers, Cold, High Fever, Mumps, Cough, Bronchitis, Leprosy, Gonorrhea, Headache, for quick pregnancy.

STEVIA *(Steviarebaudiana)*

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, Wasp stings, Tumour, Toothache, Memory loss, Malaria, Leukemia, Hodgkin's diseases, Nausea, Hair loss, sore throat,Pain.

TOUCH-ME-NOT (*Mimosa pudica*)

F-Mimosaceae

Parts used: Whole plant

Uses :Diarrhoea, Amoebic dysentery, Bleeding piles, Gynecological disorders, skin diseases, Bronchitis, General weakness, Impotence, wounds, Ulcers, Fistula, Scrofula, Conjunctivitis, Edema, Rheumatism, Myalgia.

THALKUDI (*Centellaasiatica*)

F-Apiaceae

Parts used: Whole Plant

Uses: Leprosy, Growth of Skin, Hair & Nails, Nervous disease & weakness, memory, Cough, Fever, Asthma, Bile, Inflammation, Burns, Wounds, Scars, Ulcers, Infections, Post-surgical recovers, Psoriasis, Wound healing.

TULSI (*Ocimum sanctum*)

F-Lamiaceae **ANANTAMULA** (*Hemidesmusindicus*)

Parts used: Leaves & Seeds

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

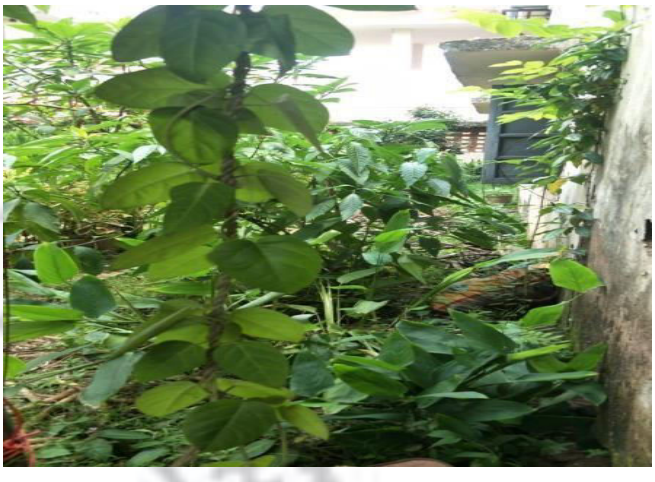
APARAJITA (*Clitoriaternatea*)

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, Dysuria, semen debility, Increase physical strength.

F –Asclepiadaceae



Parts used – Root

Uses :Blood purifier, Nutritional disorders, Syphilis, Chronic rheumatism, Urinary diseases, Stimulates flow of bile, Remove toxins, Venereal diseases, Thrush, Gonorrhoeal neuralgia, Rheumatoid, Arthritis.

CREPE JASMINE (Chandini Flower Plant)
Botanical Name -TabernaemontanaDivaricata
F-Apocynaceae

Parts used – whole plant

Uses :Tagar is a very effective herb which is used to manage the symptoms of anxiety, insomnia, or sleep-related problems. According to Ayurveda, anxiety or insomnia are mainly caused due to Vata imbalance.

SAPODILLA SAPOTE

Botanical name: Manilkarazapota

F: Sapotaceae

Parts Used – Fruits

Uses :Sapota is rich in glucose and calories that make it a source of energy.Boostimmunity,Skinbenefits,Hairbenefits, Promote gut health,Good for bones, Cancer Benefits.

JASMINE(Juhi, Chameli, Mogra,Champa etc.)

Botanical name: Jasminumspp

Family: Oleaceae

Parts used - Flower

Uses :Jasmine is inhaled to improve mood, reduce stress, and reduce food cravings. In foods, jasmine is used to flavor beverages, frozen dairy desserts, candy, baked goods, gelatins, and puddings. In manufacturing, jasmine is used to add fragrance to creams, lotions, and perfumes.

