



GREEN CERTIFICATE

This Certificate is Proudly Presented to

BAPATLA WOMEN'S ENGINEERING COLLEGE

This is to certify that a detailed GREEN AUDIT Assessment was conducted on 30/01/2023 at BAPATLA WOMEN'S ENGINEERING COLLEGE.

We are delighted to inform that the college has complied with all Green Efficiency and sustainability parameters

Thanking You,

Very Sincerely,

For GLOBAL MANAGEMENT CERTIFICATION SERVICES PVT. LTD.

Authorized Signatory



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Green Audit report, BWEC - 2022

GREEN AUDIT REPORT

2022-2023



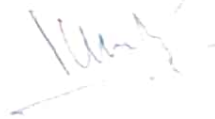
Bapatla Women's Engineering College:: Bapatla

Bapatla, Guntur, Andhra Pradesh


Green Audit Assessment Team



K.Siva Naga Prasad, Lead Auditor EMS/EnMS



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INTRODUCTION

INTRODUCTION

Green Audit is a systematic process that identifies, quantifies, records, reports and analyzes components of the environmental diversity of an institute. The purpose of green audit is to analyze environmental practices both inside and outside of the institute that will have an effect on the environment. A green audit is a valuable means for a college to identify how and where they are using the most energy, water or other resources. The college can then think about how to make changes and save energy. A green audit can create health awareness and promote environmental values and ethics. A green audit provides staff and students with a better understanding of the green impact on campus. If self-education is the natural and necessary evolution of a quality education, then institutional self-education is also the natural and necessary development of a quality educational institution. It is essential for the college to evaluate its own contribution to a sustainable future. Environmental sustainability is becoming increasingly important for the nation, the role of the higher educational institutions in relation to environmental sustainability is more prevalent.

The Rapid urbanization and economic growth at the local, regional and global levels has resulted in several ecological and social crises. In this context, the adoption of the Green Campus system for the institutes will not only lead to sustainable development but also reduce a large quantity of atmospheric CO₂. The NAAC has made it mandatory for all the Higher Educational Institutions to submit an annual Green Audit Report. In addition, it is also a part of the Higher Educational Institutions Corporate Social Responsibility (CSR) to reduce global warming by reducing their carbon footprint.

OBJECTIVES

OBJECTIVES

The Institutions have recognized the importance of Green Audits in recent years as a means of self-assessment and demonstrating their commitment to addressing environmental concerns. Our college has always been dedicated to maintaining a clean environment, and this Green Audit is designed to create a comprehensive framework for environmental sustainability that adheres to relevant regulations and standards. The audit will establish, quantify, and prioritize our efforts to promote sustainability. The main objectives of carrying out Green audit are:

- To map the geographical location of the institution.
- To document the floral and faunal diversity of the college.
- To record the meteorological parameter of BWEC where college is situated.
- To document the ambient environmental condition of weather, air, water and noise of the college.
- To document the waste disposal system.
- To estimate the Energy requirements of the college.
- To report the expenditure on green initiatives during the last five years.

METHODOLOGY

METHODOLOGY

The purpose of the green audit of BWEC is to ensure that the practices followed in the campus are in accordance with the green policy of the country. The process involves gathering data, conducting physical inspections of the campus, observing and reviewing documentation, and analyzing the collected information.

ABOUT THE COLLEGE

ABOUT THE COLLEGE

The Bapatla Women's Engineering College, one of the seven educational institutions sponsored by the Bapatla Education Society, was established in 2009 with a vision to impart quality technical education and is affiliated to Acharya Nagarjuna University. The college is located in Bapatla, a town with a historic and hoary past, about 75km. south of Vijayawada on Chennai-Vijayawada rail route. The college offers B.Tech. Programs in 3 faculties of Computer Science & Engineering, Electronics and Communication Engineering, Artificial Intelligence and Machine Learning.

Programmes Offered by the Institution

Programme Code	Programme Name
UG02	B.Tech-Computer science and Engineering
UG04	B.Tech-Electronics and Communication Engineering
UG07	B.Tech- Artificial Intelligence and Machine Learning

VISION AND MISSION STATEMENT

VISION

To impart quality education through exploration and experimentation and generate socially conscious engineers, embedding ethics and values, for the advancement in science and technology.

MISSION

- Empowering girl students with the contemporary knowledge in Electronics and communication engineering for their success in life.
- Continuous up gradation of techniques for reaching heights of excellence in a global. To make the students entrepreneur and employable and to showcase adaptability in fields of technical knowledge through the academic infrastructure.

GREEN AUDITING

GREEN AUDITING

Bapatla women's Engineering college has taken several steps to turn the college into a "Green campus" and has adopted the 'Green campus' system for the purpose of environmental conservation with the aim of achieving environmental sustainability. The Institute has initiated and planted various plant species to promote and improve the Biodiversity of the campus. As a result of the Green initiative taken by the institute, campus temperatures have been reduced which contributes to the negative effects of Global warming. Students are able to enjoy their technical higher education in a comfortable environment at Green Campus and an eco-friendly learning environment. A Rainwater harvesting system has been implemented to meet the requirement for plantation.



Solid waste will be taken from all sources such as Kitchen, Bathroom, and other areas of the hostel, including papers, plastic, food, metals, and glass etc. It will be separated from the sources of generation. The administrative supervisor on each block will ensure that the waste is collected in each floor at specific time intervals. Block workers on each floor will gather, clean, separate, and combine the waste in dustbins available on the floor. The dustbins will be emptied in the containers available on each block and taken to the designated dumping yard. The college will arrange for an authorized vendor to collect, separate, recycle, and dispose of the waste at the government-approved landfills. For drinking purposes, mineral water facilities are provided in every building on the campus. Waste water disposal is restricted by proper monitoring. Proper drainage of waste water is ensured to maintain the campus's greenery and provide an environmentally friendly environment. The campus operates as a zero water discharge campus, signifying that no water is released beyond the campus boundaries. Consistent efforts are made to raise awareness among the students about the importance of

minimizing water wastage.

The college is situated on a vast expanse of 10 acres of land. It is built on three fundamental principles: achieving zero environmental impact, promoting the well-being and productivity of its occupants, and ensuring that all graduates possess a comprehensive understanding of environmental issues. The primary objective is to minimize CO2 emissions, conserve energy and water resources, all while fostering an environment that facilitates learning and promotes good health among the students.

LAND USE ANALYSIS OF BWEC

LAND USE ANALYSIS, BWEC

GENERAL OVERVIEW OF THE CONCEPT OF LAND USE

Land use encompasses the range of human activities and the diverse purposes for which land is utilized. When observing the earth from space, the significance of land use in human endeavors concerning natural resources becomes evident. In instances where land use undergoes rapid transformations, the observations of Earth from space offer valuable insights into human activities and the utilization of the landscape.

The utilization of remote sensing and Geographic Information System (GIS) techniques now presents novel instruments for advanced land use mapping and planning. The acquisition of data through remote sensing enables comprehensive analyses of the Earth's system, its functions, patterns, and changes at local, regional, and global scales over time. Satellite imagery, in particular, proves to be an invaluable resource for generating accurate land use maps.

METHODOLOGY ADOPTED FOR LAND USE MAPPING

Three types of data that are GPS points, field survey data and Google earth data for geo referencing have been used in this study.

