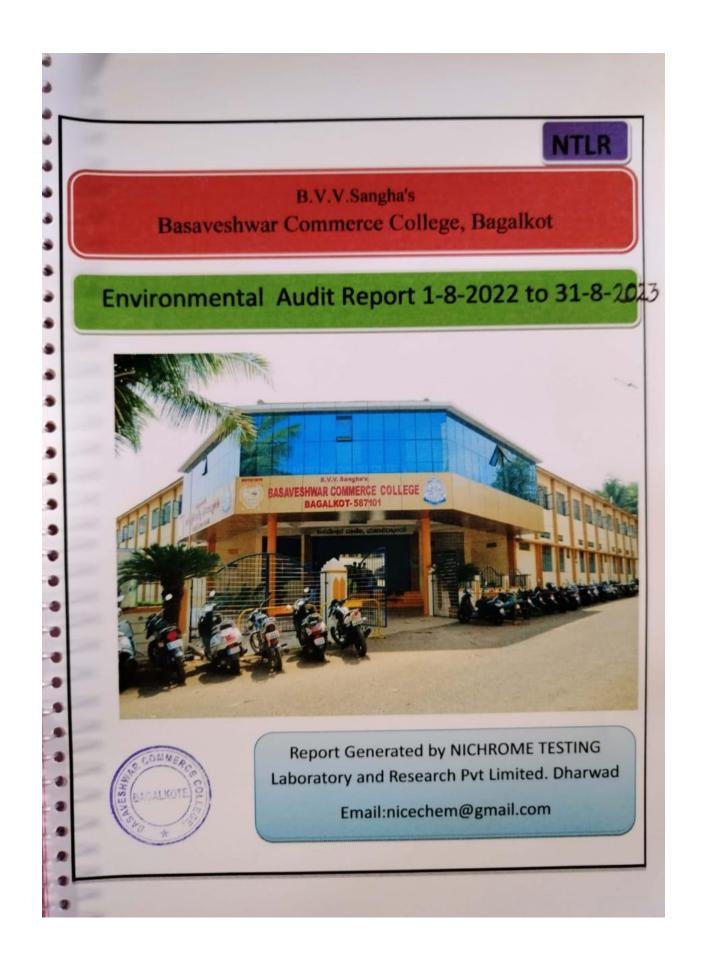




B.V.V Sangha's Basaveshwar Commerce College, Bagalkot



Environmental Audit Report



CONTENTS

Sr. No. Titles/Topics		
1	INTRODUCTION	
2	PREAMBLE	
3	OBJECTIVES	
4	METHODOLOGY	
5	BRIEF INTRODUCTION OF ORGANISATION	
6	VISION & MISSION STATEMENT	
7	CORE VALUE AND ENVIRONMENT PLEDGE	
8	ENVIRONMENT, OCCUPATIONAL HEALTH AND SAFETY POLICY	
9	WATER CONSUMPTION AND DISCHARGE	
10	GEOGRAPHICAL LOCATION WITH CAMPUS MAP IN SCALE	
11	TREE DIVERSITY	
12	FAUNAL DIVERSITY	
13	WEATHER DATA	
14	AIR QUALITY	
19	OBSERVATIONS AND SCOPE FOR IMPROVEMENT	
20	AUDITED TEAM AND THEIR CREDENTIALS	



PREAMBLE:

The policy statement for abatement of pollution (1992) and the subsequent Environment Protection Act 1986 announced by the Government of India seeks integration of environmental considerations into decision making at all levels. Environmental Audit has been recognized as one of the instruments for achieving this objective.

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An Environmental statement is an objective assessment, of the extent of compliance of a company with applicable Environmental laws and regulations. It is based upon a review of pertinent records and technical data. The Environmental statement achieves following purposes,

- 1. Assuring compliance with various Governmental regulations,
- 2. Reduces environmental risks and liabilities,
- 3. Cost savings or increasing the efficiency of operations,
- 4. Indentifies environmental liabilities, if any.

Accordingly, the survey was carried out to review the operations, to collect relevant data like materials consumption, water consumption, waste generated and the pollution prevention method practiced by the Organisation etc. Further improvement plans of the Organisation during the financial year were also noted.

OBJECTIVES

The environmental audit helps in pollution abatement, safety, health and conservation of natural resources focusing attention on areas of concern, practices that need to be changed and plans to deal with adverse effects. The audits would also facilitate the promotion of environmental awareness by companies by framing of proper environmental policies and effective management systems to implement them to achieve sustainable development.

