

SUNDARBAN HAZI DESARAT COLLEGE IQAC



PREPARED BY

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Green Audit

Spread across a lush green area of 11.2 acres, Sundarban Hazi Desarat College is located in the Sunderban delta on the southernmost part of South 24 Parganas surrounded by rivers and canals. Located at the latitude 22.194739 and longitude 88.77182 and about 100 K.M. away from the city Kolkata, the place is in fact the confluence of numerous rivers and streams flowing into the Bay of Bengal and home to several kinds of trees, some of them rare and almost extinct. The Sunderbans with its phalanx of mangroves provide a sort of buffer against severe cyclonic storms of the nature of *Aila* or *Hudhud*, capable of cushioning not merely the city of Kolkata or South 24-Parganas, for that matter, but vaster swathes of the South Bengal. Situated in such a crucial and environmentally strategic place, the college cannot afford to ignore its answerability to the community and environment to and in which it serves in the first place.

Why Green Audit at Hazi Desarat College

The college campus boasts of a large number of trees, and even in the face of senseless deforestation in the whole of Sunderbans the college maintains a very sensitive approach towards cutting of trees in its jurisdiction. In fact, the college can pride itself on a campus that contains a large green base and three water bodies used for water harvesting and providing sustenance to both plants and trees, and the hostellers, especially during dry seasons. But having no ready in-hand data of the green resources available, the authority fails to adopt and then implement a uniform green policy. Naturally it warrants a thorough Green Audit in the campus with its aims and objectives unequivocally defined. The intention of organizing this Green Audit is to upgrade the environment condition in and around the institute with the express purpose of performing tasks like waste management, energy saving and others to turn into a better environmental friendly institute. This apart, the college authority wants to instill in the students the importance and significance of environmental ethics and green awareness through the curriculum. Even though all final year students have to execute an academic project on Environmental Studies as part of the existing curricula, it has become imperative for the concerned academic departments to make students aware of the environmental ethics as well. In fact, being the only institution of higher education in the whole southern part of the Sunderbans, it devolves upon the college to take an exemplary initiative in steering a conservation movement in this geographically crucial area.

Objective of the Study

The objectives of the study are as follows:

1. Observe to what extent the activities of the college are causing erosion of green resources in the campus.
2. To examine the steps taken to preserve and enhance the green base of the college.
3. To encourage green awareness among all stakeholders of the institution.

Green Resources: Major Findings and Recommendations

1. As far as the green base of the college campus is concerned, the green resources are a matter of pride for all stakeholders of the college. As per the Register for the Green Resources, one *Saal* or *sakhua* tree (*Shorea robusta*) had to be cut down along with about 30 (thirty) other trees, mostly mahoganies and *shirish* or lebbek trees.
 - **Suggestions and Recommendations:** -The college authority should ensure plantation of equal number of trees mostly at the back-side of the proposed Boys' Hostel close to the small land-locked canal.
2. The campus can boast of trees almost rare in the whole of Sunderban delta. According to a survey conducted by Geological Survey of India as is given on their website (http://www.portal.gsi.gov.in/portal/page?_pageid=127,723790&_dad=portal&_schema=PORTAL&linkId=1216) trees like *palash* or *Forest fire* or *Bastard Teak* (*Butea monosperma*), *Ranjana* popularly known as *red sandal* (*Adenanthera pavonina*), *Chhatim* or *Milkwood* pine (*Alstonia scholaris*) and *Rudrapalsh* or *African Tulip* (*Spathodea campanulata*) are hard to come by in the Sunderban delta, especially in areas prone to inundation by saline water of rivers and creeks. These trees are well-kept in the campus.
 - **Suggestions and Recommendations:** -As per the same study by GSI mentioned above, at the current rate of erosion of land, a loss of 15% of farmlands and more than 250 Sq. Km of the Sunderban Biosphere in the next two decades is feared. Corollary to it is the apprehension of deforestation of some species of mangroves. Considering the cruciality of location of the college, arrangements should be made to plant some mangroves in consultation with the Department of Botany. In fact, the college has now only a single *Sundari* tree (*Heritiera fomes*) of the extended gamut of mangrove family.
3. The campus is home to a total of 84 medicinal trees of 20 types—a rare treasure in terms of the general negligence of people towards herbal/natural modes of well-being and a total ignorance of the importance of these trees/plants.
 - **Suggestions and Recommendations:** -The medical team of the college should be well advised to orient the students towards herbal therapy/medicines with the resources available in the campus for problems like common flu, stomach ailments, common gynaecological problems and etc. The institution cannot merely nurture these herbs for their own sake; students ought to be educated about their efficacies in practical ways in their day-to-day lives.

WATER: Major Findings and Recommendations

1. The water bodies inside the campus are indispensable both for the college community and the people of adjoining locality who have to rely on these water resources, especially during summer.
 - **Suggestions and Recommendations:** The Audit Team also recommends that the water quality, generally called **ambient water quality**, be assessed biannually by the competent authority. It should be mentioned here that water quality standards for surface waters vary significantly on account of different environmental conditions, ecosystems and intended human uses. Toxic substances and high populations of certain

microorganisms can present a health hazard for non-drinking purposes such as irrigation, swimming and even fishing by angling.

2. It has come to the notice of auditing team that both day scholars and hostellers are into the habit of throwing plastic bags and left-over victuals
 - **Suggestions and Recommendations:** The authority should sensitize the students about the issue through notifications and awareness programmes.
3. The audit team has received complaints from students as well as other quarters that the water of the ponds has been polluted because of unscientific fish farming by the concerned party. On account of this, there are reports of dead and rotten fish floating on the surface of water causing stench in the entire campus.
 - **Suggestions and Recommendations:** Under the above circumstances, it is highly recommended that the leasing out of the water bodies be scrapped through proper negotiations or, at best, which the concerned fishermen be encouraged to revert to scientific farming or pisciculture.

ENERGY: Major findings and Recommendations

1. The college has registered a considerable reduction in the consumption of energy in the last two and half years largely because of the use of CFL lamps and tube lights in the offices as well as in the hostels. That despite the new constructions and ensuing electric supply therein, the percentage of electric consumption has come down sharply.
2. There is a solar-power system meant to tap renewable energy for supply to the library during power-cuts. A small yet commendable attempt on the part of the present administration of the college!
3. During the auditing, it was found that a number of lights and fans were kept on when there was obviously no necessity of it.
 - This indifferent and nonchalant attitude amongst teachers, non-teaching staff and students has to be addressed by way of raising awareness of all concerned through college-level programmes at least once in an academic session.

Waste Management: Major findings and Recommendations

1. The overall impression in terms of waste management mechanism of the college is satisfactory. But day scholars as well as hostellers need to be sensitized about the need of waste management.
2. Though there are litter bins stationed at the hostels, it pains to see no collecting bin in the main academic building and near students' canteen. Two bins need to be kept in these places for a cleaner and tidier campus.
 - It is a long pending demand of environmentalists that the entire Sundarban area be declared a 'Plastic-Free Zone' for maintaining its endangered flora and fauna. Being situated in such a crucial area and being an institute of no mean repute, the college may declare its campus Plastic-Free and then work towards its fast implementation to blaze the trail.

- It's highly recommended that the college authority go for producing vermicomposting from the solid waste to be collected at green-coloured waste pit for use as manure in sustaining its green base. It is also suggested that the college may approach Ministry of Environment, Government of West Bengal for seeking financial and technical assistance under its Integrated Coastal Zone Management System (<http://www.iczmpwb.org/main/> and <http://www.wbtourism.gov.in/>)