Manoharbhai Shikshan Prasarak Mandal Armori's

Rashtrapita Mahatma Gandhi Arts & Science College, Nagbhid, Dist-Chandrapur 441205

Accredited by NAAC 'B' Grade

(Affiliated to Gondwana University, Gadchiroli)

www.rmgcollegenagbhid.in

AQAR 2021-2022

Criterion No – VI

Metric No – 7.1.6

Metric Name - Quality audits on environment and energy are regularly undertaken by the institution

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GREEN AUDIT REPORT

2021 - 2022

-: Prepared by :-

Dr. Pawan S. Nagare

President, ZEP Nisarg Mitra Bahuuddeshiya Sanstha, Nagbhid (NGO)

Mr. Mangesh S. Bawankar (Electric Supervisor)

-: Convener:-

Dr. G. D. Deshmukh

-: Members: -

Dr. V. M. Mohture

Dr. A. S. Nagpure

Dr. A. R. Kayarkar

Mr. D.G. Madavi

About Nagbhid

Nagbhid is a taluka place in Chandrapur district of Maharashtra State, India. Location code or village code of Nagbhid village is 540611; the total geographical area of village is 1096.83 hectares. Nagbhid consist of 114 villages and 56 gram panchayat. Chichala, Gaimukh is the smallest village and Nagbhid is the biggest village. It is in the 250 m elevation (altitude). Nagbhid local language is Marathi. Total population of Nagbhid Tahsil 133020 out of which 66886 are males and 66134 are the females and number of houses are 3172. Female population is49.7%, town and the female literacy rate is 35.8% according to 2011 census report.

Recently in 2016 Nagbhid gram panchayat is converted into nagar parishad by including 12 gram panchayat. Nagbhid Village located in Nagbhid Taluka, 12790 People is living in this village, 6435 are males and 6355 are females as per 2011 census. Expected Nagbhid population 2021/2022 is between 12,534 and 14,325. Literate people are 9872 out of 5287 are male and 4585 are female. People living in Nagbhid depend on multiple skills, total workers are 5277 out of which men are 3535 and women are 1742. Total 360 Cultivators are depended on agriculture farming, 718 people works in agricultural land as a labor in Nagbhid.

About College

Rashtrapita Mahatma Gandhi Arts and Science College, Nagbhid was established in 2008 to satisfy the need of rural population of getting quality education at affordable cost in Nagbhid on permanent non grant basis. The college offers Under Graduate courses in Arts, and Science faculty. Science faculty received 100% grant from Govt. of Maharashtra in 2010 as it is the first faculty in Nagbhid Tahsil. College is running Computer Science and Microbiology subjects on non- grant basis. College has its own 5.11 acre land with botanical garden and play grounds.

Our college has been committed to the mission of upholding maintenance of standards and quality enhancement of higher education. We are feeling very proud to state that, Dr. A. S. Nagpure during 2016-17 got one U.S. and one Indian Patent. We believe that quality is a verb and we are ready to spread quality culture. In a very short span of its establishment the college had grown in multiple directions and gained tremendous popularity for its regularity, honesty, sincerity, academic

success co-curricular opportunities, dedication and the devotion of teachers in the overall development of our students. Rashtrapita Mahatma Gandhi Arts & Science College, Nagbhid has been founded with strong belief that value based quality education is the best foundation for success in life.

Rashtrapita Mahatma Gandhi Arts & Science College, Nagbhid on excellent infrastructure and faculty for imparting a highest quality of holistic education and emphasize to inculcating the right values through discipline from academics to sports and from spiritual development to personality development, every aspect is important to us and attention is paid to each of these facets of education. Rashtrapita Mahatma Gandhi Arts & Science College, Nagbhid always was an institution that strives to explore path trodden and untrodden in quest for excellence. At this institution, we continuously strive to provide finest environment for learning, research creation, innovation and character building.