The objectives of an environmental audit in an Organisation can be summarized as follows

- To determine the consumption of various materials used and the performance of various operations so as to identify usage of materials in excess than required.
- To identify the areas of water usage and wastewater generation and to determine the characteristics of wastewater generated, its treatment and its impact on the environment
- To identify the areas generating Air pollution, To determine the emission, the sources, quantities and characteristics, its treatment and its impact on the environment
- 4. To identify the possibility of waste minimization, recovery and re-cycling of wastes.
- To determine the performance of the exiting waste treatment/ control system so as to modify or install additional or alternative control equipment accordingly.

METHODOLOGY:

The purpose of the environmental audit is to ensure that the practices followed in the campus are in accordance with the Green Policy of the country. The methodology includes: collection of data, physical inspection of the campus, observation and review of the documentation and data analysis.

BRIEF INTRODUCTION OF ORGANISATION:

The Basaveshwar Commerce College, Bagalkot is one of the prestigious institute of Basaveshwar Veerashaiva Vidyavardhaka Sangha, Bagalkot which was founded by His Holiness Shri Gurubasava Mahaswamiji of Bilur in the year 1906, with the opening of a Sanskrit Patashala.

It provided the impetus that propelled a sleepy little town into an Educational, Commercial and Industrial hub of this backward area of Karnataka state.







BASAVESHWAR COMMERCE COLLEGE

The Basaveshwar Commerce College is part of B.V.V.Sangha, which was established in 1970 with 50 students. The college has become predominant in the field of commerce and management education within a span of five decades. Basaveshwar Commerce College is the only independent commerce college in Bagalkot district. At present, nearly 1800 students are studying at the College. The college is offering various courses such as B.Com, B.B.A, M.Com and CA foundation coarse. The college has committed and dedicated faculty by large, it is committed for academic excellence and all-round development of the students.

The Alumni of college are serving at their various capacities around the world. Some of them are leading chartered accountants, judicial officers, people's representatives, government officers, and entrepreneurs. In total Basaveshwar Commerce College is one of the outstanding colleges in Karnataka.

Bagalkot, is a city in the state of Karnataka, India, which is also the headquarters of Bagalkot district. It is situated on branch of River Ghataprabha about 481 km (299 mi) northwest of state capital Bangalore, 410 km (255 mi) southwest of Hyderabad, and about 570 km (354 mi) southeast of Mumbai. The population of the urban agglomeration was 111,933 according to the provisional results of 2011 national census of India, and the city is spread over an area of 49.06 square kilometres (18.94 sq mi)[2] with an average elevation of 532 m (1,745 ft) above MSL.

Our Vision

Imparting Excellent Education and Training in Commerce and Business Administration, thereby earning a unique Distinction as Top-notch Commerce Institution in North Karnataka

Our Mission

Basaveshwar Commerce College was established in 1970 with a great mission of imparting professional education in commerce, Business Administration & Management at U.G & P.G. Levels.

The Broad Goal of the college is to respond to the ever-changing needs & expectation of Business Environment and Demands of the community by molding students into accountable citizens, developing a sense of Dedication, Social Conscience and Commitment.

Objectives of organisation

To bring out graduates of excellence, complete character and integrity to venture into right vocations, professions and entrepreneurship.

To harness the students potential through coordinated efforts and personal attention.

CORE VALUE

- Critical thinking and problem solving.
- Leadership.
- · Encouraging and building student ability, character and creativity.
- Ethics: We believe in acting with honesty, courage, and trustworthiness.
- We value an institutional attitude and culture that promotes and supports total health and wellness of staff and students.

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 Excellence: Maintain a high standard of integrity and performance leading to the achievement of academic and professional goals.

ENVIRONMENT PLEDGE

We, The Principal, staff and students, adopt responsible practices in our days energy use with due regard to the environment. We pledge to avoid using electrical power where not needed. We also pledge to use judiciously the electrical power by using Energy efficient products. We shall practice to switch off all appliances when not in use.

PURPOSE:

To realistically and comprehensively reduce energy consumption, assure acceptable indoor air quality, and improve energy efficiency on campus through methods that are consistent with a safe, secure, and inviting campus community. As outlined in this policy, Environment conservation will be accomplished by developing a proactive and progressive approach to providing energy efficient, responsible, and cost effective operations on campus. This policy will be reviewed and updated periodically as public awareness, management techniques, and technologies change.

APPLIES TO: Faculty, staff, students, and visitors.

CAMPUS: BVV Sangha's Basaveshwar Commerce College, Bagalkot.

We pledge to speak in open forums for the energy conservation first, Energy Efficiency next and eliminating of High Energy use appliances for better or low energy use one's.