DATA PROCESSING AND ANALYSIS

Land use map preparation is executed through the following steps:

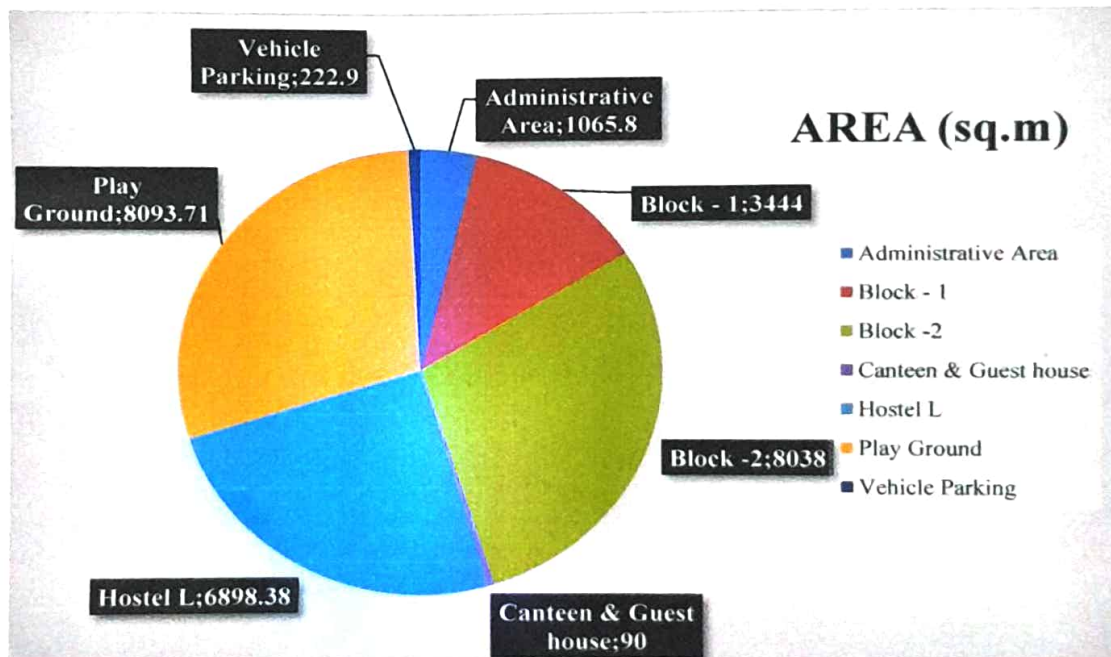
Acquisition of data (latitude and longitudinal data) Geo-coding and Geo referencing of satellite imageries by extracting the ground control points. Supervised classification was carried out with the aid of ground truth data collected during field survey. Scanning and digitization of maps and editing of all the Geo referenced maps were done using GIS. Data manipulation and analysis and linking the spatial data with the attribute data for creation of topology was carried out using GIS software. Creation of GIS output in the form of land use map showing various land usage have also been prepared.

Therefore, attempt has been made in this study to map land use for BWEC with a view to detect the land consumption in the built-up land area using both remote sensing and GIS techniques.

LAND USE DATA OF BWEC, Bapatla

CATEGORIES OF LAND USE	AREA (Sq.m)
Administrative Area	1065.8
Block - 1	3444
Block -2	8038
Canteen & Guest house	90
Hostel L	6898.38
Play Ground	8093.71
Vehicle Parking	222.9
GRAND TOTAL	27852.79

LAND USE ANALYSIS, Bapatla Women's Engineering College, Bapatla, Guntur



LAND USE (BUILT UP AREA) ANALYSIS

The built up area of 11859 Sq.m² consists of the following regions as stated below for land consumption in built up area for Bapatla Women's Engineering College.

FINDINGS

BWEC, which was established in the year 2009, 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 75% of the total area is occupied by open land and plantation that generates a better and sustainable campus environment.

Instructional Area Details

Building/Blocks Name	Level/Floor No.	Room No.	Measurements of room (in Sq.mts.)
			Area
Block -1	1	H-104	275
Block -1	2	H-201	66
Block -1	2	H-203	66
Block -1	2	H-208	160
Block -1	3	H-301	66
Block -1	3	H-311	175
Block -2	1	N-102	66
Block -2	1	N-106	150
Block -2	2	N-207	67
Block -2	2	N-211	67
Block -2	3	N-302	66

Class room Area Details

Building/Blocks Name	Level/Floor No.	Room No.	Area
Block -1	1	H-101	139
Block -1	1	H-109	85.5
Block -1	2	DH-1	150
Block -1	3	H-305	85.5
Block -1	3	H-308	85.5
Block -2	1	N-101	100
Block -2	1	N112	100
Block -2	2	N-206	100
Block -2	2	N-223	100
Block -2	3	N-312	100
Block -2	3	N-318	100

Geographical location with campus map in scale

GEOGRAPHICAL LOCATION WITH CAMPUS MAP IN SCALE

The college has a sprawling pollution-free campus spread over 0.5 acres of land in the heart of Bapatla , Guntur.

BAPATLA WOMEN'S ENGINEERING COLLEGE

College in Bapatla, Andhra Pradesh

Overview

Course admissions



CALL



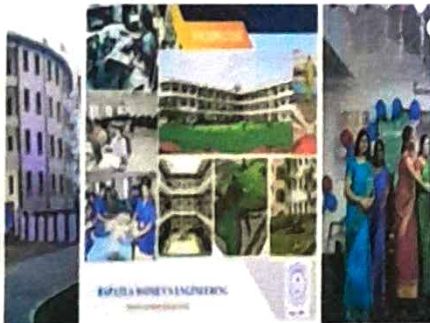
DIRECTIONS



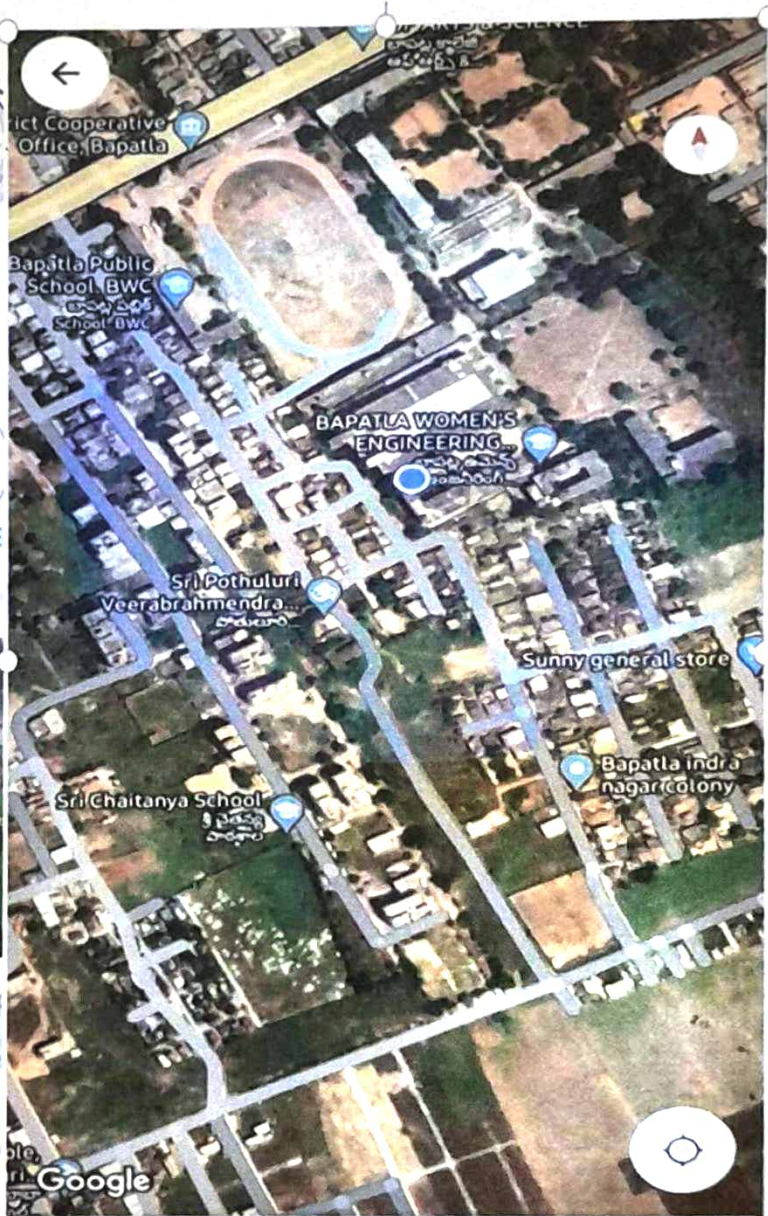
SHARE



SAVE



Srinivas Nagar, NH-214A,
Karlapalem - Ganapavaram Rd,
Bapatla, Andhra Pradesh 522101
97 m



Google Map of College Campus and Location map screen shoot

TREE DIVERSITY OF BWEC

TREE DIVERSITY OF BEC

BWEC, Bapatla, AndhraPradesh, India is within the Geo-position between latitude 15.9081161° N and longitude 80.4844789° E. It encompasses an area of about 10 Acres. The area is immense 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, in terms of contributing to our environment by providing oxygen, improving air quality, climate amelioration, conservation of water, preserving soil, and supporting wild life, controlling climate by moderating the effects of sun, rain and wind. Leaves absorb and filter the sun's radiant energy, keeping things cool in summer. Many species of birds are dependent on these trees mainly for food and shelter. Nectar of flowers and plants is a favorite of birds and many insects.

