



7.1.4: Water conservation facilities available in Centurion University of Technology and Management

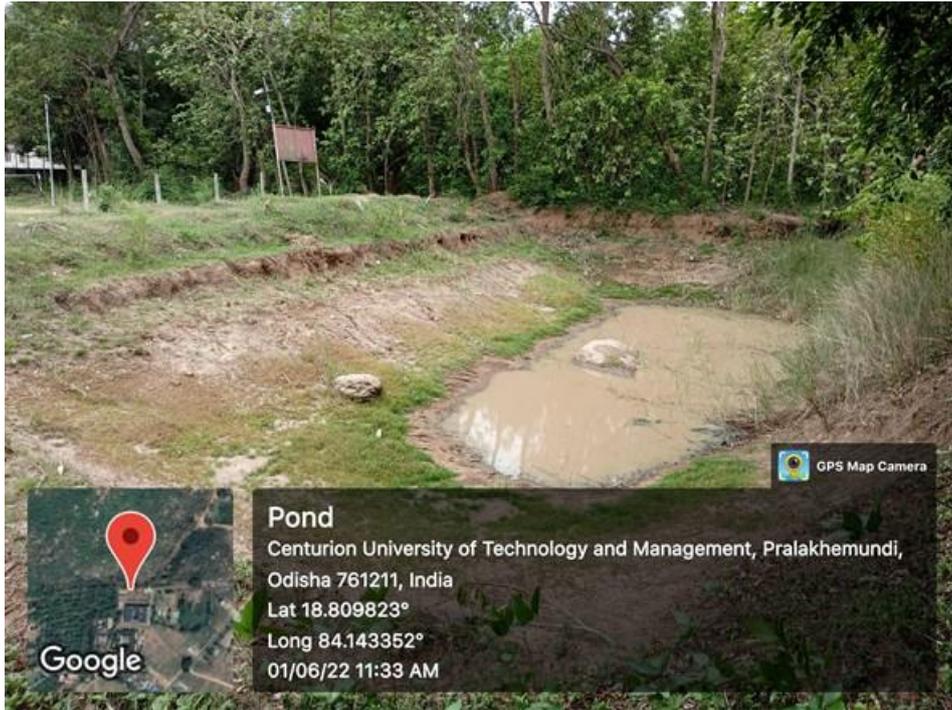
1. Rain Water Harvesting:

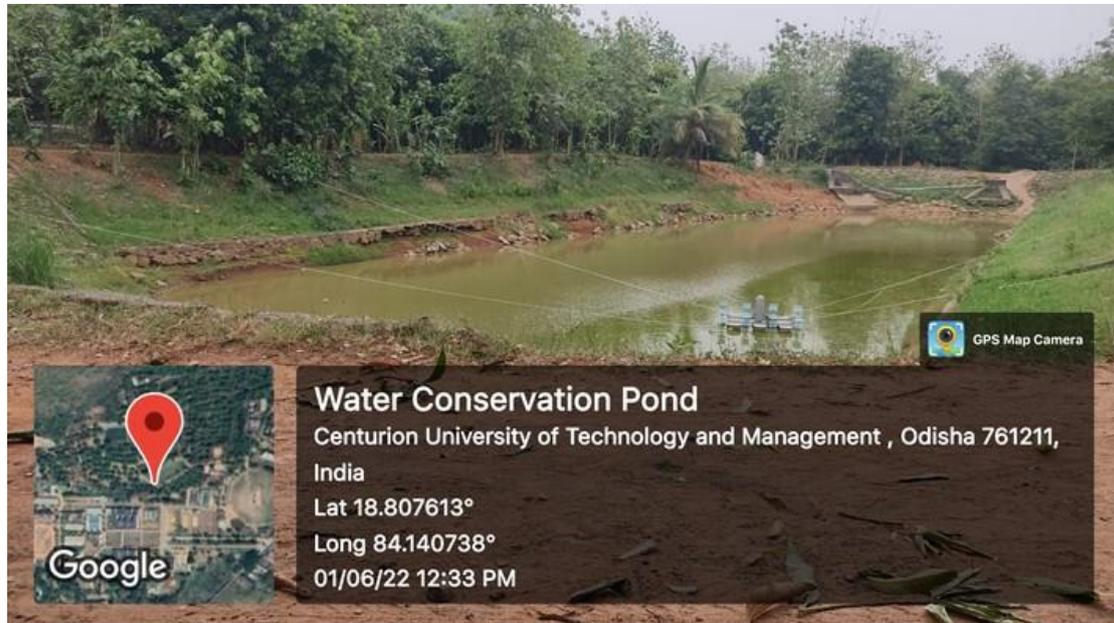
Centurion University of Technology and Management (CUTM) has enabled rainwater harvesting system (RWH) in all the campuses. Rain water harvesting, utilization of harvested water for irrigation or rearing fish and ground water recharge with excess harvested rain water have become popular in various developmental programmes in the University Campus.