We commit ourselves to the safe operation of all our needs, be it in classrooms, library, canteen, on road, off road, in-campus out-campus as well as at our place of stay.

We adhere to reduce environmental load by efficiently using resources, saving energy, reducing waste, encouraging material recycle, with special emphasize to minimising emissions of greenhouse gases, ozone depleting substance and particle matter. we endure to minimise environmental loads and adopt environmentally friendly technologies when ordering and purchasing necessary products and resources.

We endure to attend educational programs and promulgate our close friends and colleagues to follow suite.

We endure to ensure that we recognize the essence of this Energy use policy by actively and aggressively conducting workshops and training to all in environmental concepts. We make wide ranging social contribution to close association with the students, teaching staff, administrative staff, housekeeping staff by disclosing Energy use (Star rating appliances) information and supporting minimized consumption of Energy.

ENVIRONMENT, OCCUPATIONAL HEALTH AND SAFETY POLICY

BVV SANGH'S COMMERCE COLLEGE, BAGALKOT in its continual improvement shall be achieving Environmental, Occupational, health, and safety management system by

- 1. Providing good working condition and healthier environment to all employees
- Optimum usage of natural resources by reducing, recycling and re using Prevention of pollution by minimizing waste generation and proper disposal of waste generated by all activities
- Prevention of health and injuries by adopting safe working practices in all operations Comply with all applicable environmental requirements

Basic Activity : Education Activity : Commerce College with B.Com Facility.

Faculty :	58 Number	r of Students :1650
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LAND USE DATA

SI.No	CATEGORIES OF LAND USE	AREA (m ²)	
01	PLANTATION AREA	965 m ²	
02	BUILT UP AREA (INCLUDE ROADS)	1350 m ²	
03	TOTAL AREA	2315 m ²	

CELEBRATION OF WORLD ENVIRONMENT DAY by NSS ON 05-06-21



AMBIENT AIR QUALITY MONITORING DATA

SI.No	Parameters	Results
01	Respirable suspended particulate matter (PM10) µg/m3	52.4
02	PM _{2.5} μg/m3	36.1
03	Sulphur di oxide (SO ₂) µg/m3	4.1
04	Oxides Of Nitrogen (NOx) µg/m3	6.4

WATER CONSUMPTION AND DISCHARGE

- A. Water Consumption 77,000 Lit /day
- B. Waste water discharged to the Environment 61,600 lit/day.
 Treatment is by Septic Tank + Soak Pit at various places across campus. A sewage treatment plant is proposed in future.

SOLID WASTE MANAGEMENT AND DISPOSAL

Name of Raw Material		Quantity	Disposal	
a	Papers for office use and news Paper	400 Kg per year	Sold for recycling	
b	Dry leaves from plants	500kg per month	Treat for composting	
с	Plastic+ Glass	2kg per month	Sent to Municipality dumping yard	
d	Other solid waste	2kg per month	Sent to Municipality dumping yard	

SOLID WASTE MANAGEMENT

Objectives of the Program:

The main objective of the solid waste management system in the campus is to promote the Conservation and environment management in the Institute Campus. The purpose of the current Available system is:

To introduce and aware students to real concerns of environment and its sustainability. To secure the environment and cut down the threats posed to human health by analyzing the pattern and extent of resource use on the campus.

Description of the Program

To achieve effective and sustainable implementation of the proper waste management practices, Awareness with participation is the key to be involved in the Solid and Liquid Waste Management Program of an institution. Some of the common solid wastes obtained include daily Garbage which includes used papers, card sheets, rubber waste, and plastics, cardboard Materials, etc are collected and disposed off. Dustbins are located on various floors at various Locations such as classrooms, libraries, staffroom, administration offices, etc. This separated waste is then Collected by the Municipality garbage collecting van outside the Institute campus. This waste is recycled by the Municipality. Liquid and semi solid wastes mainly consist of wastewaterfrom staff pantry etc. are disposed off through sewage systems having a network of undergroundpipes by Bagalkot Municipal Corporation.

WASTE DISPOSAL:



Solid Waste Management systems

Waste disposal are the activities and actions required to manage waste from its inception to its final disposal. This includes the collection, transport, treatment and disposal of waste, together with monitoring and regulation of the waste management process.

The waste from all around the college is separated daily as wet and dry waste in different bags which are disposed separately. Dry waste includes paper, cardboard, glass tin cans etc. on the other hand; wet waste refers to organic waste such as vegetable pads, left-over food etc. Separation of waste is essential as the amount of waste being generated today causes immense problem. The material was composted and evaluated as a fertilizing material. Disposal of these waste results in the production of good quality organic manure that can be used as soil amendments and source of plant nutrients.

