



KHARAGPUR COLLEGE

KHARAGPUR

ESTD. : 1949

P.O.– Inda, Kharagpur, Municipality– Kharagpur, Sub-Division– Kharagpur,
P.S.– Kharagpur (T), Dist.– Paschim Medinipur, West Bengal, PIN– 721305.

7.1.2 The Institution has facilities and initiatives for

1. *Alternate sources of energy and energy conservation measures*
2. *Management of the various types of degradable and non-degradable waste*
3. *Water conservation*
4. *Green campus initiatives*
5. *Disabled-friendly, barrier free environment*

Supporting Documents:

1. *Alternative sources of energy and energy conservation measures:*

Kharagpur College has a 20 KW grid connected roof top solar photovoltaic plant is installed with the financial support of Government of west Bengal under Aloshee Prakalpa on the roof of administrative building. The solar power has been converted into AC power and that is connected with the state electricity power grid which will reduce the burden of college electricity bill.

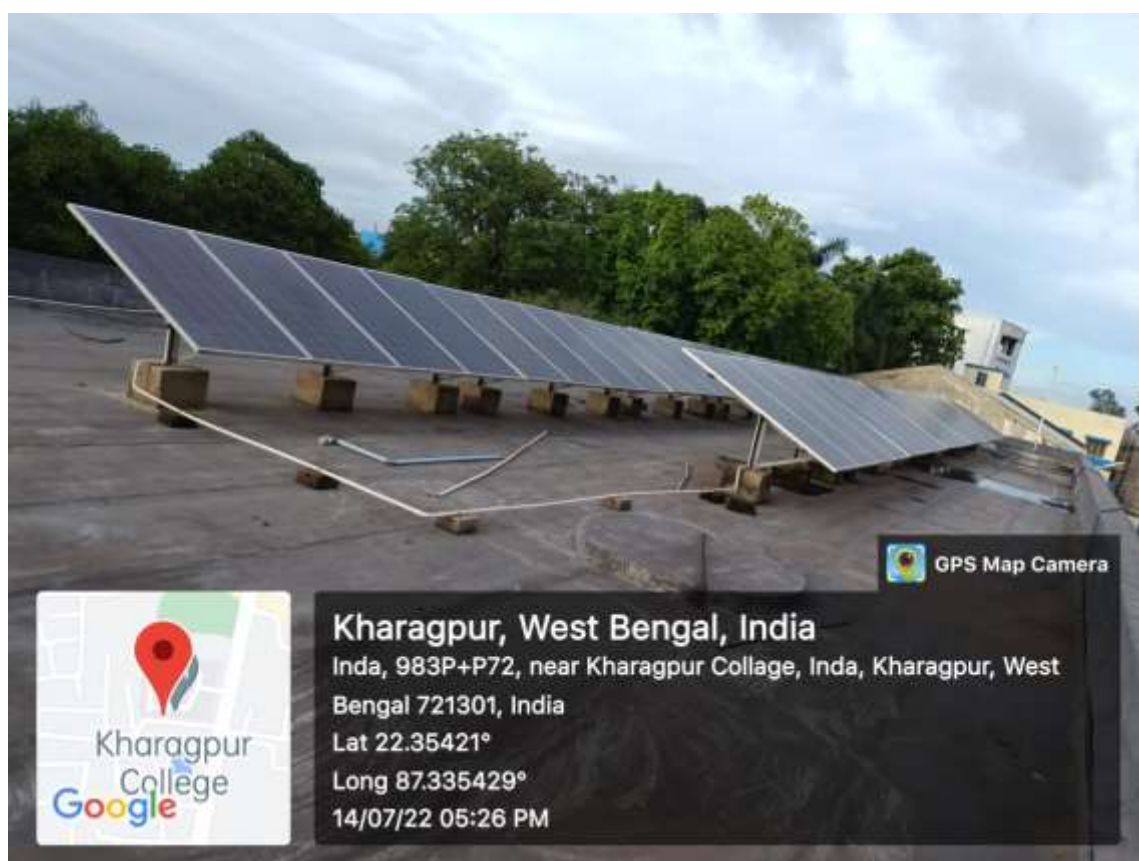


Fig 1. A 20 KW grid connected roof top solar photovoltaic plant is installed with the financial support of Government of west Bengal under Aloshee Prakalpa