BETEL*(Piperbetle)*

F- Piperaceae

Parts used: Leaves, Stem, Roots.

Uses: Energy Booster, Cough, Asthma, Stimulant, Carminative, Expectorant, Aphrodisiac, Headache, Arthritis, Toothache, Indigestion, Constipation, Diarrhea, Joint pain, Diphtheria, Bronchitis, Pneumonia, Skin diseases, Fever, Impotency, Colic.

KARANJA

Botanicalname**:**Pongameoiltree

F - Legumes

Parts used – Whole Plant

Uses :Karanja is a medicinal herb mainly used for skin disorders. All parts of Karanja tree (roots, flowers, leaves, bark) are used for medicinal purposes. Karanja is widely used in managing constipation as it helps to improve gut motility and has a laxative

property.

KADAMBA

Botanical Name **-** Neolamarckiacadamba

F - Rubiaceae or Ixora

Parts used – Whole plant

Uses - Kadamba is used as anti-hepatotoxic, antimalarial, antimicrobial, wound healing, antioxidant, anthelmintic, analgesic, anti-inflammatory.

MALATI TREE(Rangoon creeper)

F – Apocynaceae

Botanical Name - *Combretumindicum*

Parts Used – Whole Plants

Uses - Respiratory & Digestive Disorders,Reduces Stress &Depression,ControlsCholesterol,BoostsImmunity,Keeps your Liver Healthy,Treats Skin Disorders,WeightManagement.Treats Sore Throat & Cough.

SHATAVARI (*Asparagus racemosus*)

F-Liliaceae

Parts used: Rhizome

Uses: Piles, Excessive menstruation, Skin, Aphrodisiac, Malaria, Typhoid, Nerve weakness, Blindness, Polio, Feeds, Acidity, Vigour, Ureteral stones, Cardiac debility, Cough, Arthritis, Increase breast milk, Diarrhea, Piles.

BAEL (*Aegle Marmelos*)

F-Rutaceae

Parts used: Fruits, Bark, Leaves, Roots

Uses: Chronic Diarrhoea& Dysentery, improve

appetite & digestion, Diabetics, Polio, Cold, Cough, Fever, Constipation, Peptic Ulcer, Dyspepsia, Ophthalmic, Abdomen pain, Urinary troubles, Burningsensation.

POMEGRANATE (*Punicagranatum*)

F-Punicaceae

Parts used: Fruit, Leaves, Bark, Flower, Seed.

Uses: Diarrhoea, Dysentery, Tapeworm, Intestinal Parasites, Hemorrhages, Breast Cancer, Dyspepsia, Leprosy, Bronchitis, Hypotension.

RUBBER (Heveabrasiliensis)

F-Euphorbiaceae

Parts Used – Whole Plant

Uses :It is used in medical devices, surgical gloves, aircraft and car tires, pacifiers, clothes, toys, etc.

SHELTER PLANTS

PEEPAL TREE

Botanical Name-Ficusreligiosa

F- Moraceae

Uses :
Traditionally, the leaf juice of the peepal tree may be helpful for cough, asthma, diarrhoea, ear pain, toothache, haematuria (blood in urine), migraine, scabies, eye troubles, and gastric problems. The stem bark of the peepal tree might help with paralysis, gonorrhoea, bone fractures, diarrhoea, and diabetes.

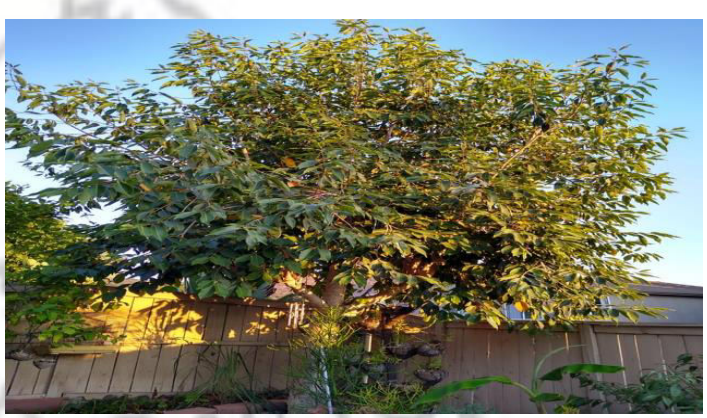
PESTABADAM (Terminalia Catappa)
F-Combretaceae

