AMBEDKAR COLLEGE

FATIKROY, TRIPURA-799290

**GREEN AUDIT REPORT 2018–2019**



Prepared by

**ECO CLUB**

Ambedkar College, Fatikroy- 799290

**INSTITUTION DATA**

**A BRIEF PROFILE OF THE COLLEGE**

The Ambedkar College is situated at Fatikroy village in hilly and rural area on the bank of river Manu. Educational development is the key of total transformation of rural region with this dream, to impart knowledge and inculcate ethical and humanitarian values among rural people, the then Education Minister Sri Sunil Chandra Das has established this college in a temporary school building in 1991. He realized that creation of educational facilities, particularly facility of higher education was the prior need of this area. Before the establishment of this college, the students of this area were deprived of higher education and only a few well-to-do could afford to go to Kailashahar, the nearest city, for pursuing higher education. Having realised this, the leadership decided to create these facilities for the youth of this area for their total transformation.

1. Name and Address of the College:

## Name : Ambedkar College

## Address:Fatikroy, Kumarghat, Unakoti-799290

State :Tripura

Website : [www.actripura.edu.in](http://www.actripura.edu.in)

1. For communication:

## Dr. Subrata Sharma

PRINCIPAL (Incharge)

Mobile : 09446700821

Email : principalacfr@gmail.com

**IQAC COORDINATOR**

## Dr. Anil Kumar Acharya

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Email :acharyaanilkumar1@gmail.com

1. Status of the College by management: Government.
2. Name of University to which the College is Affiliated :Tripura University
3. A**.** Date of establishment : 26th September 1991

B..Date of recognition by UGC: 12th March 2010

1. Type of Institution**:**
2. ByGender : Co-Ecucation.
3. By Shift : Day
4. Source offunding : Government.
5. A. Details of UGCrecognition :

|  |  |  |
| --- | --- | --- |
| *Under Section* | *Date, Month & Year* | *Remarks (If any)* |
| i. 2(f) | 12th March 2010 |  |
| ii. 12(B) | 12th March 2010 |  |

B. Details of recognition/approval by statutory/regulatory bodies other than UGC

 (AICTE,NCTE,MCI,DCI,PCI,RCIetc.) : Not Applicable

1. Has the college been recognized?
2. By UGC as a College with Potential for Excellence(CPE)? : No
3. For its contributions/performance by any other governmental agency? : No
4. Location of the campus and area

Location : Rural

Campus are a in acres : 10.47 acres

1. Does the College have the following facilities in the campus ?
	1. Auditorium/seminar complex : Yes
	2. Sports facilities
		* Play ground : No
		* Swimming pool : No.
		* Gymnasium : Yes
	3. Hostel
		* Boys’ hostels : No
		* Girls’ hostels : No
	4. Residential facilities
		* For teaching staff : Yes
		* For non-teaching staff : Yes
	5. Cafeteria : Yes
	6. Health centre –
		* First aid facility : No
		* Inpatient facility : No
		* Outpatient facility : No
		* Ambulance facility : No
		* Emergency care facility : No
* Other facilities
	+ - Bank : No
		- ATM : No
		- Post office : No
		- Book shops : No
		- Transport facilities : for students /for staff : No
		- Power house : No
		- Waste management facility : yes
1. Details of programmes offered by the institution (2018-19):

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UG** | **Course** | **Duration (Semester)** | **Sanctioned student intake** | **No. of students admitted** |
| 1 | B.A. English | 6 | 20 | 14 |
| 2 | B.A. Bengali | 6 | 40 | 26 |
| 3 | B.A. Sanskrit | 6 | 40 | 29 |
| 4 | B.A. Education | 6 | 30 | 24 |
| 5 | B.A. History | 6 | 30 | 26 |
| 6 | B.A. Political Science  | 6 | 40 | 32 |
| 7 | B.A. Philosophy  | 6 | 20 | 2 |
| 8 | B.A. General  | 6 | 1000 | 918 |
| 9 | B.Sc General | 6 | 20 | 3 |

1. Does the institution offer self-financed Programmes?

(if yes how many) : No.