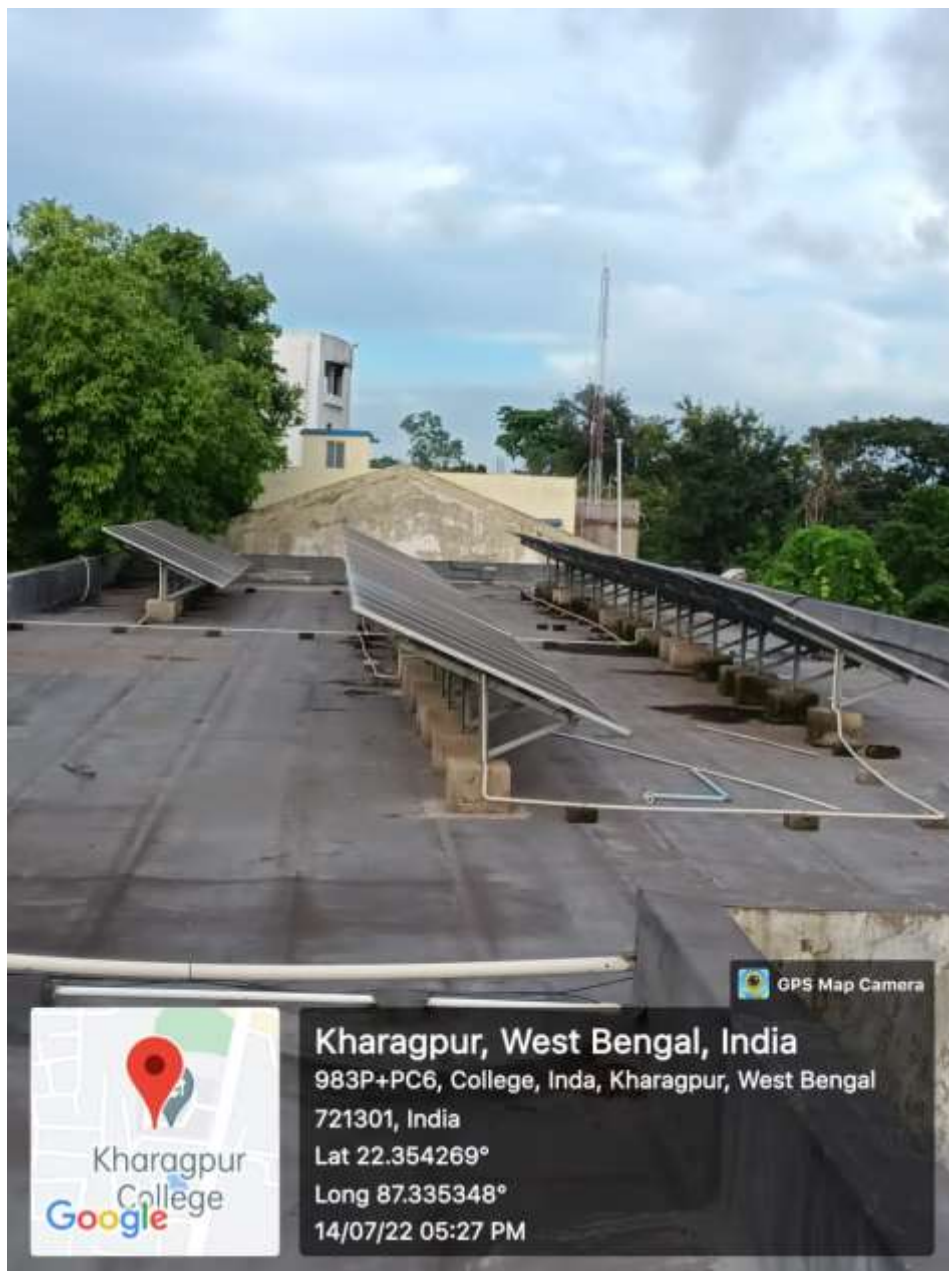


Fig 2. A 20 KW grid connected roof top solar photovoltaic plant is installed with the financial support of Government of west Bengal under Aloshree Prakalpa (same plant as Fig 1)

- The college has been very conscious always about the energy consumption issue. Accordingly, the normal light bulbs and tubes (high wattage) are replaced by energy efficient bulbs e.g. CFLs, LEDs and slim lights. The college has also replaced all the CRT monitors by LCD/LED monitors. Thus, the objective of using power efficient equipment is fulfilled.

2. Management of the various types of degradable and non-degradable waste

Solid waste management:

Coloured dustbins are used to collect the solid waste in segregated form. This ass then subsequently collected by the local Municipality from the college campus.

- The Green-colored dustbins are used for wet and biodegradable wastes.
- Blue dustbins are used for disposal of plastic wrappers and non-biodegradable wastes.
- Yellow dustbins are meant for papers and glass bottles.

The entire campus is a "plastic free zone" and the institution sincerely puts efforts to maintain the same. Portion of the Biodegradable waste is used as manure for the plants in the garden.

Liquid waste management:

Liquid chemical waste products produced from the laboratories are treated before disposal. As a routine practice, chemical wastes are segregated as acids and bases.

Biomedical waste management:

A vermicomposting unit has been developed by the college for decomposition of domestic waste of the college Boys' hostel and bio wasted materials of the campus. As a routine biomedical waste management process in the college, the animal anatomical waste material collected in yellow bags is disposed of in a deep burial pit constructed within the college campus. This is equally true for the used syringe and the cotton applied for blood collection.



Vermicomposting unit of the college

Hazardous waste management:

Practices adopted for management of hazardous chemical wastes generated in laboratories. Chemical wastes are separated into different groups and disposed accordingly.