Parts used: Leaves, Kernel, Bark

Uses: Cough,Tuberculosis, Dyspepsia, Worms, Mammary pain, Gonorrhea, Rheumatism, Headache, Colic, Scabies, Sexual dysfunction, Diarrhea, Dysentery, Biliousness, Flatulence, Liver disease, Lepros.

JAVA PLUM OR INDIAN BLACKBERRY

Botanical name: **Syzygiumcumini**
Family: Myrtaceae (Bottlebrush family)



Uses :
Fighting respiratory problems,helping to manage wweight boost immunity,low-calorie count.
Keeps the skin healthy.

BANYAN TREE (FicusBenghalensis)
F-Moraceae

Parts used : Whole Plant
Uses : The banyan tree has been used for many medicinal purposes from ancient times. Its bark and leaves both possess analgesic and anti-inflammatory properties. The bark of the Banyan tree is considered useful in burning sensation, ulcers, and painful skin diseases. It can also be used in inflammation and

toothache.

CHINESE MOON CREEPER (GandhaPrasarini)
(PaederiafoetidaAuct)
F – Convolvulaceae

Parts used : Whole Plant
Uses :It grows mainly in China, Bangladesh, India and Mauritius, has been used in folk medicine for the treatment of inflammation, piles, and diarrohea, while P. Scandens is used to treat aches, jaundice, dysentery and dyspepsia as a folk medicine in the southern region of China, Vietnam, India and Japan.

GUAVA TREE (Psidiumguajava)
F :Myrtaceae

Parts used : Whole Plant

Uses : It is used for inflammation, diabetes, hypertension, caries, wounds, pain relief, fever, diarrohea, rheumatism, lung diseases, and ulcers.

MANGO TREE(MangiferaIndica Linn)

F – Anacardiaceae

Parts used : Whole Plant
Uses :Various parts of plant are used as a dentrifrice, antiseptic, astringent, diaphoretic, stomachic, vermifuge, tonic, laxative and diuretic and to treat diarrhea, dysentery, anaemia, asthma, bronchitis, cough, hypertension, insomnia, rheumatism, toothache, leucorrhoea, haemorrhage and piles.

NEEM TREE(Azadirachta indica)
F - Meliaceae

Parts used : Whole Plant

Uses :All parts of the neem tree- leaves, flowers, seeds, fruits, roots and bark have been used traditionally for the treatment of inflammation, infections, fever, skin diseases and dental disorders. The medicinal utilities have been described especially for neem leaf.

COCONUT PALM(Cocos nucifera)
F – Arecaceae

Parts used : Whole Plant

Uses :They might increase fat burning and reduce fat storage. Coconut flour, which is made from coconut, contains high amounts of dietary fiber. People use coconut for diabetes, high cholesterol, obesity, and other conditions.

CUSTARD APPLE(Annona reticulate)
F: Annonaceae (Sugar-apple family)

Parts used : Whole Plant

Uses :
High in antioxidants. Cherimoya is loaded with antioxidants, which fight free radicals in your body.

May boost your mood, benefit eye health, prevent high blood pressure, promote good digestion,have anticancer properties,fightinflammation,support immunity.

ORANGE TREE(Citrus sinensis)
F – Rutaceae

Parts used : Whole Plant

Uses :It is highly recommended for scurvy. The infusion of the leaves, mixed with a little honey, is used for controlling cough. The infusion of the dried flowers is recommended for stress or nervousness. In general, the orange juice stimulates the digestive organs, acts as a laxative and purifies the blood.