1. Whether new programmes have been introduced during the last five years?

(if yes how many) : Nil

**Introduction**

As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent. Hence sustainability is the need of the hour for our country to provide our future generation a cleaner and safer environment. To achieve it, the National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory from the academic year 2016–17 onwards for all Higher Educational Institutions to submit an annual Green Audit Report to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures. Green Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of various establishments. It aims to analyze environmental practices within and outside of the concerned sites, which will have an impact on the eco-friendly ambience. The Ambedkar college has conducted Green audit for the first time.

The Ambedkar College, since its beginning of journey was always careful in maintenance of its physical environment in and outside the campus. In view of the NAAC circular regarding Green Auditing, the College Management decided to conduct a Green audit by some competent persons along with Eco club of this college headed by Mr. Biplab Majumdar, Asst. Professor, Environmental Science, Ambedkar College, Fatikroy.

The auditing was done for the period extending from 01/04/2018 to 31/03/2019.

**Green audit outline:**

Ambedkar College is generating awareness about the environment consciousness among the students, staffs and local communities. The institute taken number of steps to make its campus green. To preserve the environment within the campus, various viewpoints are applied by the institute to solve their environmental problems such as promotion of the energy savings, water reduction, water harvesting, Solid waste management, air quality, noise pollution, minimizing use of Plastic, etc.

„Green audit‟ is one of such concepts or principles introduced to make the educational institute environmentally sustainable. "Green audit is a tool to assess general practices implemented by organization in term of its impact on environment". Green audit also throws a light on adverse practices which are responsible for degradation of environment. It shows strength and weakness of organization towards conservation of environment. It is helpful to recognize the need to function around the year in a manner to minimize its harmful environmental impact.

**OBJECTIVES:**

Green Audit of an institution has been becoming an utmost important for self-assessment of the institution which reflects the role of the institution in mitigating the present environmental problems. The college has been putting efforts to keep our environment clean since its inception. But the auditing of this non-scholastic effort of the college has not been documented. Therefore, the purpose of the present green 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 estimate the Energy consumption of college.

- To document the Waste disposal system

- To document the ambient environmental condition of air, water and noise of the college

- To introduce and aware students to real concerns of environment and its sustainability

**METHODOLOGY:**

The purpose of the green audit of Ambedkar College is to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution. The methodology includes: physical inspection of the campus, observation and review of the documentation, interviewing key persons like students, staff, faculties and local residents, and data analysis, measurements and recommendations. Some data have also been taken from the students’.

**OBSERVATIONS**

The environmental audit of campus was carried for solid waste, electricity and energy, water, hazardous waste, noise and air quality, e-waste management.

1. **Solid Waste and management:** The solid waste audit focused on volume, type of solid waste generated in college campus. The volume of the waste generated in the college is not very high. Different types of solid waste collected was paper waste (old exam papers, assignments, used papers from office and departments) plastic waste from canteen, biodegradable waste from canteen, garden, jungles cleared from road sides. To minimise the paper waste single sided used papers reused for writing and printing in office and in other departments. Every office and sections were provided with trash bin which has been cleared by the sweeper on daily basis and finally dispose in a composting pit. Although the college campus is declared as plastic free campus, still few plastic waste is generated in college canteen in the form of water bottle and refreshing drinks which is neither categorized at point source nor sent for recycling. Food waste, dinning waste, etc. of common canteen and garden waste is thrown in composting site.
2. **Electricity and energy audit:** This indicator addresses electricity consumption on lighting appliances / instruments. As there was no record of total electricity consumed by the institute in a year, we could not conduct energy audit. However, the institute has taken several steps to reduce the consumption of electricity. In large extent use of LED light, energy efficient fans and Air conditioners decreases the consumption of electricity. Installation of solar lamp for lighting the campus at night is one the green practices deployed by college. All the buildings are provided with adequate ventilation so that natural light enters the rooms which in turns reduce the consumption of electricity on air and light appliances. While inspecting campus sites, many of the classroom’s fans and lights were running although there was no class and students in the room. It wastes electricity as well as misuse of money.

Auditing shows all the teaching as well as non-teaching staff has residence out of the campus and students are come from nearby villages. As our college is situated in rural area large number of students are using public transport to reach college. Very few faculty and Staff members using own vehicle. Consumption of LPG for education or practical purpose as well as the LPG consumption at canteen is observed to be much less. The LPG connection in name of the college and LPG is handled by departments of Physics, Chemistry etc for heating purpose at the time of practical, no leakages and off mode regulators are seen at time of verification.