E-Waste management:

A service agreement for E-waste management is signed with Hulladek Recycling Private Limited, a company incorporated under the Companies Act 2013; to pick up, transport, carry and recycle/dispose of the E-waste from the Kharagpur College time to time. They also provided an e-waste dustbin in the college campus for the collection of e-wastes.



Fig 1. Photos of e-Waste bin provided by the Hulladek Recycling Private Limited.

3. *Water conservation*

6. **Rain water harvesting:**

A big pond of nearly 4800 sq metre is situated at the centre of the college campus. It is the main of our rain water harvesting process. The water of the pond is used for non-drinking purpose such as for the watering of trees, construction and other repairing work of the building etc. In addition, the college has also built a rain water harvesting unit using the rooftop rain water of central library building. This water is utilised for two purposes. Firstly, it is used in ladies toilet and the excess amount of water is meant for re-charging the ground water.

7. **Bore well/ open well recharge:**

Huge area in our college campus is covered by soil. Naturally, there is no dearth of ground water reserve in the college campus. This stock of ground water is used mainly for drinking purpose. Thus, the institution seeks to reduce the practice of consuming ground water for regular activities and contributes to the preservation of ground water resources to a certain extent.

- **Waste water recycling:**

Plantation: The college itself is rich with a huge green coverage consisting of a number of large small trees. We have four well maintained gardens inside the college campus. Students of the college not only clean the garden but take initiatives to nourish the trees and the flowering plants. Plantation is regularly done in the campus by the NSS volunteers throughout the year and a special drive is taken on the college foundation day every year.



Photograph of Rain water harvesting unit of Kharagpur College

4. Green campus initiatives

The College has 02(Two) NSS Units with around 200 student volunteers. Regular plantation and nurturing the plants in the College campus has been one of the major activities of the NSS volunteers. Besides that, Teachers of the College conduct the auditing by periodic inspection of different units to ensure that college campus remains eco-friendly. The college campus is highly environment friendly with a huge green with a large number of big and small trees like Sal, Teak, Mahogany, Mango, Palm, Tamarind, Neem etc. Seasonal flowers in the gardens make the environment of the college very beautiful. These are nurtured and properly maintained by the students under the supervision of the Teaching & Non-Teaching staff of the college. At the centre of the college there is a big pond of nearly 4800 sq metre, which is properly cleaned and maintained throughout the year. This pond not only enhances beauty of the college, but helps in maintaining the ecosystem as well. The college with the help of the NSS & NCC units maintains four gardens inside the campus. Use of plastic cups, polythene carry bags etc has been restricted inside the college campus.



