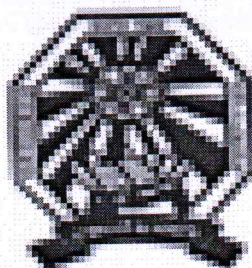


**A GREEN AUDIT REPORT OF NOWGONG COLLEGE CAMPUS**  
**Academic Year- 2019-20**



**AUDITED BY**

**: DR. KHARGESWAR BHUYAN, Member State Level  
Environmental Impact Assessment Authority, Assam.**

**SUBMITTED TO**

**: INTERNAL QUALITY ASSURANCE CELL (IQAC)  
Nowgong College, Nagaon, Assam-782001**

**REPORT PREPARED BY**

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## GREEN AUDIT REPORT: 2019-20

1. **Name of the Institution** : Nowgong College  
Nagaon, Assam-782001
2. **Campus area** : 36120.702 sq. mts
3. **Build up area** : 28094.142 sq. mts
4. **Date of establishment** : 7<sup>th</sup> August, 1944
5. **Brief History** : Nowgong College a pioneer Institution of higher education, is located about 120 kms to the East of Guwahati city on the heart of Nagaon district. Established in 7<sup>th</sup> August, 1944, with the permission from the University of Calcutta, and later affiliated by Gauhati University under UGC Act 1956 under section 2(F). The College offering a large number of subjects in Arts and Science and Commerce stream in the Under Graduate as well as Post Graduate Level, and has been able to attract students from the entire North Eastern region. This college has been accredited with "A" Grade by NAAC in 2011/16.
6. **Green Auditing:** Green auditing or Environmental auditing can be defined as "Systematic identification, quantification, recording, reporting and analysis of components of ecological diversity and expressing the same in financial or social terms." Further, Environment consciousness is often given top priority among the significant steps taken for the holistic upliftment of an educational institution and Nowgong College is no exception in this matter. Nowgong College has focused a lot on the enhancement of environmental awareness among the students, teachers and other members of the institution by incorporating certain rules and practices within the campus as well as by various other means. As the issue of saving our environment has attained a global prominence in the contemporary time, Nowgong College has considered it extremely essential to work sincerely in the matter of environment consciousness. In its strive for a clean and green campus, every possible step is taken by each and every member or cell of the institution to create a sense of responsibility among the students pertinent to the sustenance of a healthy environment in the form of various programmes and project works. This awakening of a sense of responsibility has promoted different kinds of activities for a healthier and cleaner environment. Necessary steps have been taken by the college to have Green Audit done. The College conducts the internal Green Audit in academic year 2018-2019 and strives to maintain eco-friendly atmosphere on the campus.

With the growing consciousness regarding a clean and green environment, the Institute has taken steps to ensure an eco friendly campus. All kinds of initiatives are taken to maintain the greenery of the campus and to generate more and more awareness and concern for a healthy environment.

Some of the initiatives taken by the college to make the campus eco friendly are:

### **Energy conservation:**

With the rising awareness on the necessity to save energy, the college has resorted to ways and means for saving electricity. Efforts are made to shift to solar energy phase wise.

- The classrooms and laboratories are in such manner that they allow sufficient light and air during class hours and as a result, much electricity is saved.
- In its drive for saving energy, Nowgong College has taken steps to replace all existing bulbs and lights with LED lights phase wise. In fact, all newly constructed buildings have been equipped with LED lights and 5 star rating ceiling fans with a view to reducing the consumption of energy.

**Use of renewable energy:**

The college has adopted means to switch over from conventional source of electricity to renewable resources. Solar Energy Plant has been set up in the college to cater to the dire needs of various departments during power cuts. The energy produced is sufficient enough to generate power for minimum number of lights and fans. Besides the already existing solar plant to combat power crisis, the institution has appealed to the Assam Power Distribution Company Limited (APCDL) for installing another source of solar power and, in that connection, APDCL has sanctioned an amount of Rs.100 lakh to establish Grid Connected Solar PV Power Plants with Net Metering facility. The installation work, that will soon be completed, will enable the college to shift to solar energy.

**Water harvesting:**

This region, being an area that receives heavy downpour during rainy and summer seasons, yet during winter season scarcity of water is met with the harvesting of natural rain water for the purpose a rain water harvesting unit has been already set up with a sole motive to conserve water and energy. The water for the unit is used for the purpose of watering gardens and other uses.

**Plantation:**

The Go Green'drive, that has already gained ground among the students and teachers, needs an occasion to plant new saplings, not only in the college campus but also in areas outside the college. Every year, on World Environment Day, College Foundation Day, new saplings are planted in the college campus. Old trees uprooted by natural calamity or cut down for construction are replaced by planting of new trees. The Green Earth Society of the college has undertaken the task of bio fencing around the campus by planting a variety of bamboo plants and other allied plants. Further, planting in pots has been taken up as a project work for the students by the department of Environmental Studies that contributes to the beautification of the campus. Planting of seasonal plants in the college campus has been adopted as a regular practice to enhance the beauty of the campus.

Again, in its endeavour to possess rare species of plants, several new varieties discovered find a place in our Botanical Garden. The Garden houses a wide variety of medicinal, orchids and common as well as rare indigenous plants. This all programme helps in maintaining eco-friendly environment as well as provides pure oxygen within the college campus.

**Efforts for Carbon neutrality:**

With a larger green coverage, the college has always adopted all possible means to create a carbon neutral environment.

