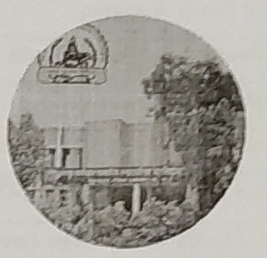
WATER AUDIT REPORT

Sant Guru Ghasidas Govt PG College Kurud, Distt-Dhamtari (C.G.)



Submitted

to

IQAC

Sant Guru Ghasidas Govt. PG College Kurud, Dist. Dhamtari (CG)

Submitted by

Water Audit Committee

Sant Guru Ghasidas Govt. PG College Kurud, Dist. Dhamtari (CG)

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PRINCIPAL
S.G.G. Govt. P. G. College
Kurud, Distt. Dhamtari (C.G.)

CONTENT

ACKNOWLEDGEMENT

The Water Audit Committee takes this opportunity to appreciate & thank the IQAC and Principal Dr. O.P.Chandraker Sant Guru Ghasidas Govt. PG College Kurud, CG for giving us an opportunity to conduct a water audit for the college.

We are indeed touched by the helpful attitude and co-operation of all faculties, office and technical staff, who rendered their valuable assistance and co-operation to the Water Audit study.

Water Audit Committee

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About College

Government College Kurud was established in 1984 as a graduate college. This college is progressing continuously and at present it is a prestigious college of the state with the status of postgraduate level. This college has facilities for postgraduate studies in 16 subjects. Out of there is Research Centre in Hindi Department Due to academic quality, the National Assessment and Accreditation Council has awarded 2.76 CGPA with the status of B++ to this college. This has been possible due to excellence in academic and extra-curricular activities of the college.

The students of the college actively participate in cultural, literary and sports activities. C.G. Annual activities are conducted according to the instructions of the Higher Education Department of the Government and according to the academic calendar.

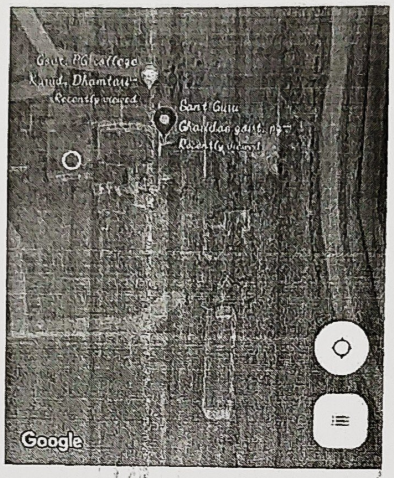


Image - Google Map of College

Strength of College

- Highly qualified and experienced teaching staff
- Updated Library
- As required laboratories
- As required infrastructure
- As required sports ground and gymnasium
- Clean and green campus
- Eco-friendly premises
- Achievements in sports and cultural activities
- Co-educational institution
- Locational advantage

Vision

The vision of the college is to give quality education and to make students ideal and virtuous persons by holistic education.

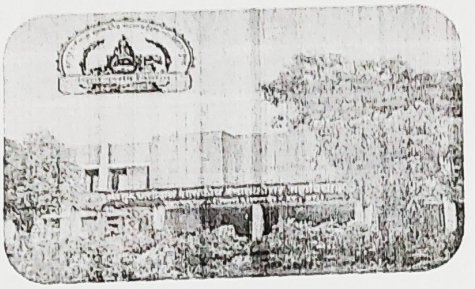
Mission

The Mission of the college is to bring about education at upliftment and overall development of the underprivileged and to groom them to face the world with confidence.

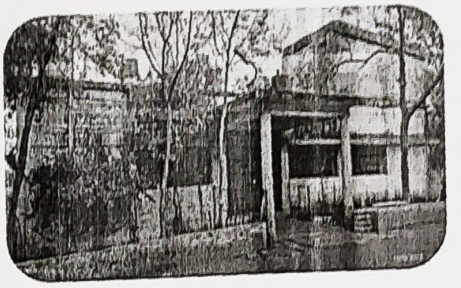
About College Campus

The college is spread over beautiful land with plenty of open space and sports areas. The details of various departments and buildings are given below:

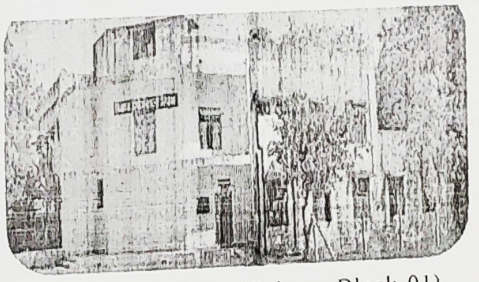
S.No.	Building Name
1	Old Building (Main Building)
2	Physical Education
3	Science Building (Science Block-01)
4	New Building- 01 (Science Block-02)
5	New Building- 02 (Science Block-03)
6	Library
7	Atal Manch
8	Staff Toilet
9	Boys Toilet



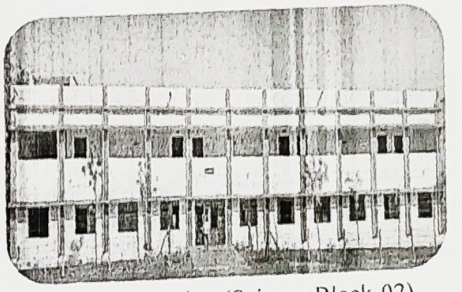
1. Main Office Building (Old Building)



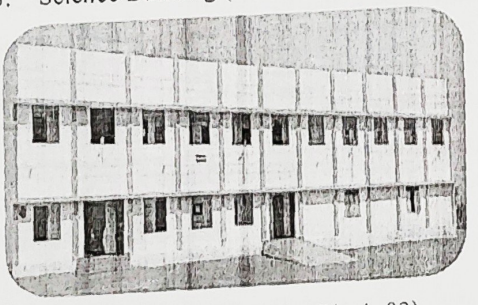
2. B.P.Ed Building



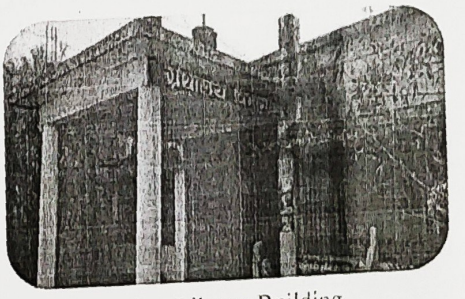
3. Science Building (Science Block-01)



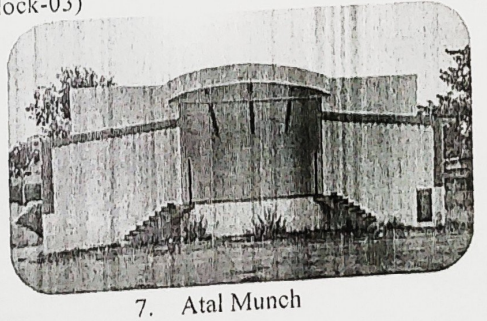
4. New Building (Science Block-02)



5. New Building (Science Block-03)



6. Library Building



7. Atal Munch

About Water Auditing

"Water Audit is a qualitative and quantitative analysis of water consumption to identify means of reducing, reusing and recycling of water"

Water audits can be a highly valuable tool for the institute in a wide range of ways to improve their energy, environment, and economic performance. while reducing wastages and operatingcosts. Water audits provide a basis for calculating the economic benefits of water conservation projects by establishing the current rates of water use and their associated cost.

Objectives of Water Audit

- The general objective of a water audit is to prepare a baseline report on water conservation measures to mitigate consumption and improve quality and sustainable practices.
- To monitor the water consumption and water conservation practices.
- To assess the quantity of water, usage, the quantity of wastewater generation, and theirreduction within the college.
- To utilize water resources effectively and more efficiently.
- To keep a check on unwanted excess usage of water.
- To determine water losses and leakages path.
- To identify priorities areas that need immediate attention for control and maintenance
- For the planning of water storage and supply.
- For cost-benefit study related to the optimum recovery of water loss.

Target Areas of Water Audit

This indicator addresses water sources, water consumption, irrigation, rainwater, and appliances.

The methodology followed for conducting water Audit

- Walk through the survey.
- Understanding of existing water sourcing, storage, and distribution facility.
- Assessing the water demand and water consumption areas/processes.