VISION

The institute will be the leader in optimizing human resource potential to its fullest so as to contribute phenomenally in national development. The institute will work significantly for upliftment of rural and tribal student.

MISSION

- To serve the people by providing the facilities of higher education for under privileged and needy people of this educationally backward region.
- To create awareness about higher education in Science for both boys and women of weaker section
- To sensitize the students on socio-economic and environmental issue
- To create research environment this will be helpful for all round
- development of society
- To create learning environment and knowledge base society
- To strengthen faith in secularism and humanity

Objective and Goals

- To focus on holistic, value added education and character building through all round activities including curricular and extra-curricular implementation
- The institute will strive to provide quality education facilities for students of backward and middle class living in rural and tribal areas
- To implements the target oriented different programs for youth
- A well thought out, systematic process of teaching and learning
- To achieve leadership position in education by providing facilities of learning and holistic development of students through providing the most effective resources and environments
- To develop overall personality of students
- To enable students realize their full potential in academic, cultural and sporting pursuits
- To foster a scientific tempers and encourages students to adopt a rational approach

Fig. 1 Infrastructure of Rashtrapita Mahatma Gandhi Arts and Science College, Nagbhid

Fig.2 Location of Rashtrapita Mahatma Gandhi Arts & Science College, Nagbhid

Green Audit Report

To find out the environmental performance of educational institution and to analyze the possible solutions for converting the educational campus into eco-campus, Green auditing of institution become essentials.

To carry out this audit comprising five different components, a committee consisting of the following staff members and external expert members (for special tasks) was constituted by the principal Dr. A. N. Korpenwar in consultation with College Development Committee.

Members of Green Audit Team

Sr. No.	Name of Auditor	Members
1	Dr. Pawan S. Nagare President, ZEP Nisarga Mitra Bahuuddeshiya Sanstha, Nagbhid (NGO)	For Green Audit
2	Mr. Mangesh S. Bawankar (Electric Supervisor)	For Energy Audit
3	Dr. G. D. Deshmukh	Convener
4	Dr. V. M. Mohture	Member
5	Dr. A. S. Nagpure	Member
6	Dr. A. R. Kayarkar	Member
7	Mr. D. G. Madavi	Member

Green auditing in the college began with the assessments of the status of the green cover of the institution followed by waste management's practices and energy conservation strategies etc. The team monitored different facilities at the college, determined different types of appliances and utilities (lights, taps, toilets etc.) and identifying the relevant consumption patterns (such as how often an appliance is used) and their impacts. The staff and learners were interviewed to get details of usage, frequency or general characteristics of certain appliances.

Data collection was done in the sectors such as Energy, Waste, Greening, Carbon footprints and Water use. College records and documents were verified several times to clarify the data received through survey and discussions.

Data offered by the College

UG Course

Aided Course		B.A.
		B.Sc.

The College is located in 5.11 acres of land. The built up area of the college is 32612 Sq.m.

Main Building	Number	Area in Sq. Feet
Principal room	01	526.5618
Office	01	460.9192
Staff room	01	542.0490
Incubation centre	01	686.1217
Computer lab	01	320.5923
Chemistry lab	01	1201.5753
Physics lab	01	1201.5753
Botany lab	01	1201.5753
Zoology lab	01	1201.5753
Home Economics lab	01	320.5923
Classroom	09	731.7306
Conference Hall	01	1833.3708
Library	01	908.3427
Store room	01	320.5923
Girls common room	01	280.1920
NSS room & Physical education dept.	01	260.1824
ICT room	01	518.090
Gym	01	260.1824
Urinals	04	153.9992

Total Strength of students, teachers, and non-teaching staff

No. of Students	522
No. of Teachers	22
No. of non teaching staff	09
Total	**553**

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. Our college examines the quality and usage of water in the college campus. Water auditing is conducted for the evaluation of facilities of raw water intake and determining the facilities for water treatment and reuse. The concerned audit investigates the relevant method that can be adopted and implemented to balance the demand and supply of water.