Leaf covered branches keep many animals, such as birds and squirrels, out of reach of predators. Different species display a seemingly endless variety of shapes, forms, texture and vibrant colors. Even individual trees vary their appearance throughout the course of the year as the seasons change. The strength, long lifespan and regal stature of trees give them a monument – like quality they also remind us the glorious history of BWEC and our institution in particular. We often make an emotional connection with these trees and sometime become personally attached to the ones that we see every day.

A thick belt of large shady trees in the periphery of the college have found be bringing down noise and cut down dust and storms. Thus, the college has been playing a significant role in maintaining the environment of the entire BWEC and its surrounding areas.

“Green audit” is a principle introduced to make the educational institute environmentally sustainable. The purpose of the green audit is to ensure that the Green Policy is followed and implemented in the campus. Bapatla Women's Engineering College implemented green-friendly practices to manage the available resources and has taken steps in environmental conservation and protection. As a part of such practice, internal environmental audit (Green Audit) is conducted to evaluate the actual scenario on the campus. A survey on trees and other greeneries within the campus was done by the committee.

The following are the tree species with whom we are being attached:

S.No.	Common Name	Scientific Name	Number
1	Duranta	Verbenaceae	300
2	Sannajaji(Guthupulu)	Vjura	20
3	Mandara	Hibiscus-Roja-Sinosis	50
4	Muripinda	Acalypha	50
5	Tulasi	Sciumu	40
6	Thuja	Thuja occidentalis	2
7	Kanakambaram	Crossandra infundibuliformis	10
8	Jasminum	Acharia tragodes	10
9	Tutturu Benda	Abutilon Indicum	15
10	Sago palm	Cycas	10
11	Jennifer	Aster ericoides	10
12	Radha Manohora	Quisqualis	5
13	Star light	Piaranthus Genus	4
14	Vepa chettu	Azadirachta indica	50
15	Neredu chettu	Syzygium cumini (L.) Skeels	20
16	Subabulu	Leucaena leucocephala	20
17	Teak	Tectona grandis	8
18	Custed apple	Annona reticulata	10
19	gova	psidium	20
20	Farms chettu	Parthenium hysterophorus	10
21	Badam	Terminalia catappa	2
22	Usirikaaya	Phyllanthus emblica	5
23	Mango	Mangifera indica	20
24	Pogada chettu	Mimusops elengi Linn.	9
25	Raavi chettu	Ficus religiosa	4
26	Naringa chettu	Citrus sinensis	2
27	Ganneru chettu	Nerium oleander L.	8
28	Maddi chettu	Terminalia elliptica	2
29	Ashoka chettu	Saraca asoca	6
30	Yellow flower trees	Cascabela thevetia(L.) Lippold	3
31	Sapota	Manilkara zapota	5

Green Audit report, BWEC - 2022

S.No.	Common Name	Scientific Name	Number
32	Parangi chettu	Couroupita guianensis	2
33	Kotanchu	Bryophyllum calcicola	41
34	chitramata	Plumbago zeylanica	15
35	Akiranthu	Amaranthaceae	29
36	Table Plam	Livistona Rotundifolia	32
37	Rose	Portulaca grandiflora	22
38	Drumstick	Moringa oleifera	04
39	Henna Tree	<i>Lawsonia inermis</i>	02
40	Lantana camara	Verbenaceae	1
41	Nerium Indicum	Apocynaceae	3
42	Nymphaea Caerulea	Nymphaeaceae	4
43	Ocimum canum	Lamiaceae	3
44	Ocimum gratissimum	Lamiaceae	2
45	Ocimum sanctum	Lamiaceae	5
46	Jasminum Cuspidatum	Oleaceae	3
47	Jasminum sambac	Oleaceae	2
48	Jasminum arborescens	Oleaceae	1
49	Jatropha curcas	Euphorbiaceae	2
50	Jatropha glandulifera	Euphorbiaceae	1
51	Jatropha gossypifolia	Euphorbiaceae	1
52	Ocimum Tenuflorum	Lamiaceae	2
53	Pamburus Missionis	Rutaceae	2
54	Pandanus odoratissimus	Pandanaceae	1
55	Ocimum canum	Lamiaceae	3