By reusing or recycling we are contributing to the conservation of natural resources, saving energy, helping to protect the environment, reducing landfill. We will also reduce our impact on the environment by minimizing the carbon emissions associated with both disposing of old products and obtaining new ones. Our Organisation adopts environment friendly practices and takes necessary actions such as energy conservation, waste recycling, trying to be carbon neutral etc. The biological reusable waste are processed as organic manure for the plants available in the college campus and the other solid waste generated in the college campus is disposed to vendors and wherever required pollution control approved vendors.

Waste Disposal Bins





Organic Waste Management



Green Cover:

Our Organisation is within the geo-position between latitude 16.1834077 N and longitude 75.7046074 E in Northern Karnataka, India. It encompasses an area of about 2315 Sq.m. The area is immensely diverse with a variety of tree species performing a variety of functions. Most of these tree species are planted in different periods of time through various plantation programmes organised by the authority and have become an integral part of the college. The trees of the college have increased the quality of life, not only the college fraternity but also the people around of the college in terms of contributing to our environment by providing oxygen, improving air quality, climate amelioration, conservation of water, preserving soil, and supporting wildlife, controlling climate by moderating the effects of the sun, rain and wind. Leaves absorb and filter the sun's radiant energy, keeping things cool in summer. Many species of birds are dependent on these trees mainly for food and shelter.

Different species display a seemingly endless variety of shapes, forms, texture and vibrant colours. 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. A thick belt of large shady trees in the periphery of the college have found to be bringing down noise and cut down dust and storms.

It has got extreme climates. 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 The climatic condition is suitable for a wide variedly of flora and fauna to support its rich biodiversity.

The city has an average altitude of 808 feet or 246 meters from the average sea level. The climatic conditions bear a strong resemblance with the other cities in the northern part of Karnataka, India. The summers are usually very hot and the winters are cold. The summers are prevalent during the months of February to May and cold season between November to January. There is onset of Monsoon in May end and continues to September.



OBSERVATIONS

Observations are as follows

- 1. Proper Water Balance needs to be continuously followed up to know the wastage of water and hence actions to be taken for reduction of wastage of water.
- 2. Waste water treatment plant (Sewage Treatment Plant) needs to be set up with modern technology for least energy consumption and reuse of the treated water in garden thereby reducing water consumption. Presently Septic Tank and Soak pit is the norm which should be discontinued and recycling of water to be introduced. This will reduce pressure on the ground water and can also develop the garden further.
- 3. More detailed study of Tree cover both Flora and Founa needs to be done.
- Metalling of some of the roads need to be done for Air pollution which may occur especially during winter season.
- Vehicle usage may be reduced in the campus which will reduction in CO2 emissions.
 Similarly pooling of members for vehicle usage will also reduce CO2 emissions.
- Signage's be put across the whole of campus (Safety, Environment, Botanical names, etc.)

ACTION PLAN SUMMARY:

- Make an action plan both short term and long term.
- · Execute plan as pe schedule. Invite subject experts if required,
- Organize in person panel discussions and interaction to propagate the knowledge of energy conservation and mitigation.
- Prioritize the initiatives and execute.
- Observe and record the benefits and shortcomings.
- Workout further improvement by involving the staff and students.

AUDITED TEAM AND THEIR CREDENTIALS

NTLR

DR KRISHNA N KULKARNI BE(Chem), MTech (Chem), PhD (Geology)

Environmental Expert

In the Environmental Field for the last 25 years having completed many Audits of Colleges, Industries and their compliances as per Ministry of Environment, Forests and Climate Change, New Delhi. Also an expert in Design, Execution and Operations of Waste Water Treatment Plants

Shri Ramesh Upadhye B.Tech(Electrical Power)

Electrical Expert

Former employee at POWERGRID (Central Government) and been in the field of Academics and Electrical Audits. Experience of more than 35 years

Shri Shrikantha Joshi BE(Civil)

Civil Engineering Expert Expert on design of Buildings, Audits in Civil engineering area. Experience of more than 25 vears

Shri Kallappa Udhoji

Bachelor in Science (Chemistry)

Formerly QA / QC Head - Lab Division, ADM Oil Industries. Analytical Expert and Incharge of Nichrome Testing Laboratory and Research Pvt Ltd Lab Section. Experence of more than 30 years

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- NABL Accredited,
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- ISO 45001 : 2018 Certified (Certificates Enclosed)