Sr. No.	PARAMETERS	RESPONSE	REMARK
1	Source of water	Bore/tube well	safe
2	No. of Wells	NA	
3	No. of motor used	01	Functioning
4	Horse power motor	3hp	
5	Depth of well total	NA	
6	Water level	NA	
7	No. of water tank	01	
8	Capacity of tank	8000 Litre	
9	Quantity of water pumped every day	1000 Litre	Based on usage
10	Any water wastage/why	Nil	
11	Water uses for gardening/tress	100 Litre	Approximate
12	Waste water sources	01	
13	Use of waste water	Diverted for tress or into Soak pit	
14	Fate of waste water from lab	Nil	No chemical use
15	Any treatment of lab water	NA	

16	Whether any green chemistry practice in lab	NA	
17	No. of water cooler	04	
18	Rain water harvest available	Yes	
19	No. of units and amount of water harvested	-	Didn't Measure
20	Any leaky taps	-	
21	Amount of water lost per day	-	
22	Any water management plan used	NA	
23	Any water saving technique followed	None	
24	Are there any sign reminding people to turn off the water	Yes	

How is the waste generated in the college managed?

Parameters	Response	Remark
A) Compositing/Vermicomposting	Yes	Functioning
B) Recycling	No	
C) Reusing	Yes	Direct Selling
D) Other ways	No	

Waste generated in the college?

E-waste	Yes	
Hazardous waste	No	
Solid waste	Yes	
Dry leaves	Yes	
Canteen waste	NA	
Liquid waste	No	
Glass	Yes	
Unused equipment	Yes	
Napkins	No	
Others (specify)	None	
Do you used recycled paper in college		No
Any waste management method is used		Direct Selling

Waste Management

The following data provide the details of the waste generated and disposal method adopted by the college.

Total number of stakeholders in the college: 31 staff + 522 Students = 553

Total number of building (Class rooms, canteen, office, auditorium, library etc) – 01

Different types of waste generated in the college and their disposal

Types of waste	Particulars	Disposal methods
E- waste	Computers, electrical and electronics parts	Direct selling
Plastic waste	Pen, refill, plastic, water bottles and other plastic containers, wrapper	Direct selling
Solid waste	Damage furniture's, paper waste, paper plates	Reuse after maintenance paper waste- selling
Waste water	Washing, urinals, bathrooms	Soak pits
Glass waste	Broken glass wares from the labs	Direct Selling
Sanitary Napkin		

Fig. 3 Dry & Wet Waste Collections beans

Audit Team

Teams for various auditing were formed in order to collect information and map the electrical and water equipment's and devices used in various buildings and campus premises. The information thus gathered was marked in the structured questionnaire for further analysis. With the expertise of faculty's in Zoology and Botany Departments, flora and fauna diversity were identified and listed. Water outlets fixed in the college garden, playground, biodiversity garden.

Fig. 4 Views of Greenery

Fig. 5 Commandments of Sustainability

Energy Audit

Energy Usage

Electricity charges – Rs.12520 / month

Electric unit's consumption per months – 650 units

No. of gas cylinder - 04

Checklist of electrical equipment's in college

No.	Devices	No.
1.	Fan	107
2.	Freeze	01
3.	Sound service	01
4.	Cooler	04
5.	Internet connection	02
6.	Computer	47
7.	Projector	07
8.	Printer	06
9.	Bio-Metrics	01
10.	Xerox Machine	02
11.	Inverter	02
12.	Toshiba Hard Disc	01
13.	Water filter	02
15.	Battery	02
16.	CCTV Camera	56
17.	Electric Bell	01