Fig 1. Main Entrance of the Kharagpur College

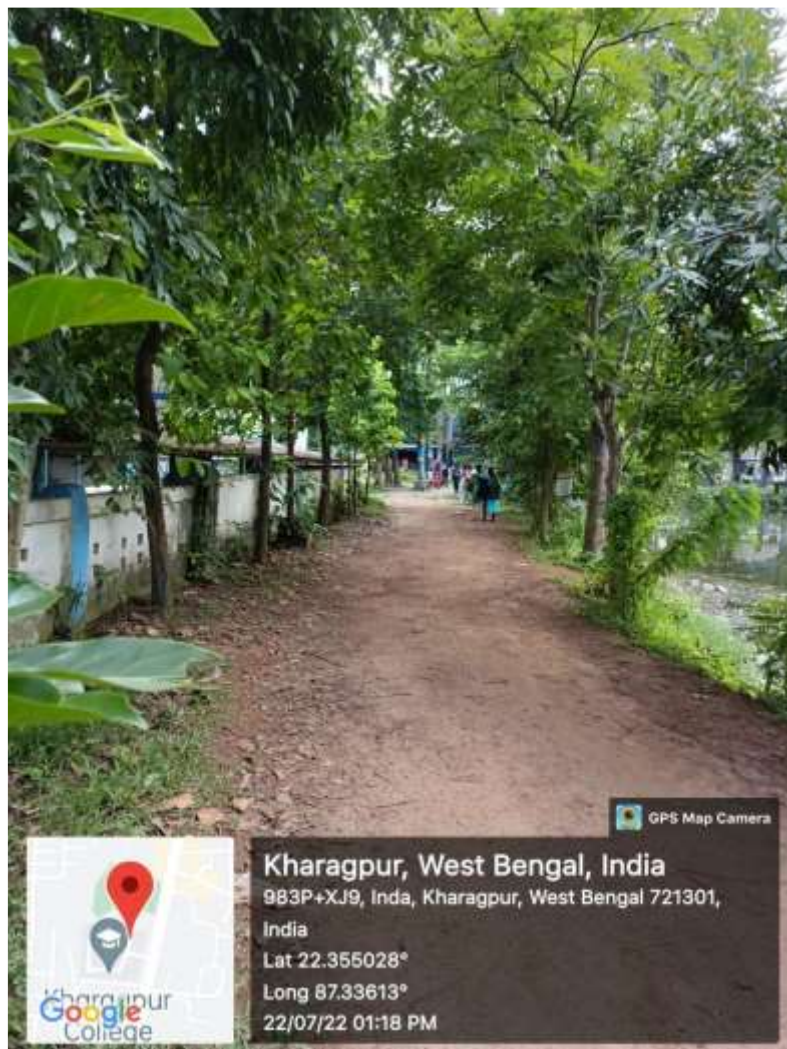


Fig 2. Road covered by trees and plants inside the college campus

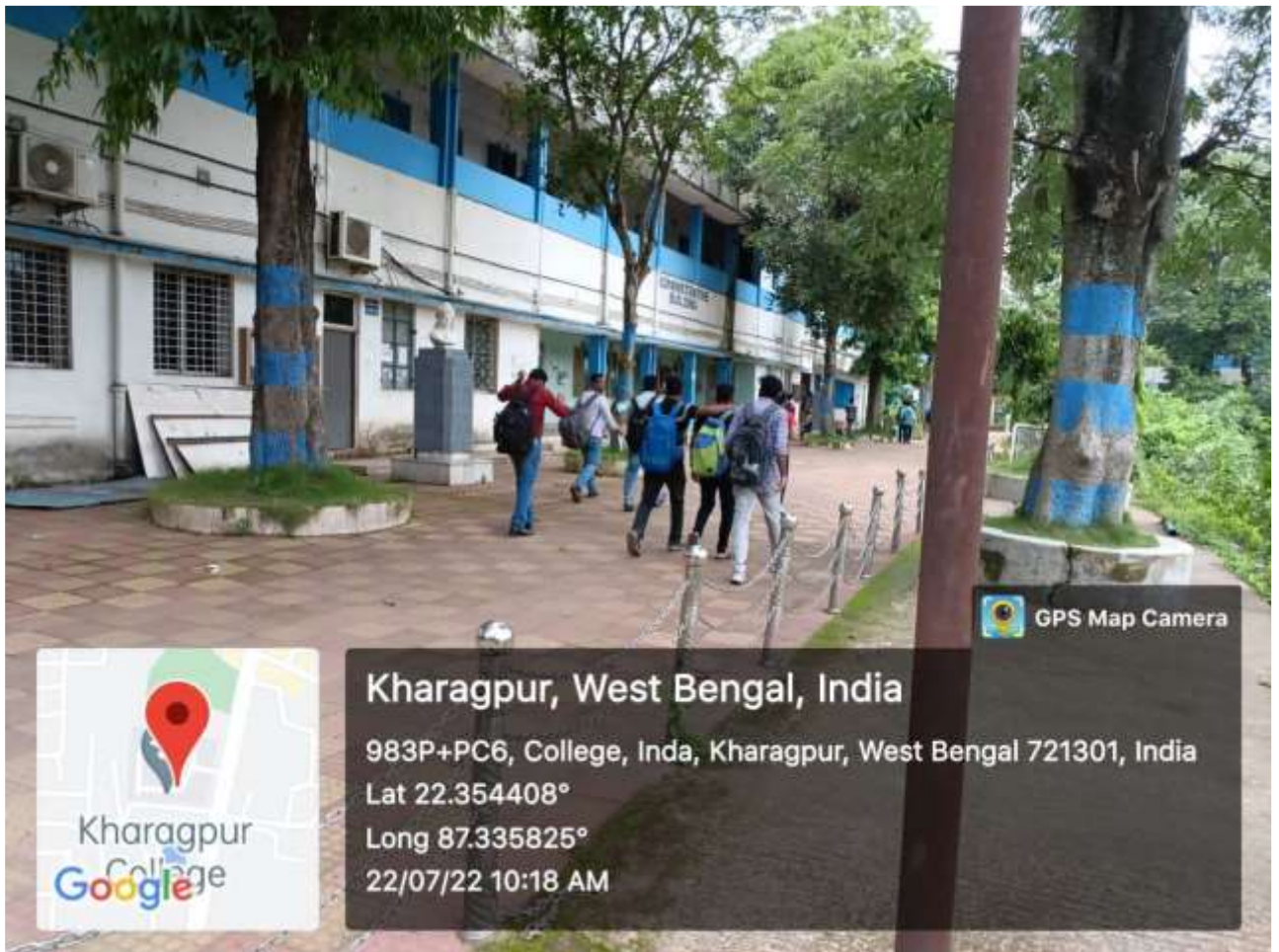


Fig. 3. Roads in front of administrative building.