INDIAN GOOSEBERRIES(Phyllanthusemblica)
F :Phyllanthaceae

Parts used :Fruits

- **Uses:**Improves Immunity. Amla benefits include antibacterial & astringent properties which help improve the body's immunity system,hair Care,
- reduces Stress,eyeCare,respiratoryHealth,treatsAnemia,bloodPurifier,diuretic.


B. PATH. GOVT. WOMEN'S COLLEGE
BERHAMPUR

KITCHEN GARDEN

Vine spinach *(Basellaalba)*

Eggplant *(Solanummelongena)*

Papaya (*Caricapapaya*)

Amaranthus*(Amaranthusoleraceous)*

Bitter Gourd (*Momordicacharantia)*

Elephant ear taro (*Colocasiaesculenta)*

Pumpkin (*Cucurbita maxima)*

Jackfruit (*Artocarpusheterophyllus)*

Banana (*Musa paradisica*)

Chilli (*Capsicum annuum*)

Coriander (*Coriandrumsativum*)

Pumpkin (*Cucurbita*)

Tomato (*Solanumlycopersicum*)

Cucumber (*Cucumissativus*)

Turmeric Curcumin (*Curcuma Longa*)

Ladies Finger (Okra) (*Hibiscus esculentus)*

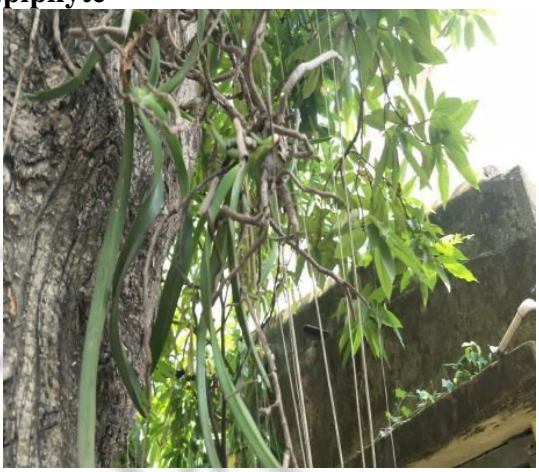
Air Potato (*Dioscoreabulbifera*)

Ridge Gourd *(Luffa acutangula)*

Wood

Teak Tree *(Tectonagrandis)*

Epiphyte



Vanda *(Vanda roxburghii)*

Ornamental

Garden Balsam (*Impatiens balsamina*)

Rose (*Rosa indica*)

Adenium*(Adeniumobesum)*

Cockscomb (*Celosia argentia*)

Areca Palm (*Dypsislutescens*)

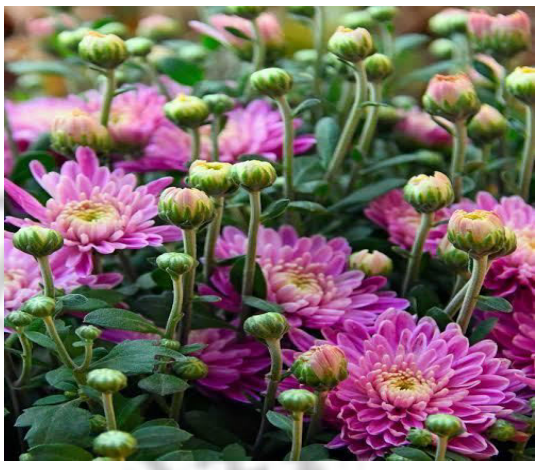
Snake Plant (*Dracaena trifasciata)*

Marigold (*Tageticserecta)*

Roheao (*Rhoeo discolor*)

Dahlia (*Dahlia pinn)*

Chrysanthemum *(Chrysanthemum indicum)*



BIRD DIVERSITY

A survey was carried out to find the animal diversity in the campus of SashiBhushanRath Govt. (Auto.) Women's College,Berhampur. The survey focused on the diversity of birds, butterfly, reptiles and Amphibia.