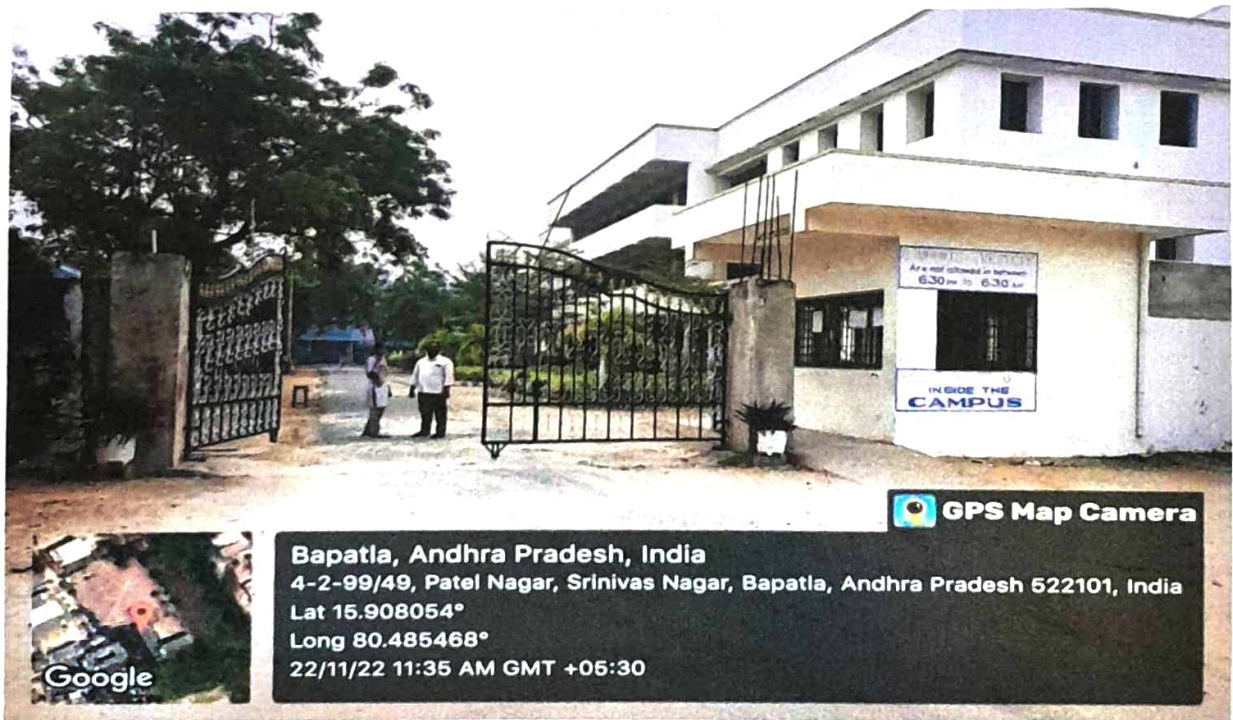
Plantation Photos







Main Entrance – Bapatla Women's Engineering College



Block – 1 Bapatla Women’s Engineering College



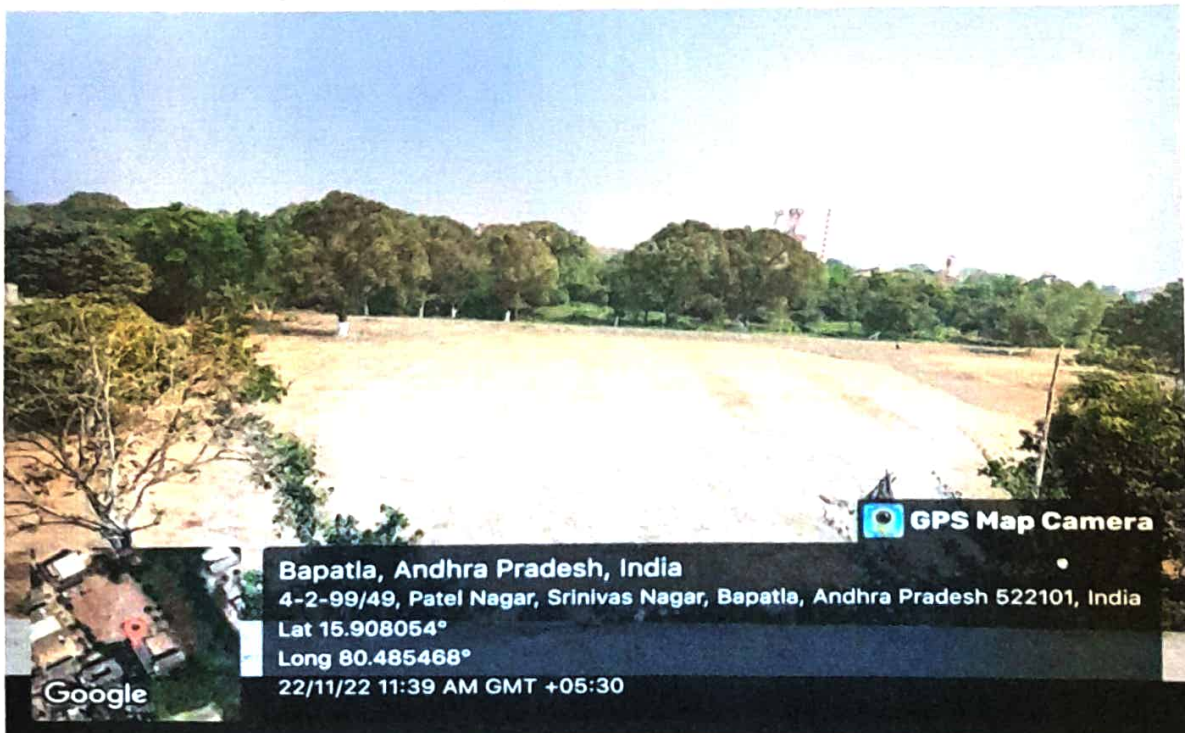
Block – 2 Bapatla Women’s Engineering College



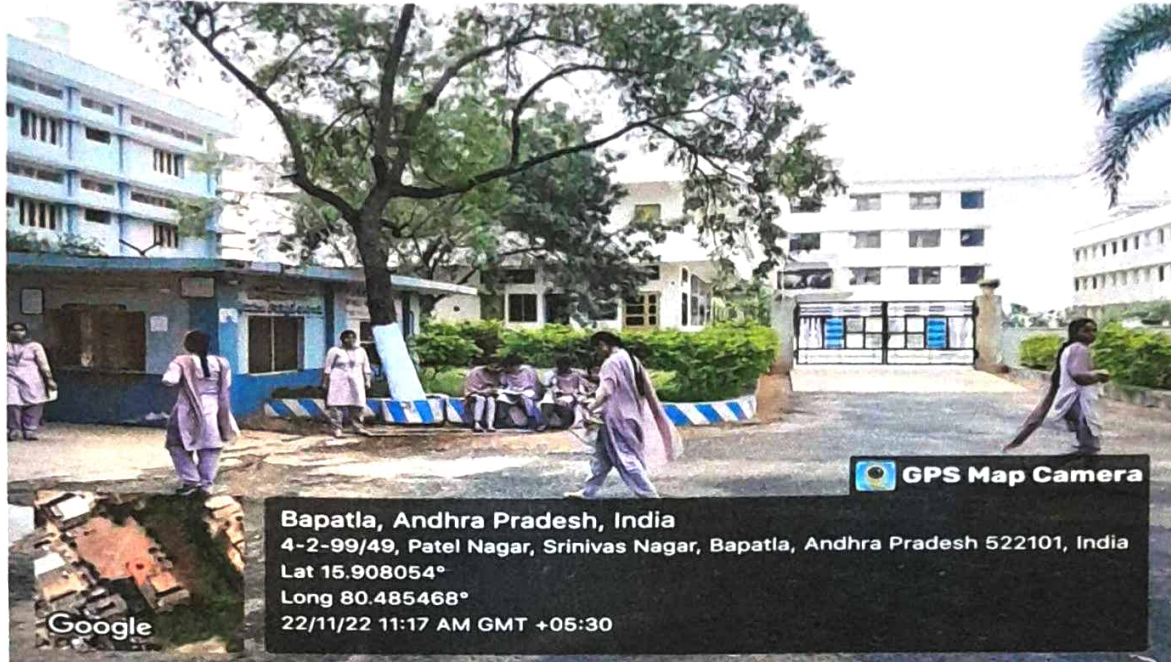
Indoor auditorium-Bapatla women's Engineering College



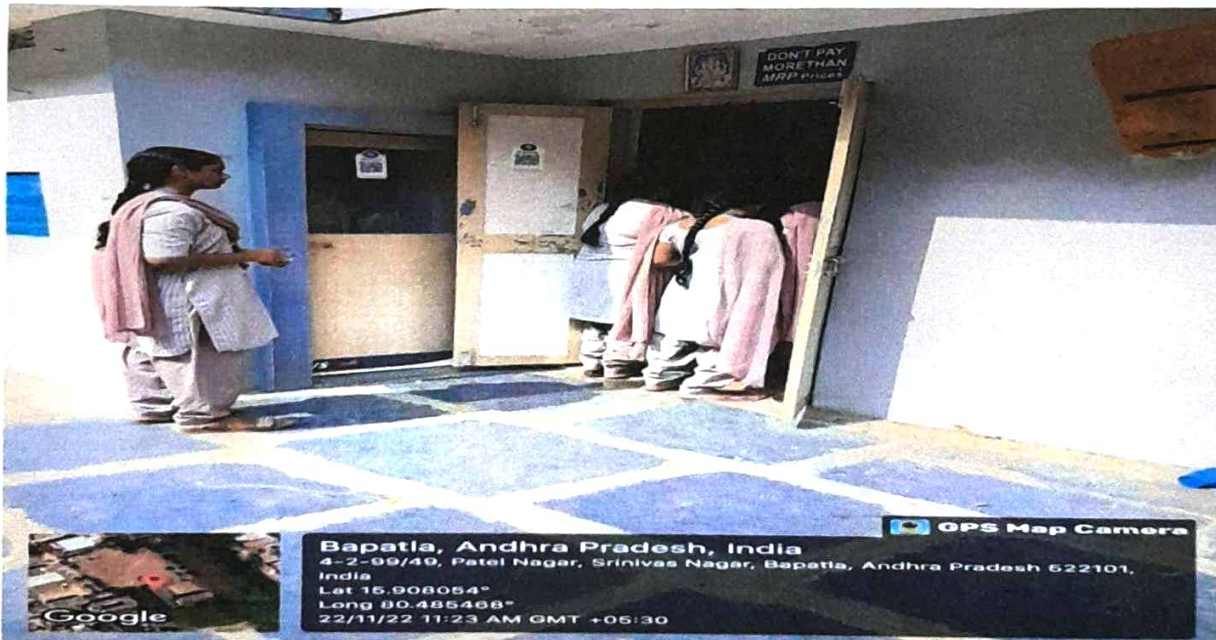
Play Ground – Bapatla Women's Engineering College