Benefits

Water audit improves the knowledge and documentation of your water sourcesand the distribution system, associate problem and risk areas, and a better understanding of what is happening to the water after it leaves the source poir It helps in analyzing water-related risks and opportunities as part of a sustainability strategy.

Details of Source of Fresh Water and Use Areas

The main source of freshwater is Borewell for the college. Freshwater is mainly used for drinking, housekeeping, gardening, and domesticactivity. Details of the well and pumps are given in table-2

Table- 02 Details of Freshwater sources and Supply pumps

Sr.no	Water Source	Location
1	Borewell -01	Entrance Ground area
2	Borewell -02	New Building- 01(Science Block-02)

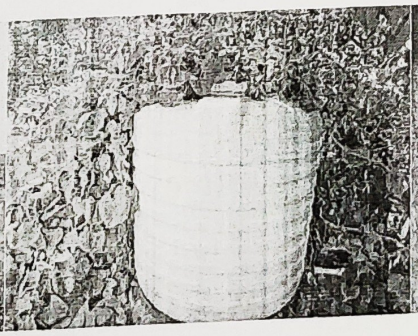
Borewell -01-Entrance Ground area

Borewell -01- New Building- 01(Science Block-02)

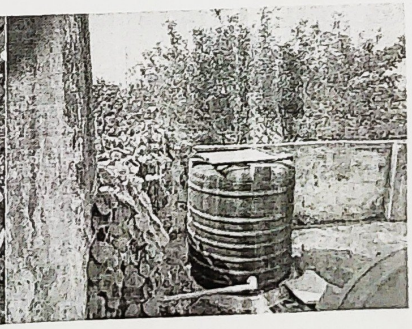
Table-03 Water Storage Capacity on a college campus

Sr.no	Building Name	No. of overhead tank	Storage Capacity
1	Old Building (Main Building)	03	10000x2=20000 liters, 5000x1=5000 liters,
2	Physical Education	01	1000x1=1000 liters
3	Science Building (Science Block-01)	03	1000x1 liters, 500x2=1000 liters
4	New Building- 01(Science Block-02)	02	1000x2=2000 liters
5	New Building- 02 (Science Block-03)	02	1000x2=2000 liters
6	Library	02	500x2=1000 liters
7	Atal Manch	01	500x1=500 liters
8	Staff Toilet	01	500x1=500 liters
Total Capacity		**15**	**34000 liters**

Old Building (Main Building)

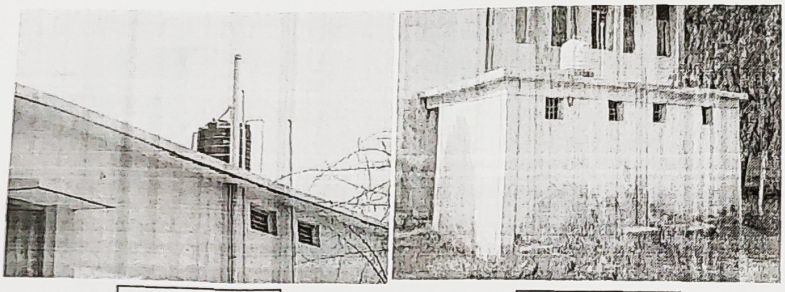


Physical Education



Science Building (Science Block-01)

Science Building (Science Block-01) | New Building- 01 & 2 (Science Block-02 & 3) | Library