- Nowgong College makes use of a device to measure the quantity of carbon dioxide and carbon monoxide. It facilitates to monitor the carbon concentration in air and to take necessary measures to control it.
- The Green Earth Society has been formed to maintain carbon-neutrality. The collective effort of Green Earth Society, Bio tech Hub and the Students'Union, in

organising seminars, talks and workshops, has created a platform for generating awareness among the members of the college and sustaining the efforts for an eco friendly campus.

- The college authority has adopted measures to check carbon emission in the campus by banning the burning of waste paper, dry leaves and other such waste products. Emission certificates from Pollution Control Board, Assam of cars and vehicles belonging to members of the college are also verified for the purpose.

#### **Hazardous waste management:**

- The concept of Green Chemistry has been made popular among the students and they have been encouraged to go for the use of non hazardous solvents with less toxic effect in the laboratories as far as practicable.
- The use of hazardous materials is always discouraged in the college campus. However, the college ensures that chemical extracts and all kinds of hazardous wastes like glass wares, plastic materials and litters are properly buried in pits dug out or disposed through the municipal corporation.
- Proper labelling of chemicals is done to ensure safety.
- The laboratories are well equipped with means that ensure safety. The laboratory assistants are also well trained in safety measures.
- Utmost care is taken to avoid any disaster or loss of any kind in the laboratories and for this purpose, posters and stickers with instructions on the handling of appliances in the laboratory are carefully and distinctly put up on the wall. Again, a museum displaying apparatus at the entrance of almost every laboratory is another initiative taken to acquaint the students with the apparatus.
- Introduction of scientific waste management

#### **Installation of incinerator**

The College has installed an incinerator to do away with the solid wastes so that cleanliness in the campus is maintained

#### **Check dam construction:**

Nowgong College is fortunate enough to have been located in a congenial geographical location. The proper surface level of all buildings does not create any problem of water logging and erosion. The college has sufficient number of canals to drain out water and a natural reservoir to collect excess water. Besides, the nature of soil in this region allows seepage of water easily.

#### **Wetland Management:**

Nowgong College Campus has a wetland about 01 hector area. The Department of Zoology in collaboration with District Fishery Development Office and NSS has taken up a project to develop the wetland area of the college into an eco friendly zone and also scientific fish culture and culture of aquatic ornamental plants.

#### **E-waste management:**

E-wastes such as damaged computer parts, batteries, electronic items, electrical appliances, empty toner containers, are disposed as scrap and given away to agencies and the municipal corporation, that recycle such products.

#### **Vermi- compost Unit**

A Vermi-compost unit has been functioning in the college for transformation of bio degradable and garden wastes to manure. The manure, thus produced, is of good quality and is used as fertiliser in the gardens within the campus. It is also procured by the staff of the

college. The pit, which is maintained by the department of Zoology, adds on to the monetary resource of the college.

#### **Biodiversity Register:**

A biodiversity register is maintained by the Department of Botany and Zoology to assess the flora and fauna found in the campus. College authority has also constituted a Biodiversity Register Committee of Nowgong College Campus to document, monitor and provide information for sustainable management of bio-resources of Nowgong College Campus. The committee comprises authority, faculty members and students of different departments. The faculty members of Department of Botany and Zoology takes care to entrust project works on floral and faunal biodiversity to the students and encourages them to have the work done within the college campus that eventually contributes to maintain Biodiversity Register and also the building up of an eco friendly environment. Recent work on biodiversity register estimated that the college premise thrive 195 species of plants including 50 species of trees, 20 species of shrubs, 100 species of herbs and 10 species of climbers. Of these, 15 species of rare and endangered plants were recorded from the campus. While Nowgong College endowed 116 species of animals which includes 06 species of mammals, 10 species of reptiles, 33 species of birds with IUCN status, 35 species of lepidopteran insects, 15 species of spider, 10 species of ants and 12 species of fishes.

#### **Other Related Activities:**

- To check noise pollution the authority has declared the campus a No Cracker Zone.
- The college has also been declared as a plastic free zone. Use of polythene bags and plastic glasses is strictly prohibited within the campus.
- An initiative to create a human chain of awareness on the use of herbal colours against synthetic colours before holi festival has been an innovative step taken by the Green Earth Society of the college.
- Gutkha, pan masala or other hazardous substances are banned in the college campus.
- No printed stickers or posters are allowed to be stuck on the walls during the election of the students union of the college. Only hand bills are allowed to be distributed among the students.
- The college has also organised a programme on Wild Life Photography to draw the interest of the students to environment and wild life.
- As a part of its effort to sensitize the students on environmental issues, Science Day has been observed with a series of programmes. While two day long programmes on environment--- one at the SPP Girls' Hostel and the other at Kachamari, our adopted village,--- were organised on 28th February, a two-day Environment Film Festival in the college on 1st and 2nd March, 2016 was held at the joint initiative of the Cine Society of Nowgong College and the Advanced Biotech of the institution.
- The department of Environmental Studies takes care to entrust project works on environment to the students and encourages them to have the work done within the college campus that eventually contributes to the building up of an eco friendly environment.
- Effort to bring more and more areas under green coverage is a continued process in the college.
- Maintenance of aquarium house for indigenous ornamental fishes in the Department of Zoology.

**Future Plan:**

- Construction of an Orchidarium
- Construction Butterfly House
- Herbal medicinal plant garden
- Construction of Animal house
- Maintenance of wild fruit plants germplasm bank for more habitats and food to the dependant animals

*KB Bhuyan*  
*20/4/2019*

(Dr. Khargeswar Bhuyan)  
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Assessment Authority, Assam  
**Member**  
**State Level Environmental Impact**  
**Assessment Authority, Assam**





**Some of the Animal of Nowgong College Campus**