Girls Hostel – Bapatla Women’s Engineering College



Canteen – Bapatla Women’s Engineering College

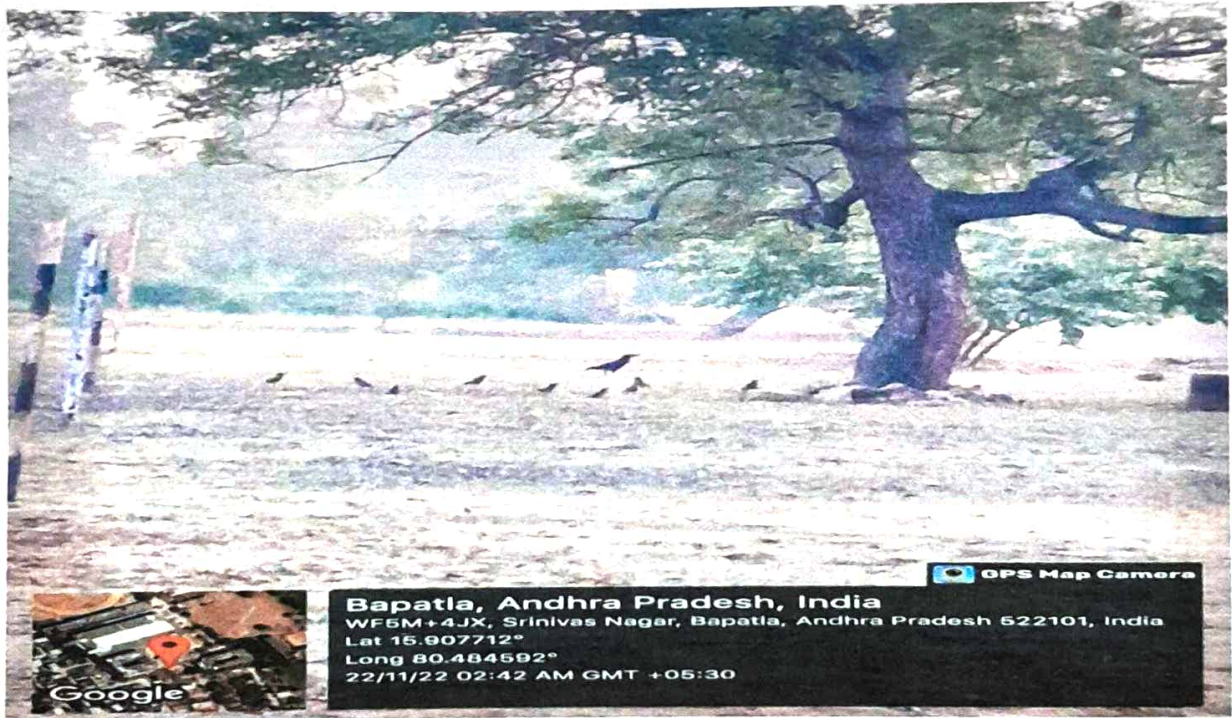
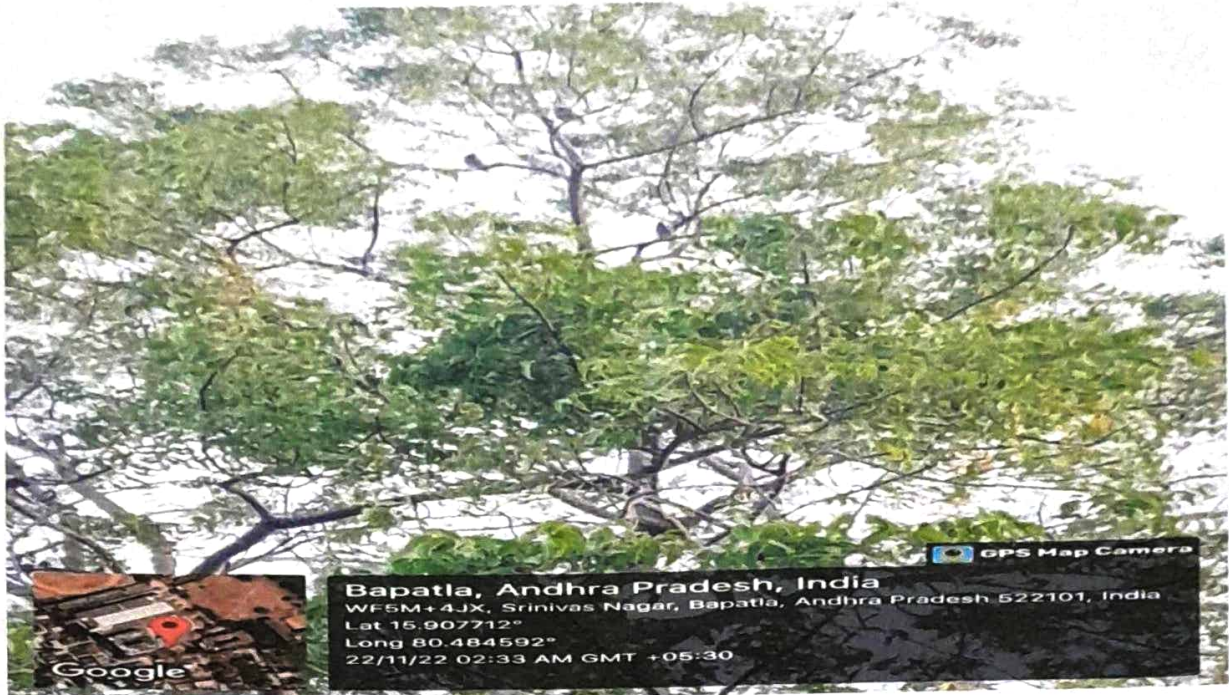


FAUNAL DIVERSITY IN BWEC

FAUNAL DIVERSITY IN BEC

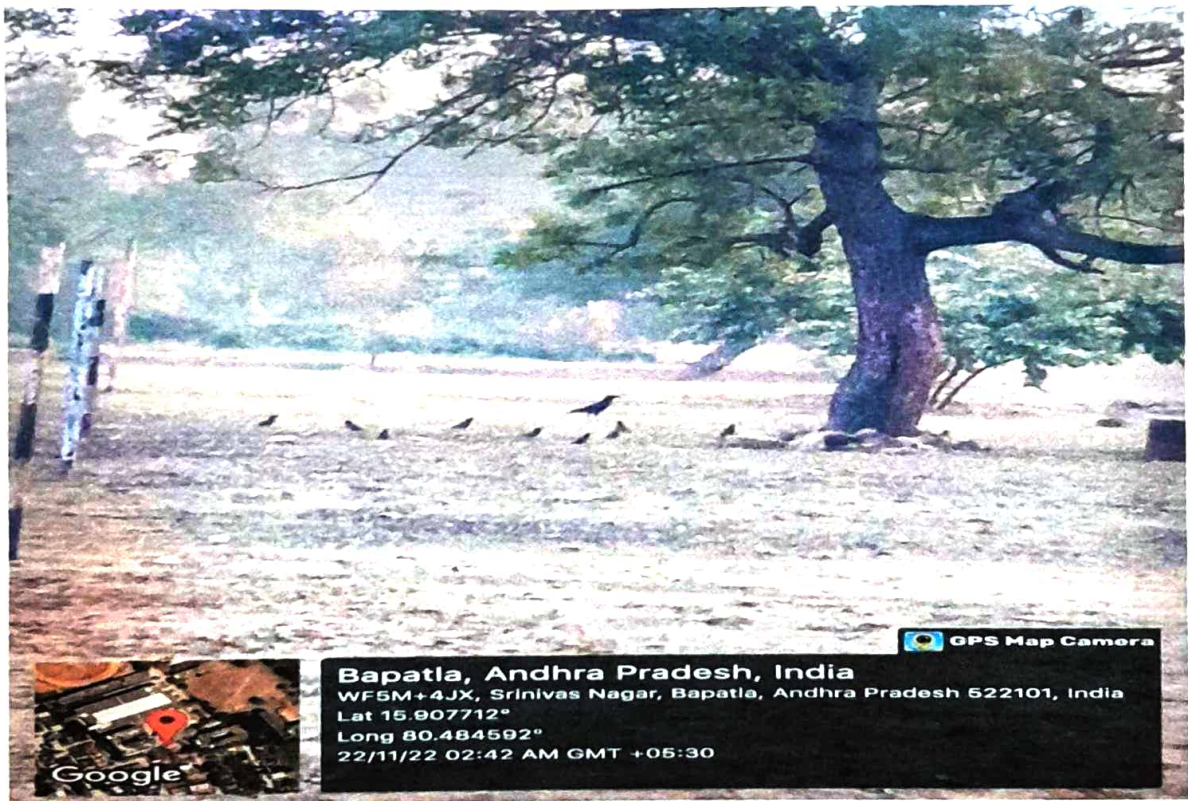
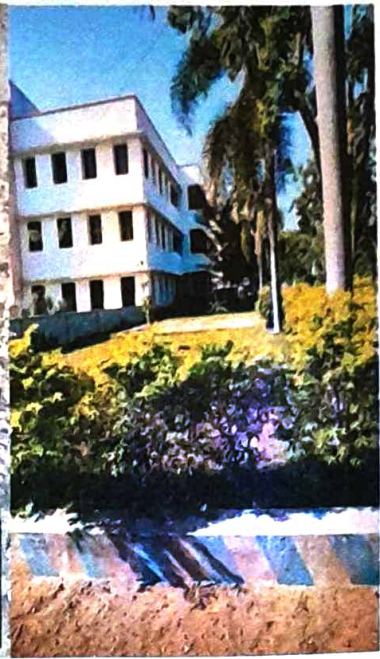
BWEC is located in District of Bapatla, Andhra Pradesh, India. The highest temperature is recorded 42⁰ C just prior to the onset of monsoon (around May- early June). Summer rain is normal, and is principally caused from late June to August by the moisture-laden South- West Monsoon, on striking the Himalayan foothills of the north. The climatic condition of the BAPATLA district as a whole and BWEC in particular is very suitable for a wide variety of flora and faunal to support its rich biodiversity. The faunal Diversity of BWEC campus has been studied and documented as below:

S.No	Common Name	Scientific Name
1.	Common Myna	Acridotheres Tristis
2.	House Sparrow	Passer Domesticus
3.	House Crow	Corvus Splendens
4.	Cuckoo	Cuculidae
5.	Snake	Naja Naja
6.	Yellow Wasp	Ropalidia Marginata
7.	Butter Fly	Danaus Genutia
8.	Honey bees	Apis
9.	Common Wood shrike	Tephrodornis Pondicerianus
10.	Pied Myna	Gracupica Contra
11.	Red-Vented Bulbul	Pycnonotus Cafer
12.	Skylark	Aluda Gulgula
13.	Garden Tiger Moth	Arctia Caja
14.	Little Owl	Athene Brama
15.	Oleander Moth	Syntomeida Epilais
16.	Slender Skimmer	Orthetrum Sabina
17.	Lizard	Indian Garden Lizard
18.	Guinea pig	Cavia Porcellus
19.	Grass Hopper	Orthoptera
20.	Squirrel	Sciuridae
21.	Scarab Beetle	Coleoptera
22.	Lizard	Lacertilia
23.	Pigeon	Columbidae
24.	Parrots	Indian Rose Ringed Parakeet



FLORAL DIVERSITY OF BWEC

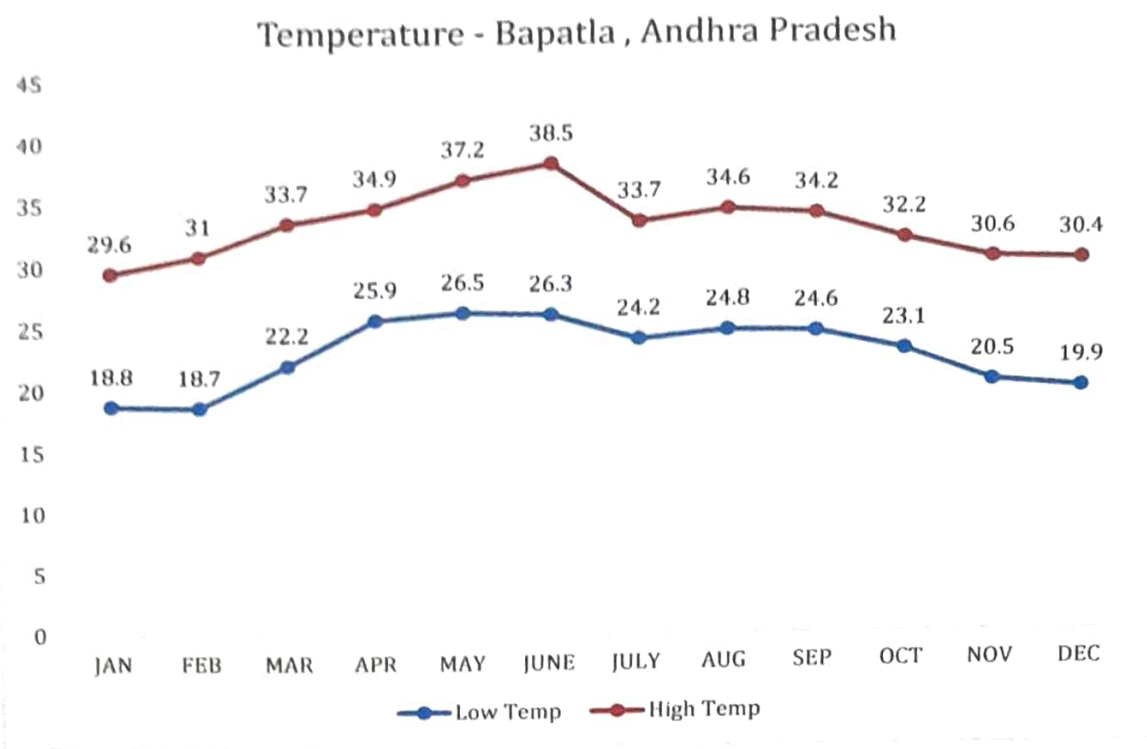
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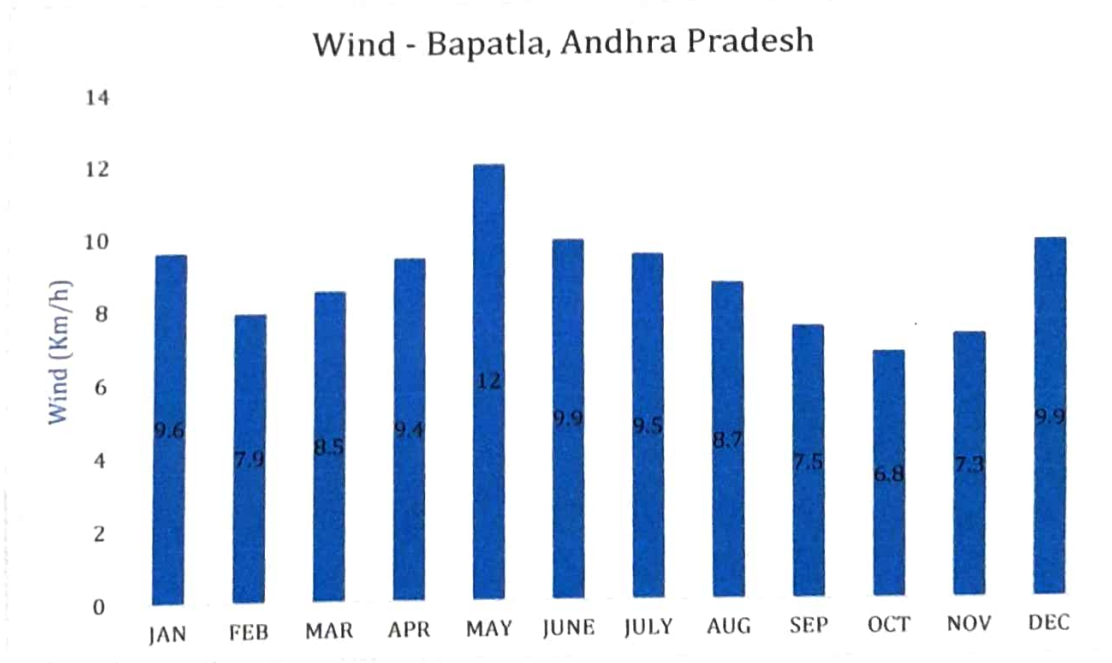
WEATHER DATA OF BWEC