Checklist of Laboratory Equipment

Sr. No.	Instrument	Number
1.	Hot plat	02
2.	Centrifuge	02
3.	Heating mantle	04
4.	Colorimeter	02
5.	Weight Balance	04
6.	Autoclave	02
7.	Soxhlet	04
8.	Compound Microscope	20
9.	Dissecting Microscope	07
10.	Incubator	02
11.	Microtome	01
12.	Furnace	01
13.	Digital Balance	02
14.	Conductometer	01
15.	pH Meter	02
16.	Refractometer	01
17.	Spectrometer	02
18.	Galvanometer	03
19.	Voltmeter	03
20.	Leclanche cell	03
21.	Rheostat	03
22	Compound pendulum	01
23	CB Mode	01
24	CE Mode	01
25	Potation meter	05

Electric Appliance Audit Sheet					
Appliance	Number	Power use (Watt)	Operation /day	No of days in month	Remark
CFL	10	15W	5hrs	25	Good condition
POP LED LIGHT	14	15W	6hrs	25	Good condition
LED LIGHT	4	8W	8hrs	25	Good condition
LED TUBE	33	20W	8hrs	25	Good condition
PROJECTOR	4	900W	3hrs	25	Good condition
SPEAKER	2	100W	1hrs	3	Good condition
FAN	107	75W	7hrs	25	Good condition
COMPUTER	47	330W	5hrs	25	Good condition
LAPTOPS	13	50W	4hrs	25	Good condition
PRINTERS	6	50W	4hrs	25	Good condition
SCANNER	4	450W	4hrs	25	Good condition
UPS	2	420W	6hrs	25	Good condition
REFRIGERATOR	1	500W	4hrs	25	Good condition
OVEN	1	2000W	1hrs	5	Good condition
CCTV CAMERA	56	15W	24hrs	30	Good condition
WATER FILTER	2	75W	24hrs	30	Good condition
BORE WELL WITH 3 HP MOTOR	1	2200W	1hrs	26	Good condition
BIO-METRICS	1	3.5W	6hrs	25	Good condition
GENERATOR	1	800W			Good condition
SWITCH & SOCKET BOARDS	714				Good condition
Electric Bell	1	150 W	3hrs	25	Good Condition