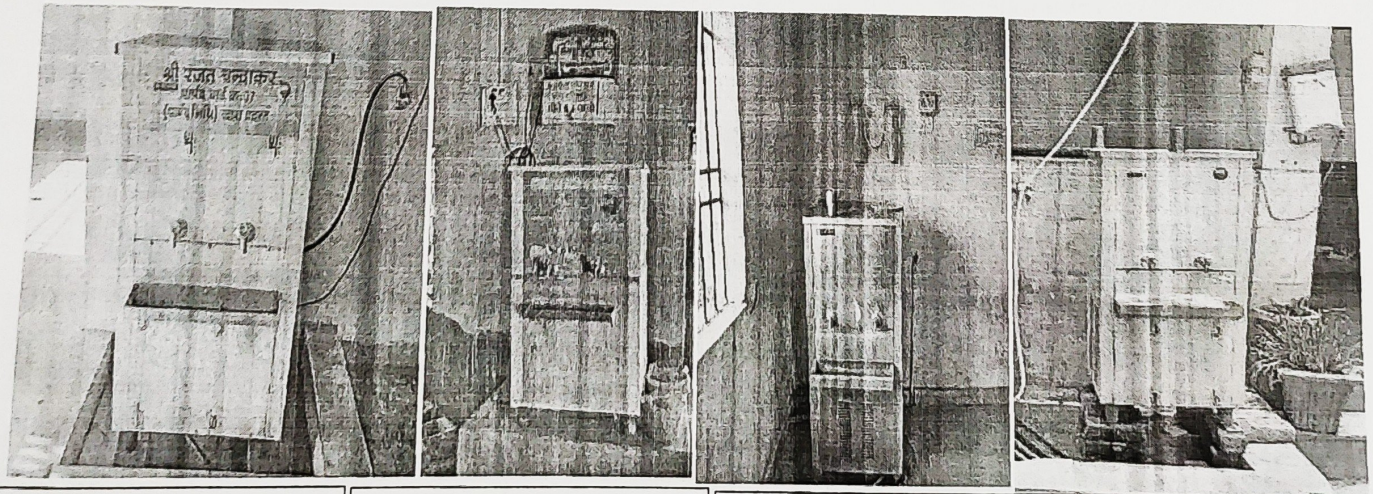
Atal Munch | Staff Toilet

Water use areas and taps on College Campus: -

Water is preliminary used for drinking, washing, Toilet, gardening, and Domestic activity. The audit team visited various departments and buildings to determine appliances.

Table- 04 Details of Fresh water tap and RO water tap

S.No.	Location of taps	Fresh Water taps	RO Water Tap
1	Old Building (Main Building)	18	02
2	Physical Education	03	01
3	Science Building (Science Block-01)	04	01
4	New Building- 01(Science Block-02)	10	01
5	New Building- 02 (Science Block-03)	10	01
6	Library	05	-
7	Atal Manch	04	-
	Total No of water Taps	**54**	**06**



RO Water Tap- New Building- 02 (Science Block-03) | RO Water Tap- Science Building (Science Block-01) | RO Water Tap- New Building- 01 (Science Block-02) | RO Water Tap- Old Building (Main Building)

Fresh Water uses for Gardening

The one of a major contribution from fresh water consumption is watering for plants and garden in college campus.

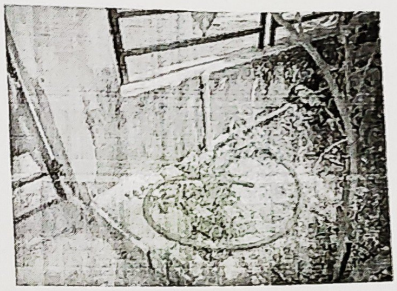


Image -Water supply in the garden in front of main building

Rainwater Harvesting systems

Rainwater harvesting is a technique to capture the rainwater when it precipitates, storethat water for direct use or charge the groundwater and use it later.

There are typically four components in a rainwater harvesting system:

- Roof Catchment.
- Collection.
- Transport.
- Infiltration or storage tank and use.

If rainwater is not harvested and channelized its runoffs quickly and flow out through storm-water drains. For storm-water management the recharge pits, percolation pits and porous trenches are constructed to allow storm water to infiltrate inside the soil.

Rainwater Harvesting System of the College

The college has been seven Buildings which made bay government agency. At present rain water harvesting system has been installed in two new building of the college by Government agency (PWD).

Rainwater Harvesting System Behind
New Building -02 (Science Block-02)

Suggestions

- Use a drip water irrigation system for gardening.
- Treated wastewater from the above STP plant can be reused for gardening purposes. It willreduce the freshwater consumption of the college.
- Wastewater generated from various departments and canteen should be collected in a separate wastewater collection tank. after filtration/treated water reuse activities like gardening and toilet.
- Prepare the water management policy, and work towards creating and implementing astrategy to reduce water consumption.
- Stablish institutional ecology policy and set an example of environmental responsibility and practices of resource conservation, recycling, and waste management.
- Ensure participation of students and teachers in local water issues.
- Water testing should be done in every three months.