The rain water coming from roof tops of the buildings, paved streets, parking lots, sidewalks are collected in storage tanks/percolation ponds or sent to the recharge pits made for ground water recharge.

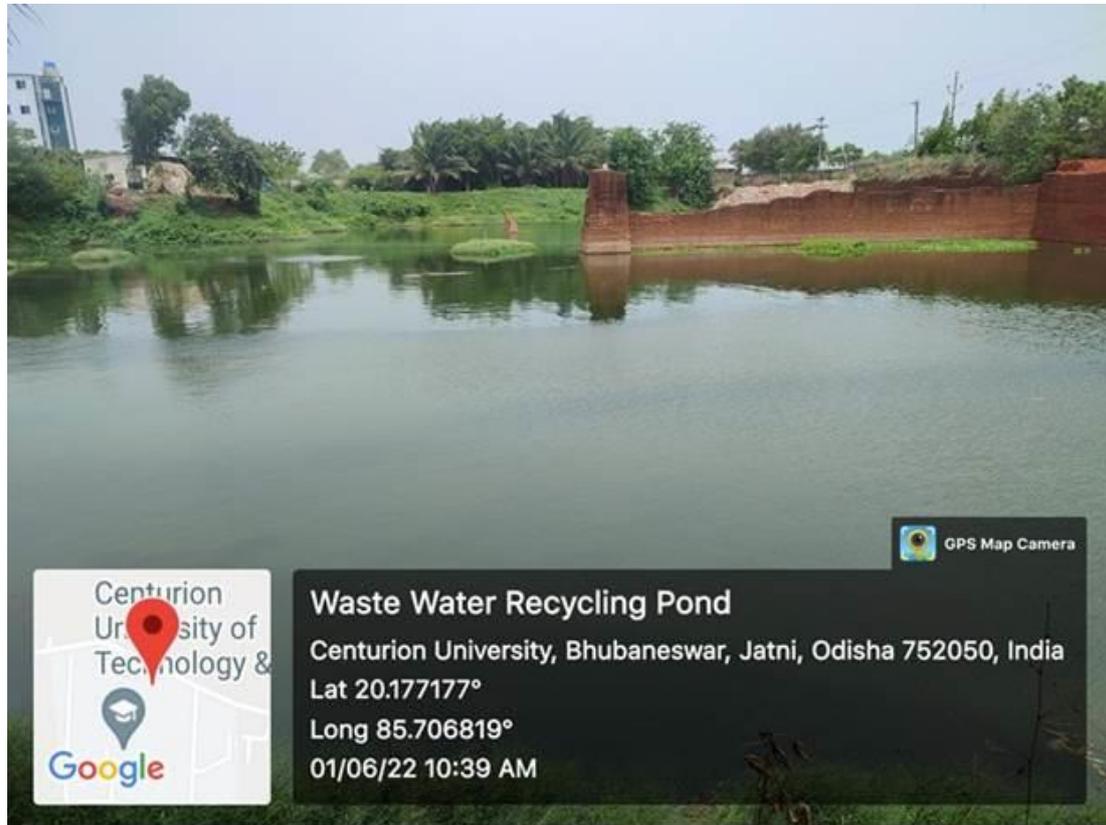
Rain Water harvesting pond at CUTM, Paralakhemundi