Weather Data – 2022

Temperature at Bapatla Women’s Engineering College, Bapatla

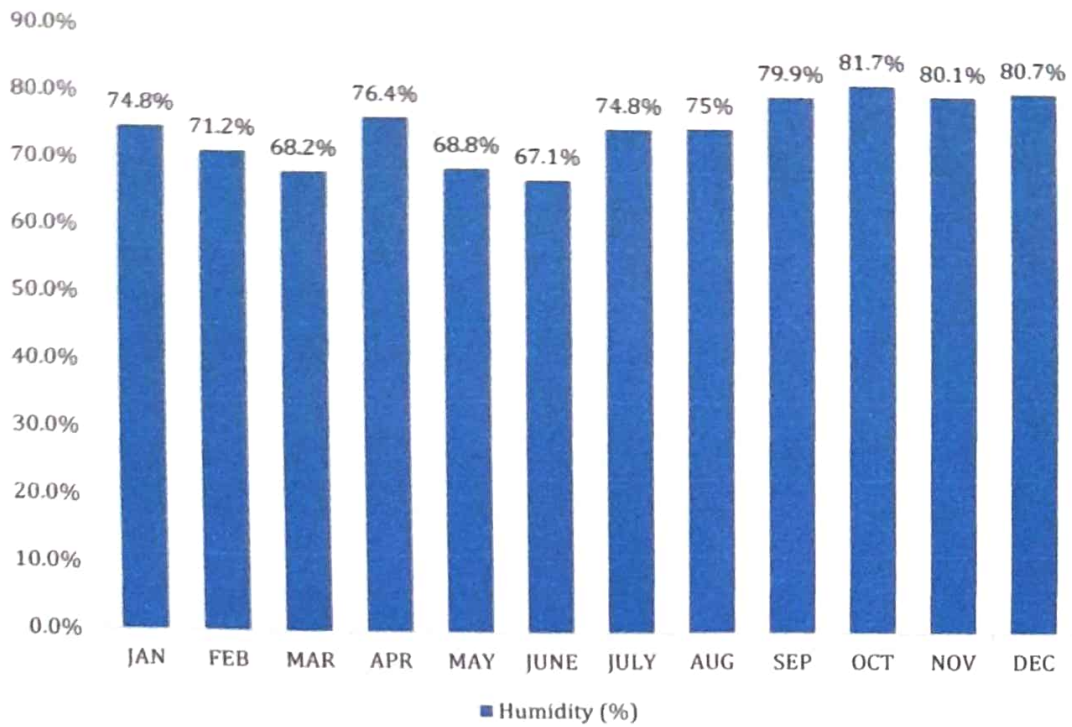


Wind Speed at Bapatla Women’s Engineering College, Bapatla



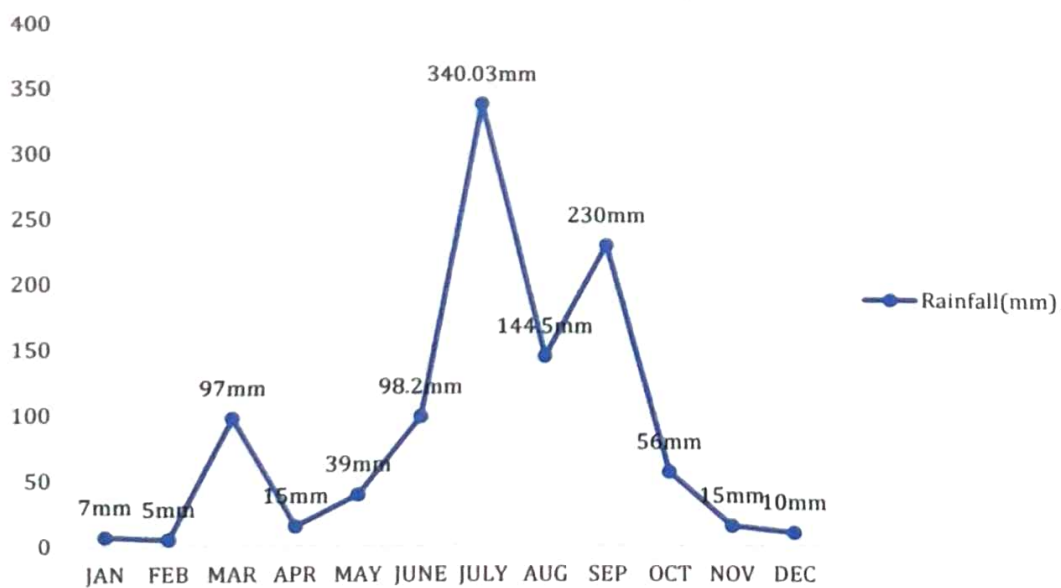
Humidity at Bapatla Women’s Engineering College, Bapatla

Humidity - Bapatla, Andhra Pradesh



Rainfall at Bapatla Women's Engineering College, Bapatla

Rainfall - Bapatla, Andhrapradesh



AIR QUALITY OF BWEC

BAPATLA ENGINEERING COLLEGE ,BAPATLA

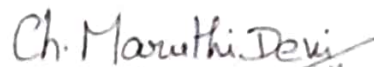
AIR QUALITY ANALYSIS DETAILS AT BEC CAMPUS

Date of Report	17-11-2022
Sample collected by	BEC Civil Final Yr Students
Sample collection Date	10-11-2022
Sample Description/Code	AIR QUALITY ANALYSIS

S.No.	NAME OF THE PARAMETER	TEST RESULTS				NAAQS LIMITS	TEST METHOD
		COLLEGE MAIN ENTRANCE	ADMIN BUILDING	CANTEEN AREA	SPORTS GROUND		
1	Particulate Matter (PM10)	62.8	53.4	52	75	100	IS 5182: Part-23 (2012)
2	Particulate Matter (PM2.5)	20.7	16.3	15.5	25	60	CPCB Manual (NAAQMS/36/2012-13) Gravimetric method (Cyclonic Flow technique)
3	Sulphur dioxide as SO ₂ (µg/m ³)	0	0	0	0	80	IS 5182: Part - 2 (2012)
4	Nitrogen dioxide as NO _x (µg/m ³)	0	0	0	0	80	IS 5182: Part-6 (2012)



Checked by
P. Sai Krishna., Asst. Prof




Authorized sign
Dr. Ch. Maruthi Devi., Prof

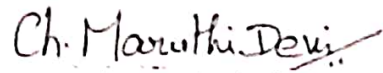
NOISE LEVEL IN THE SURROUNDING OF BWEC

BAPATLA WOMEN'S ENGINEERING COLLEGE::BAPATLA
NOISE LEVEL MEASUREMENT DETAILS AT BWEC CAMPUS

Date of Report	17-11-2022
Sample Collected by	BEC Civil Final Yr Students
Sample Collected Date	10-11-2022
Sample Description	Noise Level Measurements

S.NO.	SAMPLING LOCATION	MEASUREMENT (DURATION IN SEC)	MINIMUM (dBA)	MAXIMUM (dBA)	AVG (dBA)
1	college Gate	60	40.5	70.5	53.5
2	parking area	60	43	60.3	51.65
3	canteen	60	40.4	66.9	56.8
4	Block -1	60	48	72.9	60.8
5	Block -2	60	48	72.9	60.8
6	Ladies Hostel	60	46	68	57
7	Sports ground	60	50.5	75.6	61