Scientific name:
Acridotherestristis Common Name: Common myna

Scientific name:
Centropussinensis Common Name: Greater coucal

Scientific name: *Bubuusibis*
Common Name: Cattleegret

Scientific name: *Columba livia*
Common Name: Blue rock pegion

Scientific name: Corvussplendens
Common Name: House crow

Scientific name: *Diceum agile*
Common Name: Thick-billed flowercatcher

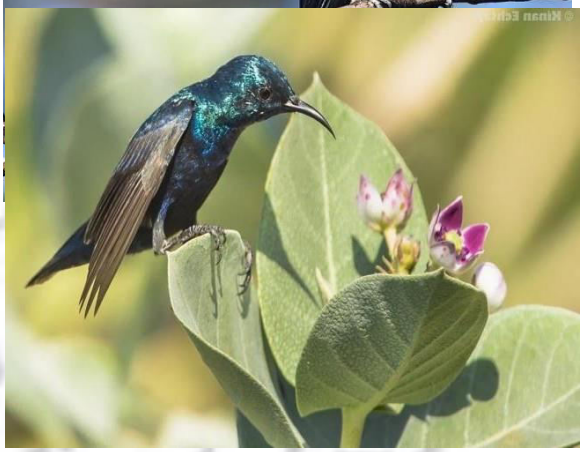
Scientific name: *Cuculuscanorus*
Common Name: Indian cuckoo

Scientific name: Dicrurusmacrocercus

Common Name: Black drongo

Scientific name: Eudynamysscolopacea

Common Name: Asian koel



Scientific name: Nectariniaasiatica

Common Name: Purple sunbird

Scientific name: Passer domesticus Common Name: House sparrow

Scientific name: Psittaculakrameri Common Name: Rose-ringed parakeet

Scientific name: Ploceusphilippinus Common Name: Baya weaver

Scientific name: Pycnonotusjocosus Common Name: Red-whiskered bulbul

Scientific name: Pycnonotuscafer Common Name: Red-vented bulbul

Scientific name: Streptopeliachinensis Common Name: Spotted dove

Scientific name:
Turdoidesstriata Common Name :Jungle babbler

Scientific name: *Acraeaviolae*
Common Name :TawnyCoster

Butterflies

Scientific name:
Abisaraecherius Common Name : Plum Judy

Scientific name: *Danausgenutia*
Common Name : Striped tiger

Scientific name:
Danauschrysippus
Common Name :
PlainTiger

Scientific name: *Euploeacore*
Common Name : Common Crow

Scientific name:
Junonialemonias Common
Name : Lemon Pansy

Scientific name: Pareroniavaleria
Common Name : Common Wanderer

Scientific name:
Papiliodemoleus Common
Name : Lime Butterfly

Scientific name:
Pseudozizeeriamaha
Common Name : Pale Grass
Blue

Scientific name: *Spialiagalba*
Common Name : Indian Skipper

Scientific name:
Neopithecopszalmora
Common Name : Quaker

Scientific name:
Athymaperius Common Name:
Common sergent

:House Mouse

Mammals

Scientific name:
Bandicotabengalensis Common
Name : Lesser Bandicoot-rat

Scientific name: Mus
musculus Common Name

Scientific name:
Rattusrattus Common
Name : House Rat

Reptiles

Scientific name: Calotes versicolor Common Name : Indian Garden Lizard

Scientific name:
Hemidactylusbrookii
Common Name : House
Gecko

Scientific name: Eutropiscarinata
Common Name : Keeled Indian Mabuya

Scientific name: Bungaruscaeruleus
Common Name : Common krait

Scientific name: Najanaja Common Name : Indian Cobra

Scientific name: Ptyasmucosus Common Name : Rat snake

Amphibians

Scientific name:
Duttaphrynusmelanostictus
Common Name : Asian Toad

Scientific name:
Hoplobatrachustigerinus
Common Name : Indian Bull Frog