Rain Water harvesting pond at CUTM, Bhubaneswar



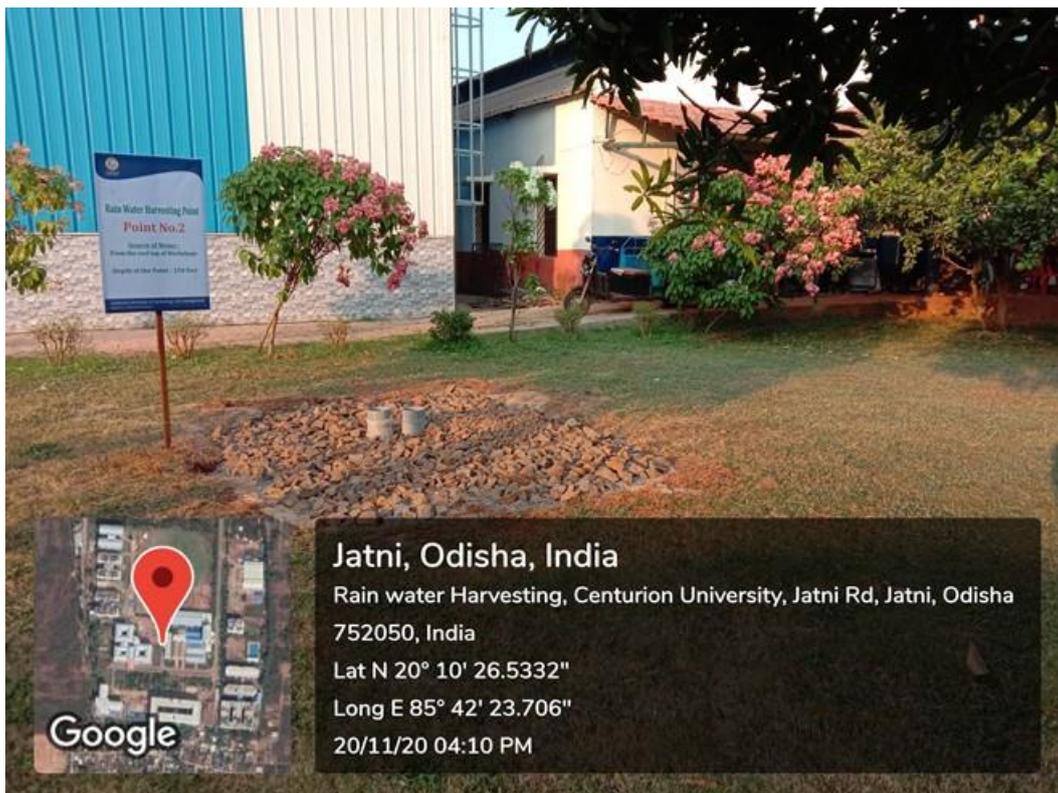
Rain Water harvesting pond at CUTM, Rayagada



2. Borewell /Open well recharge

CUTM Bhubaneswar campus is facilitated with **four** bore well recharge structures to augment the groundwater. After the water storage tank is full, the overflow water is diverted to the bore well recharge pits. Besides this ground water recharge is also facilitated through percolation tanks.