Checked by
P.Sai Krishna., Asst. Prof


Authorized sign
Dr. Ch. Maruthi Devi., Prof

WATER ANALYSIS REPORT OF BWEC

Green Audit report, BWEC - 2022

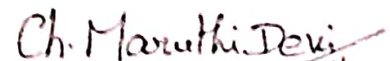
BAPATLA WOMEN'S ENGINEERING COLLEGE :: BAPATLA
BORE WATER DETAILS AT BWEC CAMPUS

DATE OF REPORT	17-11-2022
SAMPLE COLLETED BY	BEC Civil Final Yr Students
SAMPLE COLLECTED DATE	10-11-2022
SAMPLE DESCRIPTION CODE	Bore Water

S.No.	parameter	Unit	Method	Result	Is 10500 Limits	
					Acceptable	Permissible
1.	pH		APHA 23 rd Edition: 4500H+B	6.75	6.5 -8.5	No relaxation
2.	Turbidity	NTU	PHA 23 rd Edition:2130 B	2	2	5
3.	Conductivity	µMho/cm	PHA 23 rd Edition: 2510 B	3055		
4.	Total Dissolved solids		PHA 23 rd Edition:2540 B	1966	500	200
5.	colour	CU	PHA 23 rd Edition: 2120B	< 5	5	15
6.	Odor			Agreeable	Agreeable	Agreeable
7.	p-Alkalinity as CaCo3	mg/L	PHA 23 rd Edition			
8.	Alkalinity as CaCo3	mg/L	PHA 23 rd Edition			
9.	Total hardness as CaCO3	mg/L	PHA 23 rd Edition:2340C	543	200	600
10.	Calcium as Ca	mg/L	PHA 23 rd Edition: 1500 Ca B	110	75	200
11.	Magnesium as Mg	mg/L	PHA 23 rd Edition:3500 Mg B	71	30	100
12.	Sodium as Na	mg/L	PHA 23 rd Edition: 3500 Na B	<40		
13.	Potassium as K	mg/L	PHA 23 rd Edition: 3500 K B	14		
14.	Chlorides as Cl	mg/L	PHA 23 rd Edition: 4500 Cl	820	250	1000
15.	Sulphates as So4 +2	mg/L	PHA 23 rd Edition: 4500 So4	190	200	400
16.	Nitrate Nitrogen as N	mg/L	PHA 23 rd Edition: 4500	10.3	45	No relaxation
17.	Fluorides as F-	mg/L	PHA 23 rd Edition: 4500	0.8	1	1.5
18.	Iron as Fa	mg/L	PHA 23 rd Edition:3500	<0.3	0.3	No relaxation
19.	Manganese as Mn	mg/L	PHA 23 rd Edition: 3500	<0.1	0.1	0.5
20.	Phenolic Compounds as Phs	mg/L	PHA 23 rd Edition:5530 B	<0.001	0.001	0.002
21.	Chromium as cr+		PHA 23 rd Edition			
22.	Rasidual Chlorine as CL	mg/L	PHA 23 rd Edition:2130 B	<0.01	0.2	2
23.	Total Cyanide	mg/L	PHA 23 rd Edition:3111 B	<0.01	0.05	No relaxation
24.	Copper as Cu	mg/L	PHA 23 rd Edition:3111 b	<0.01	0.05	1.5
25.	Cadmium as Cd	mg/L	PHA 23 rd Edition: 3111 B	<0.01	0.03	No relaxation
26.	Zinc as Zn	mg/L	PHA 23 rd Edition: 3111 B	<0.5	5	15
27.	Lead as Pb	mg/L	PHA 23 rd Edition: 3111 B	<0.01	0.01	No relaxation



Checked by
P.Sai Krishna., Asst. Prof



Authorized sign
Dr. Ch. Maruthi Devi., Prof

WASTE DISPOSAL
AT
BWEC

Waste Management

Solid waste management:

Solid waste is collected from hostel rooms each morning by housekeeping staff in separate containers and assembled at the waste yard marked as compost pit at extreme end of the campus. Here the dry waste including paper/plastics etc. is segregated and sent in vans to recyclable joints and/or Municipal Corporation dump yard. We encourage students and staff not to use plastic items. Also we encourage them to reuse the plastic items. Many of our students are encouraged for making best from waste items by using plastic bottles etc. In our college campus NO PLASTIC sign boards are available at various places to encourage students and staff not to use plastic item.

The waste generated in the campus includes wrappers, glass, metals, paper, plastics, etc. Old newspapers, used papers, workshop scrap etc. are given for recycling to external agency like ITC limited which is started in 2007 with an objective to educate people on recycling of waste to protect environment, conserve natural resources, incubate the habit of source segregation among the citizens, recover the dry recyclable waste which is going in to landfill and make it available for recycling and incentivize the municipal workers. Glass, metals, plastic and other non-biodegradable wastes are given to Chirala Municipality Corporation where they are segregated and disposed/ recycled according to the nature of the waste.

College adopts almost paperless concept by digitization of office procedures through electronic means via whatsapp group, email; thus, reducing paper-based waste and reduce carbon dioxide emissions. Also to encourage paper waste in the aspect of teaching and learning - Slip tests, Quizzes etc, are conducted using various apps and by sharing link to the students. PowerPoint are also shared to student's whatsapp groups by the faculty members to reduce the wastage in paper printing as well as expenses. Use of paper printed on one side is encouraged in print drafts before final document, meeting minutes, memos and notes in office practices as environmentally preferred alternative to waste management. Biodegradable kitchen waste from mess and cafeteria is collected in separate bins. Horticultural waste such as dried leaves, twigs, and plant clippings is collected from all around the campus and used for vermi composting. Dustbins have been installed throughout campus for waste segregation. The chemical bottles which are made by plastic and used vehicle tires were used for plantation that gives impressive landscape look garden of the institution. Students are encouraged to use waste paper and newspaper in creative practices during various extracurricular activities.

Reducing Plastic Usage:

Now a days the usage of plastic has increased, which is a great problem to the environment as it takes hundreds of years for the waste plastic to decompose. Though govt. has planned to stop the usage of plastic bags the implementation of the same has become a major challenge for the government as there is very little awareness on the problems of plastic usage in general public. So, it is our duty to reduce the usage of plastic by spreading awareness on the problems associated with plastic. Thus, our NSS has took up this as challenge and started an awareness program to reduce the usage. Under this activity we visited some of the streets and made people aware of how we are damaging environment by usage of plastic.



Liquid Waste Management:

Liquid waste is generated from Science laboratories, Hostels, Guest House and canteen.

Liquid wastes generated are of two types:

- Sewage Waste
- Laboratory and canteen effluent.

The liquid wastes are mainly drained to improve the ground level of water.

Hazardous Chemicals are kept separately in the laboratory away from the reach of students. Lab In-charge and lab-assistant takes care of the chemicals and safety norms in the laboratory are strictly followed. Students are made aware of the hazardous chemicals and safety aspects when they are given instructions before utilizing the chemicals. The chemicals are wisely utilized for the batches of students in morning and afternoon under the guidance of faculty. Water for washing and rinsing of glassware for cleaning is done with regular water in low amounts. The Chemicals used in the experiments are diluted and after usage the chemical waste gets mixed with routine waste water. The rain water and the water which is over floated from water tanks are diverted towards lawn/garden through pipe lines.

E-waste management:

Electronic goods are put to optimum use; the minor repairs are set right by the laboratory assistants and the major repairs are handled by the support of technical assistants. The equipment which cannot be refurbished for re-use is dismantled and remanufactured into raw materials (i.e. metals, plastics, glass) to be marketed as recyclable. Input devices like keyboards which are of no use are utilized by students for their typing practice and teaching in a very basic level. UPS Batteries are recharged / repaired / exchanged by the suppliers. The waste compact discs and other disposable non-hazardous items are used by students for scrap art in extracurricular activities.

TRANSPORTATION





GPS Map Camera



Bapatla, Andhra Pradesh, India
WF5M+4JX, Srinivas Nagar, Bapatla, Andhra Pradesh 522101, India
Lat 15.907661°
Long 80.484116°
12/04/23 02:04 PM GMT +05:30