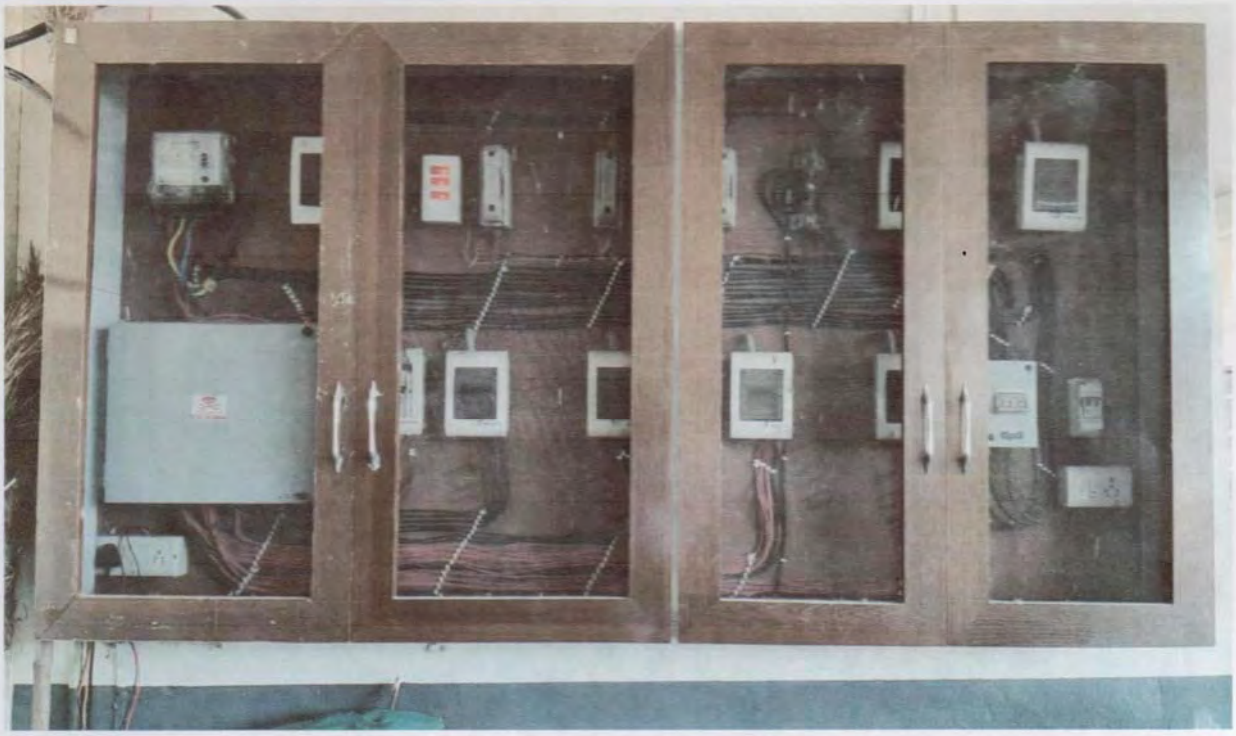

Fig. 6 Energy Audit in Rashtrapita Mahatma Gandhi Arts and Science College, Nagbhid

Existing waste management methods practiced

- Cleaning the college in daily basis
- Incinerators to burn sanitary napkins
- Waste bins are placed in corridors office and staff rooms
- Incinerators to burn sanitary napkins
- E-waste and plastic waste disposal at municipal collection centre.
- Campaigns for reduce, reuse and recycle by Biodiversity club.

Green Campus Cover

The total no. of plant species- 88

List of Plant Diversity in College Campus during Biodiversity Audit

No.	Name of the Plant	Family
1	*Gmelina arborea*	Lamiaceae
2	*Clerodendrum infortunatum*	Lamiaceae
3	*Rhynchostylis retusa*	Orchidaceae
4	*Vanda tessellata*	Orchidaceae
5	*Peristylus lawii*	Orchidaceae
6	*Eulophia nuda*	Orchidaceae
7	*Geodorum densiflorum*	Orchidaceae
8	*Cymbopogon citratus*	Poaceae
9	*Eclipta alba*	Asteraceae
10	*Vernonia elaeagnifolia*	Asteraceae
11	*Cissus quadrangularis*	Vitaceae
12	*Terminalia arjuna*	Combretaceae
13	*Terminalia chebula*	Combretaceae
14	*Plumbago zeylanica*	Plumbaginaceae
15	*Asparagus racemosus*	Asparagaceae
16	*Chlorophytum borivilianum*	Asparagaceae
17	*Flemingia nana*	Fabaceae
18	*Clitoria ternatia*	Fabaceae
19	*Delonix regia*	Fabaceae
20	*Uraria picta*	Fabaceae
21	*Ficus benghalensis*	Moraceae
22	*Ficus benjamina*	Moraceae
23	*Ficus religiosa*	Moraceae
24	*Colocasia esculenta*	Araceae

25	*Sauromatum venosum*	Araceae
26	*Gloriosa superba*	Colchicaceae
27	*Andrographis paniculata*	Acanthaceae
28	*Adhatoda vasica*	Acanthaceae
29	*Annona squamosa*	Annonaceae
30	*Murraya koenigii*	Rutaceae
31	*Aegle marmelos*	Rutaceae
32	*Citrus limon*	Rutaceae
33	*Tradescantia pallida*	Commelinaceae
34	*Mirabilis jalapa*	Nyctaginaceae
35	*Aloe vera*	Liliaceae
36	*Kalanchoe pinnata*	Crassulaceae
37	*Cycas revoluta*	Cycadaceae
38	*Corallocarpus epigaeus*	Cucurbitaceae
39	*Withania somnifera*	Solanaceae
40	*Tinospora cordifolia*	Menispermaceae
41	*Curcuma pseudomontana*	Zingiberaceae
42	*Areca palm*	Arecaceae
43	*Syzygium cumini*	Mrytaceae
44	*Costus specious*	Costaceae
45	*Amaranthus viridis*	Amaranthaceae
46	*Rose sps.*	Rosaceae
47	*Piper sps.*	Piperaceae
48	*Plumeria alba*	Apocynaceae
49	*Curculigo orchioides*	Hypoxidaceae
50	*Pedilanthus tithymaloides*	Euphorbiaceae
51	*Tacca leontopetaloides*	Dioscoreaceae
52	*Dioscorea bulbifera*	Dioscoreaceae
53	*Basella alba*	Basellaceae
54	*Thysanolaena latifolia*	Poaceae
55	*Euphorbia leucocephala*	Euphorbiaceae
56	*Leptadenia reticulate*	Apocynaceae
57	*Actiniopteris radiata*	Pteridaceae
58	*Physalis angulata*	Solanaceae
59	*Mimosa sps.*	Mimosaceae