Fig 4. A big pond at the centre of the main campus, landscaping with trees and plants

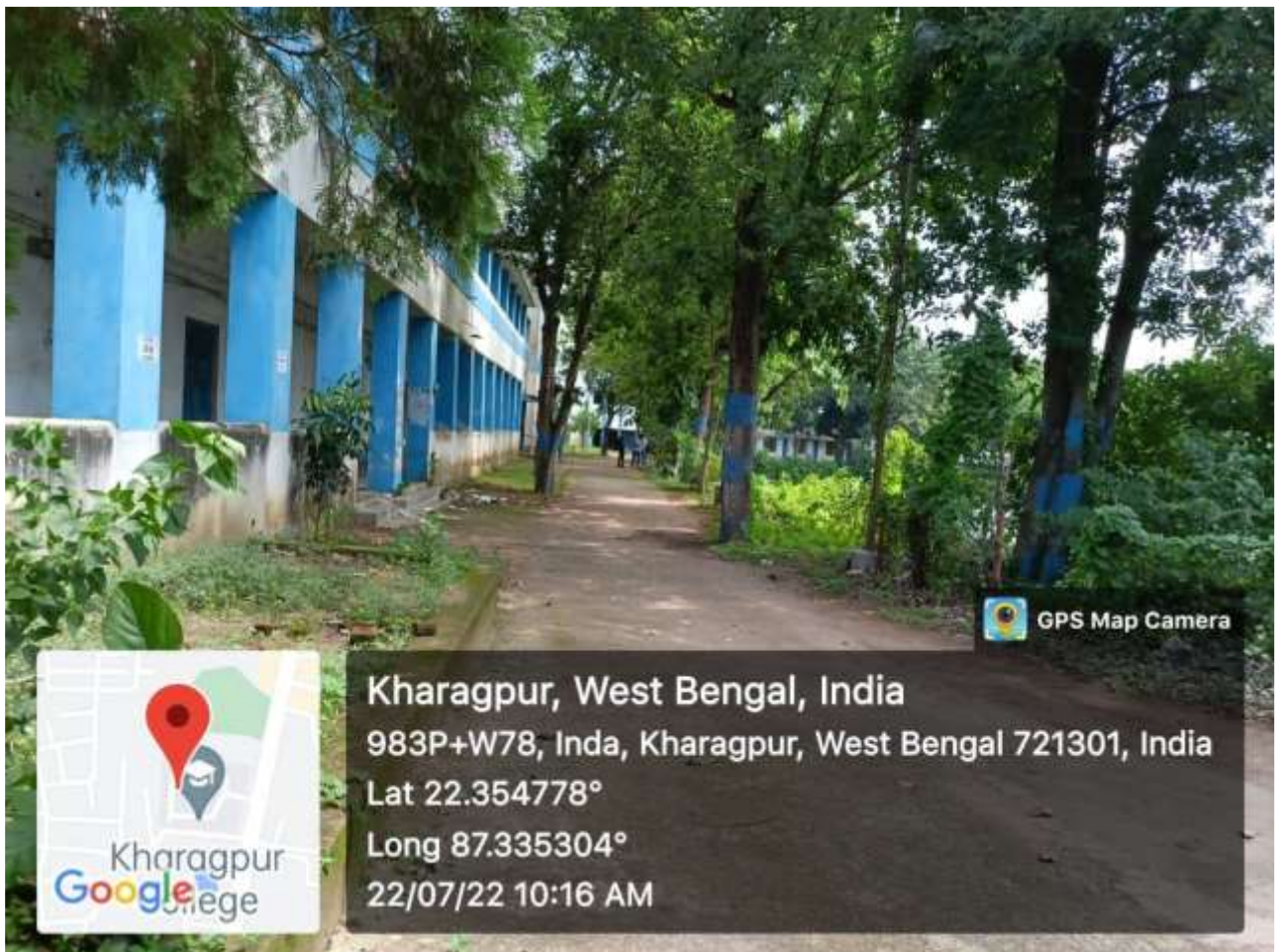


Fig 5. Road in front of the Science Building covered by trees and plants.