1. **Water consumption audit:** This auditing indicator addresses water consumption, water sources. In survey, water used at toilets, laboratory, canteen, garden, shower and as well as leakages and over flow of water from overhead tanks is also been inspected.

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Water Analysis Report of Ambedkar College

*Analysis Carried Out DWS (PWD) Kumarghat Division*

|  |  |  |  |
| --- | --- | --- | --- |
| Sl. No. | Parameters  | Permisable limit (BIS) | Result |
| 1.  | Physical appearance  | Clear  | Clear. |
| 2.  | Turbidity  | 5.0 NTU  | 3.8 NTU |
| 3.  | Odour | Agreeable  | Agreeable  |
| 4.  | pH | 6.5 – 8.5 | 7.0 |
| 5.  | Total alkalinity  | 600 mg/L | 68 mg/L. |
| 6.  | Total Hardness as CaCo3 | 600 mg/L | 86 mg/L |
| 7.  | Calcium as Ca | 200 mg/L | 22.4mg/L |
| 8.  | Magnesium as Mg | 100 mg/L | 7.4 mg /L |
| 9. | TDS | 2000 mg/L | 51.3 mg/L |
| 10 | Chloride as Cl | 1000 mg/L | 15 mg/L |
| 11. | Total Iron as Fe | 0.3 mg/L | 2.20 mg/L |
| 12. | Manganese as Mn | 0.3 mg/L  | 0.46 mg/L |
| 13. | Total Coliform | 00  | Nil  |
| 14.  | Residual chlorine | 0.2 mg/L | Nil  |

College is extremely suffering from drinking water shortage as the only source of water is mini bore well which is contaminated with iron making the water unfit to drink. Only one mini IRP is attached with a water cooler is not sufficient to meet the drinking water need of 1000 students.

Overflow of water has been noticed from the storage located on staff quarter. As the storage is located in different building’s, the tanks nearer to bore well fill in less time and more time to fill distant one, so the operator need to wait up to the filling up of every storage and overflow takes place. Roof top rain water harvesting is also been practiced in some extent. Less numbers of leakages are observed while conduction of verification and site inspection of infrastructure. Push tap is fitted in many toilets to check leakage.

1. **E- waste audit:**  E-waste can be described as electronic equipment that is near or at the end of its useful life. E-waste is much more hazardous than other waste because electronic components contain cadmium, lead, mercury, and Polychlorinated biphenyls (PCBs) that can damage human health and the environment. E-waste generated in college campus is of schedule III and is generated is very less but not disposed in scientific way. Now institute has some e-waste like bulbs, circuit boards, mother boards, computers, batteries, printer cartridge etc.

The college is not maintaining a paperless office work administration due to which in campus there is carbon emission due to printers, filing of cartridge inside the office and in several section photocopy and printing facility is observed. The non-working computer, spares and other non-working electrical equipment’s like bulbs, tubes, fans, PCB components, pieces of wires, computer hardware’s , old instrument’s are dumped in a room allocated for this purpose. Buy back policy is not available. The cartridges of printers are not refilled outside or in closed room in college campus.

1. **Air quality audit:** Air quality in the academic college is very important for producing good educational atmosphere as well as for the health of the students, faculty, staff and other stake holder of the institute. The no air pollution sources is observed in the college campus. The college campus is situated in rural and hilly area on the bank of river Manu of Unakoti district and it is far from major transporting roads. College is surrounded by green vegetation. College campus has a lot of open area and all buildings are discrete. The college has planted different types of large number of trees in the campus, this will help in trapping the carbons generated in the campus.
2. **Noise Environment:** The noise levels measurements were not carried out using precision noise level meter. As the campus is located in an isolated place and no road for public transport, it is assumed that the noise level is much below the permissible limit. No vehicle movement, and any other major source of noise are not identified.

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(Biplab Majumdar) Er. Prakash Pal Dipak Rurdra Pal

Asst. Professor, Jr. Scientific Officer Scientific Officer

Environmental Science. TSPCB, Kumargaht. TSPCB, Agartala