60	*Gardenia resinifera*	Rubiaceae
61	*Chlorophytum tuberosum*	Asparagacaeae
62	*Roystonea regia*	Arecaceae
63	*Pimenta dioica*	Myrtaceae
64	*Bixa orellana*	Bixaceae
65	*Pterocarpus santalinus*	Fabaceae
66	*Tylophora indica*	Apocynaceae
67	*Nelumbo nucifera*	Nelumbonaceae
68	*Commiphora Sps.*	Burseraceae
69	*Nymphaea alba*	Nymphaeaceae
70	*Nymphaea rubra*	Nymphaeaceae
71	*Utricularia Sps.*	Lentibulariaceae
72	*Ludwigia Sps.*	Onagraceae
73	*Trapa natans*	Trapaceae
74	*Euphorbia tirucalli*	Euphorbiaceae
75	*Cinnamomum tamala*	Lauraceae
76	*Rauwolfia serpentina*	Apocyanaceae
77	*Caulanthus ambelliferous*	Rhamnaceae
78	*Clerodendrum serratum*	Lamiaceae
79	*Curcuma caesia*	Zingiberaceae
80	*Acorus calamus*	Acoraceae
81	*Croton tiglium*	Euphorbiaceae
82	*Crotalaria pallida*	Fabaceae
83	*Morus alba*	Moraceae
84	*Spilanthus panuculata*	Asteraceae
85	*Spilanthes acmella*	Asteraceae
86	*Spilanthes radicans*	Asteraceae
87	*Plumeria alba*	Apocynaceae
88	*Plumeria rubra*	Apocynaceae

List of Bird Diversity in College Campus during Biodiversity Audit

Sr. No.	Scientific Name	Common Name
1	*Anastomus oscitans*	Asian Openbill Stork
2	*Ardeola grayii*	Indian Pond Heron
3	*Bubulcus ibis*	Catle Egret
4	*Egretta garxetta*	Little Egret
5	*Pseudibis papilosa*	Red Naped Ibis
6	*Phalacrocorax niger*	Little Cormorant
7	*Amaurornis phoenicurus*	White breasted Waterhen
8	*Coracius bengalensis*	Indian Roller
9	*Merops orientalis*	Green bee-eater
10	*Halcyon smyrnensis*	White Throated Kingfisher
11	*Alcedo atthis*	Common Kingfisher
12	*Elanus caeruleus*	Black Winged Kite
13	*Saxicola caprata*	Pied bushchat
14	*Oenanthe fusca*	Brown Rock Chat
15	*Copychus fulicatus*	Indian Robin
16	*Copychus saularis*	Oriental magpie Robin
17	*Dicrurus macrocerces*	Black Drongo
18	*Corvus splendens*	House crow
19	*Lonchura punctulata*	Scaly breasted munia
20	*Eudice malabarica*	Silverbill
21	*Mirafra erythroptera*	Indian Bush Lark
22	*Erimopteryx griseus*	Ashy Crowned Sparrow Lark
23	*Prinia inornata*	Plain Prinia
24	*Prinia socialis*	Ashy Headed Prinia
25	*Pycnonotus cafer*	Red Vented Bulbul
26	*Geokichla citrina*	Orange headed thrush