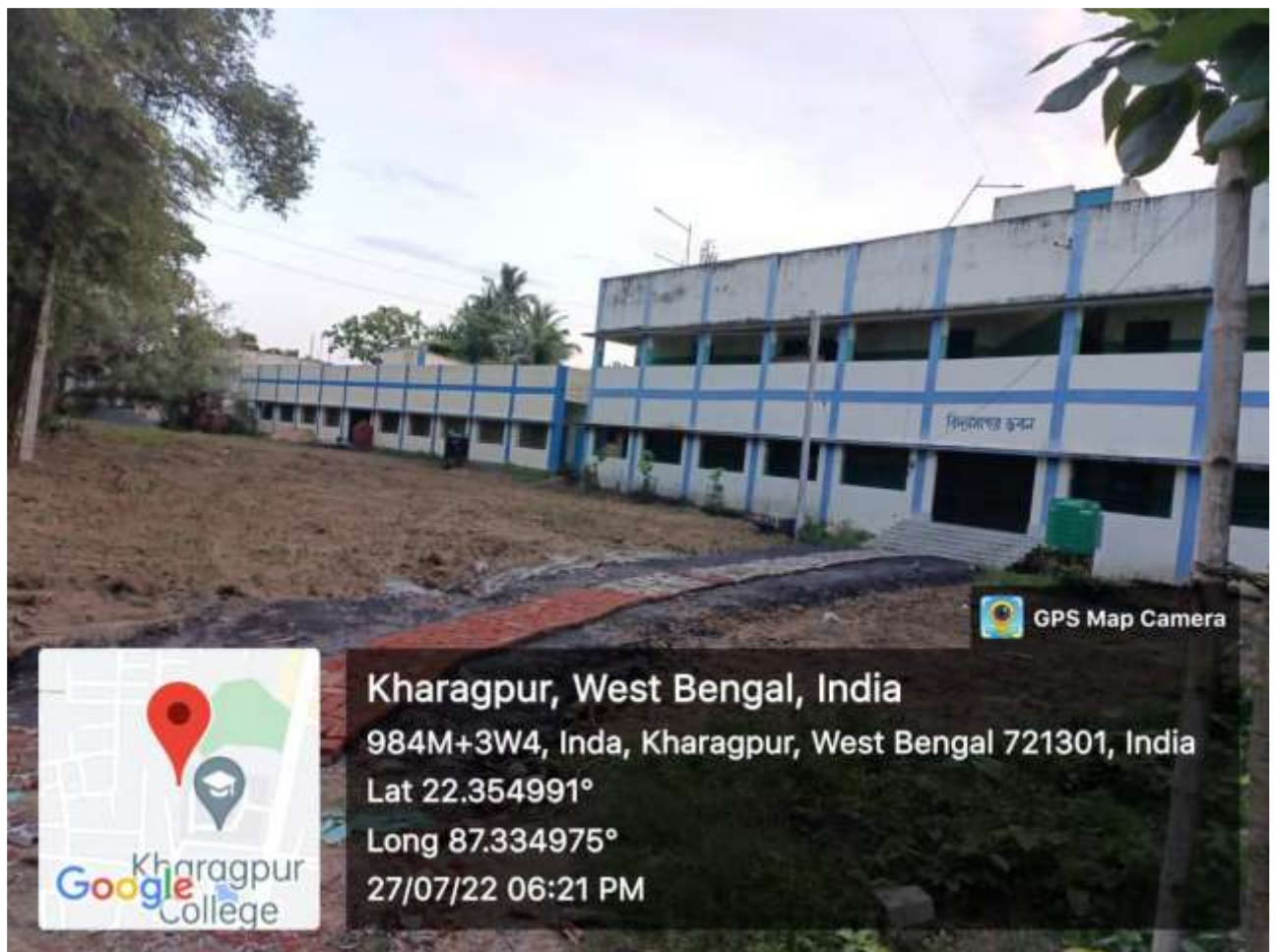


Fig 6. New buildings a) Vidyasagar Bhavan b) Vivekananda Bhavan annex to the main building