27	*Turdoides striata*	Jungle Babbler
28	*Ploceus phillipinus*	Baya Weaver Bird
29	*Sturnia pagodarum*	Brahminy sterling
30	*Gracupica contra*	Pied Myna
31	*Acidotherus tristis*	Common Myna
32	*Oriolus kundoo*	Golden oriole
33	*Lanius schach*	Long Tailed Shrike
34	*Lanius vittatus*	Baybacked Shrike
35	*Rhipidura aureola*	White browed Fantail
36	*Passer domesticus*	House sparrow
37	*Anthus rufulus*	Paddyfield Pipit
38	*Motacilla maderaspatensis*	White browed Wagtail
39	*Zosterops palpebrosus*	Oriental white eye
40	*Psitacula krameri*	Rose Ringed Parakeet
41	*Psitacula cyanocephala*	Plum Headed Parakeet
42	*Psilopogon hematocephala*	Coppersmith Barbet
43	*Dinopium benghalense*	Lesser flameback
44	*Tyto alba*	Barn Owl
45	*Athene brama*	Spotted Owlet
46	*Collumba livia*	Rock pigeon
47	*Treron phoenicoptera*	Yellow footed green pigeon
48	*Spilopelia chinensis*	Spotted dove
49	*Streptopelia senegalensis*	laughing dove
50	*Ocyceros burestris*	Grey Hornbill
51	*Upupa epops*	Common Hoopee
52	*Cinnyris asiaticus*	Purple Sunbird

List of Dragonflies & Damselflies Diversity in College Campus during Biodiversity Audit

Sr. No.	Scientific Name	Common name
1	*Gomphus vulgatissimus*	Common clubtail
2	*Acisoma panorpoides*	Trumpet tail
3	*Brachydiplox sorbina*	Little Blue Marsh Hawk
4	*Brachythemis contaminata*	Ditch Jewel
5	*Bradinopyga geminata*	Granite Ghost
6	*Crocothemis servilia*	Rudy Marsh Skimmer
7	*Diplocodes trivialis*	Ground Skimmer
8	*Neurothemis tulia*	Pied Paddy Skimmer
9	*Orthetum sabina*	Green Marsh Hawk
10	*Pantala flavescens*	Wandering Glider
11	*Rhyothemis variegata*	Common Picture Wing
12	*Tramea brasilaris*	Red Marsh Trotter
13	*Agriocnemis pygmaea*	Pygmy Dartlet
14	*Ceriagrion coromandelianum*	Coromandel Marsh Dart
15	*Ischnura aurora*	Golden Dartlet

List of Butterflies Diversity in College campus during Biodiversity Audit

Sr. No.	Scientific Name	Common name
1.	*Graphium doson*	Common Jay
2.	*Graphium agamemnon*	Tailed Jay
3.	*Chilataclysia dissimilis*	Common Mime
4.	*Papilio polytesromolus*	Common Mormon
5.	*Papilio polymnestor*	Blue Mormon
6.	*Papilio demoleus*	Lime Butterfly
7.	*Pachleopta aristolochiae*	Common Rose
8.	*Pachleopta hector*	Crimson Rose
9.	*Catopsilia pyranthe*	Mottled Emigrant
10.	*Eurema hecabe*	Common Grass Yellow
11.	*Pareronia valeria*	Common Wanderer
12.	*Delias eucharis*	Common Jezebal
13.	*Castalius rosimon*	Common Pierret
14.	*Zizina otis*	Lesser Grass Blue
15.	*Euchrysop scnejus*	Gram Blue
16.	*Chilades lajus*	Lime Blue
17.	*Tirumala limniace*	Blue Tiger
18.	*Danaus genutia*	Striped Tiger
19.	*Danaus Chrysipus*	Plain Tiger
20.	*Euploea core*	Common Indian Crow
21.	*Melanitis leda*	Common Evening Brown
22.	*Acraea violae*	Tawny caster
23.	*Phalanta phalantha*	Common Leopard
24.	*Neptis hylas*	Common Sailer
25.	*Euthalia aconthea*	Common Baron
26.	*Euthalia nais*	Baronet
27.	*Ariadne merione*	Common Castor
28.	*Junonia orithiya*	Blue Pancy
29.	*Junonia iphita*	Chocolate Pancy
30.	*Junonia atlites*	Grey Pancy
31.	*Junonia almana*	Peacock Pancy
32.	*Junonia lemonias*	Lemon Pancy
33.	*Hypolimnos bolina*	Great Eggfly