- Restricted entry of automobiles
- Use of bicycles/ Battery-powered vehicles

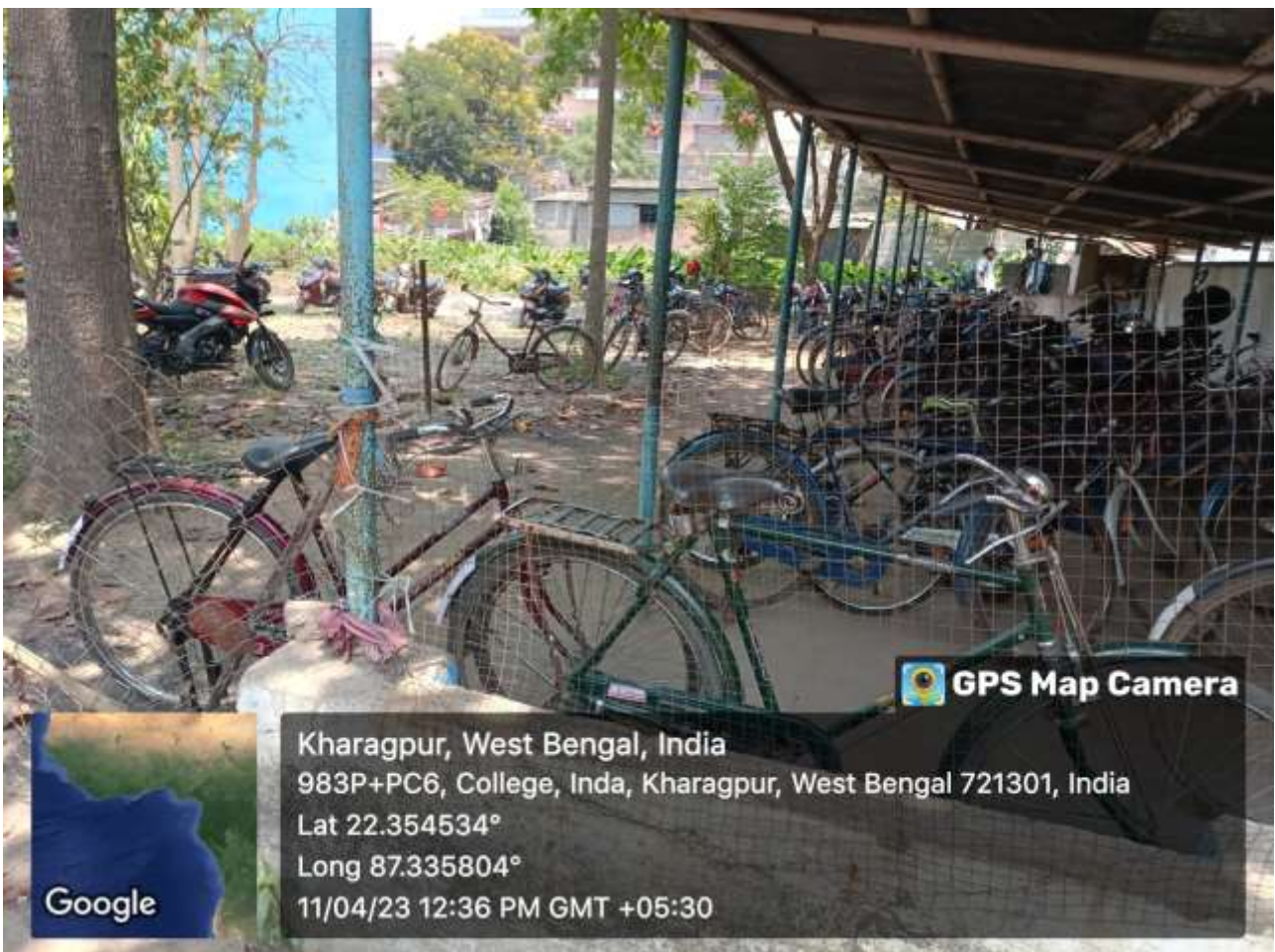


Fig 7. Photographs of College cycle stand

5. Disabled-friendly, barrier free environment

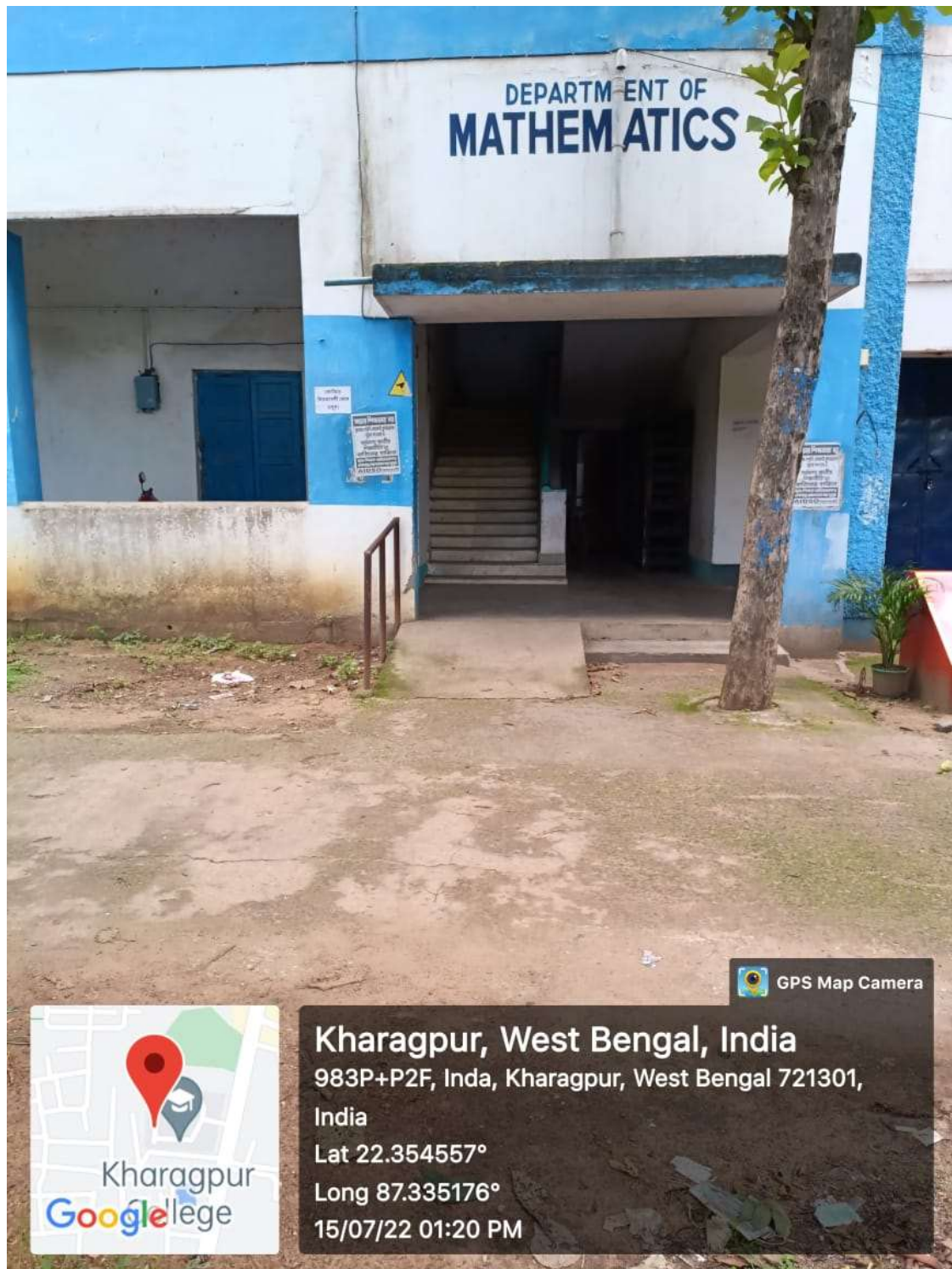


Fig.7. There are provision of ramps at different corners of the college to facilitate disabled (Divyangjan) persons.



Fig 8. Photograph of the ramp at the entrance of History department



Fig. 9. Facilities for the persons with disabilities and sick candidate during end semester examination.

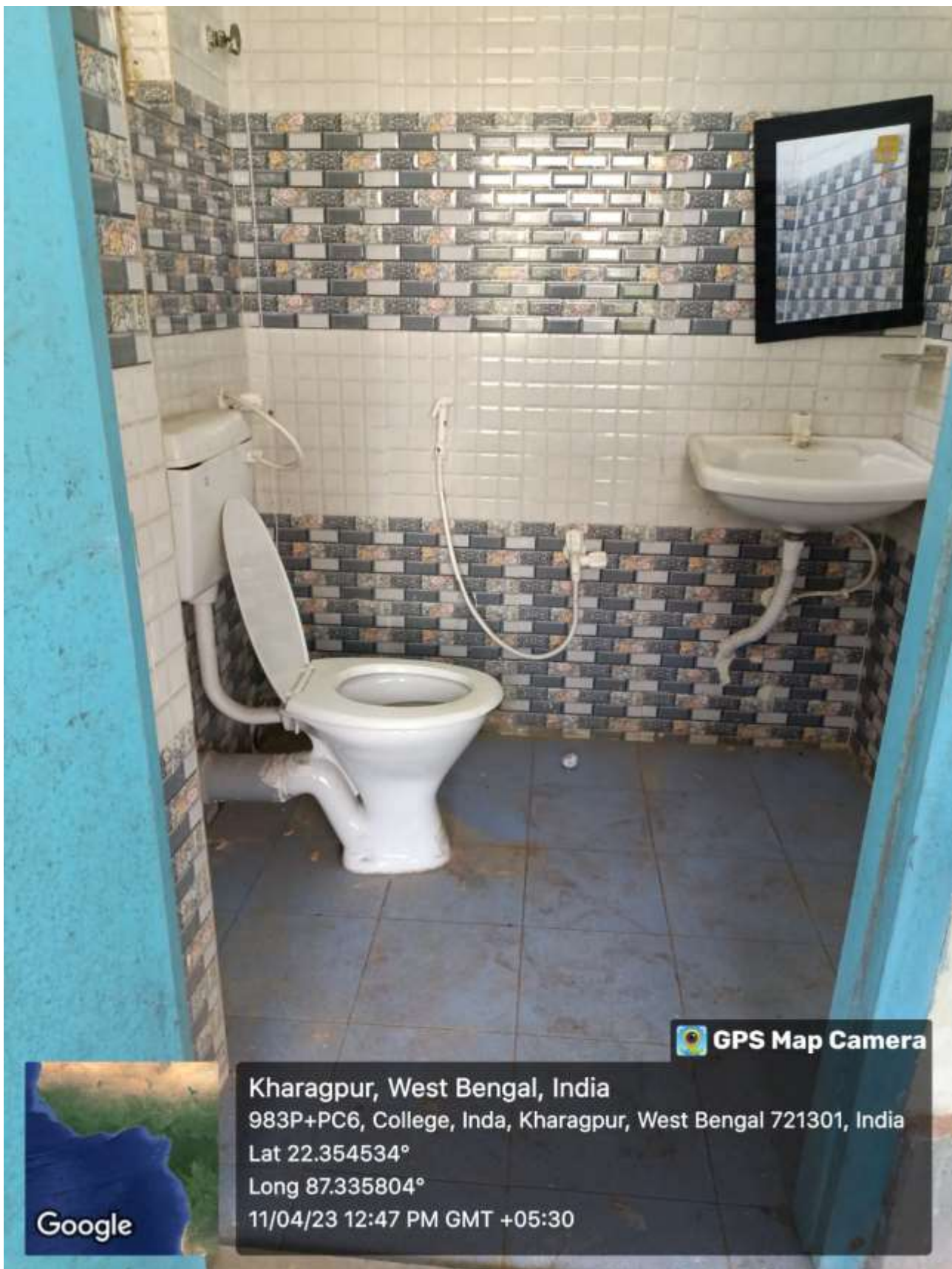


Fig 10. disabled friendly washroom