Carbon Foot Print Analysis

1. Total number of vehicles used by the staff of the college - 20

2. Percentage of cycles used by students- 45%

3. No. of two wheelers used- 25
   Average distance travel- 10Km
   Average quantity of fuel used per month- 5L

4. No. of cars used- 07
   Average distance travelled- 8 Km
   Average quantity of fuel used per month – 30 to 32 L

5. Percentage of person including students using public transportation – 50%

6. Percentage of persons including students coming on foot- 20%

7. Percentage of persons using college conveyance –

8. No. of generator used per day- Nil
   Amount of fuel used- Nil

9. No. of LPG cylinder used in canteen/Labs- 04

10. Use of any other fossil fuels in the college- Nil
11. Any suggestion to reduce the use of fuel- **No vehicle day once in week can be follow.**

FINDING AND RECOMMENDATIONS

Methodology

This audit was conducted by mainly focusing on greening indicators like consumption of energy in terms of electricity and fossil fuel, waste management practices and carbon foot prints of the campus etc. Initially a questionnaire survey was conducted to know about the existing resources of the campus and resources consumption pattern of the students and staffs in the college. Collected data was grouped, tabulated and analyzed. Finally a report pertaining environment management plan with strength, weakness and suggestions on the environment issue of campus are documented.

1. **Waste Management**
   - The source of water used in the college in tube level is present in campus. This tube well is near an open well that has been converted into rain-water harvesting ditch with the intention to maintain ground water level.
   - The water sources are safe in terms of contamination. The students are taking back the food waste as per the zero waste management strategy of the college. It helped in reducing the consumption of water for washing.
   - Approximately 80% of water can be harvested from the roof area of new building.
   - There should be a proper monitoring of water consumption pattern in the campus.
2. **Energy Managements**
   - Avoid the use of more energy consuming electrical appliances and to replace with more environment friendly and energy efficient appliances in the college.
   - The potential of renewable energy sources has to be explored.
   - As the college has a very large roof area for installing solar panel so that it can effectively used for generating power.
   - Electric wiring of the building was found to be in good condition.

3. Waste Managements

- Waste management is important for an Eco-friendly campus.
- Try to avoid the use of plastic in the campus and to encourage the use of biodegradable materials as alternatives. Try to achieve the goal of plastic free campus.
- Recycle the paper waste instead of incinerate to burning.

4. Green campus

In order to increase carbon credit and greenery of the campus, it is recommended to plant more indigenous and evergreen/fruit trees inside the campus. Every year college celebrates World Environmental Day and World Water Day in the campus. The main focus of these activities is to create awareness among the students about the importance of the environment, its conservation and sustainable use of environmental resources.

5. Carbon Foot Print

Majority of student who halt from Nagbhid and surrounding villages use bicycles for commuting to and from the college

Place: Nagbhid
Date:
18.03.2022

Signature

अध्यक्ष / सचिव
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कमल
इलेक्ट्रीक & प्लमिंग
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3. Dr. G. D. Deshmukh	(Convener)
4. Dr. V. M. Mohture	(Member)
5. Dr. A. S. Nagpure	(Member)
6. Dr. A. R. Kayarkar	(Member)
7. Mr. D. G. Madavi	(Member)

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