Borewell recharge at CUTM, Bhubaneswar





Jatni, Odisha, India

Rain water Harvesting, Centurion University, Jatni Rd, Jatni, Odisha
752050, India

Lat N 20° 10' 29.1684"

Long E 85° 42' 25.1748"

20/11/20 04:07 PM



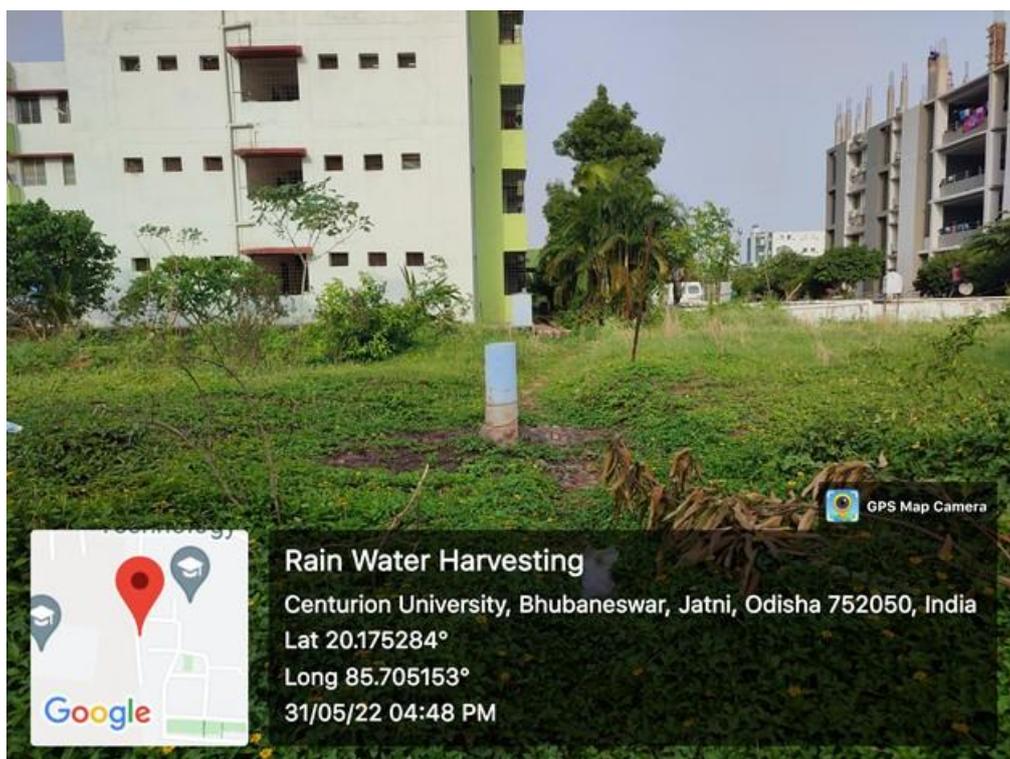
Jatni, Odisha, India

Rain Water Harvesting, Centurion University, Jatni, Odisha
752050, India

Lat N 20° 10' 30.954"

Long E 85° 42' 18.7056"

20/11/20 03:58 PM



3. Construction of tanks and bunds

CUTM implementing various rain water harvesting structure to improve water supply to agriculture fields and enhance the ground water recharge across all the campuses. It is also bringing enhance learning to students of various water harvesting structure.

Paralakhemundi campus has five percolation tanks and a polyethylene lined pond of different dimensions for collection of runoff water generated within the campus area. A polyethylene lined pond is currently used for fish rearing. A loose boulder check dam was constructed at the vicinity of the campus to check the velocity of runoff generated from the slopy mountain present nearby the campus. The staggered trenches and land bunding also done in 5 acres area near tribal village.

The dimensions and capacity of each percolations tanks at CUTM campus are given below.

Pond No.	Capacity of the tank (m³)
Paralakhemundi campus	
Percolation tank 1	5507.57
Percolation tank 2	718.20
Percolation tank 3	607.50
Percolation tank 4	2575.80
Percolation tank 5	972.00
Polyethylene Lined	10500.00
Loose Boulder Check Dam	--
Bhubaneswar	
Rain water storage tank	95922.54
Rayagada Campus	
Rain water storage tank	2000

Construction of percolation tanks at CUTM, Paralakhemundi





Construction of bunds at CUTM, Paralakhemundi





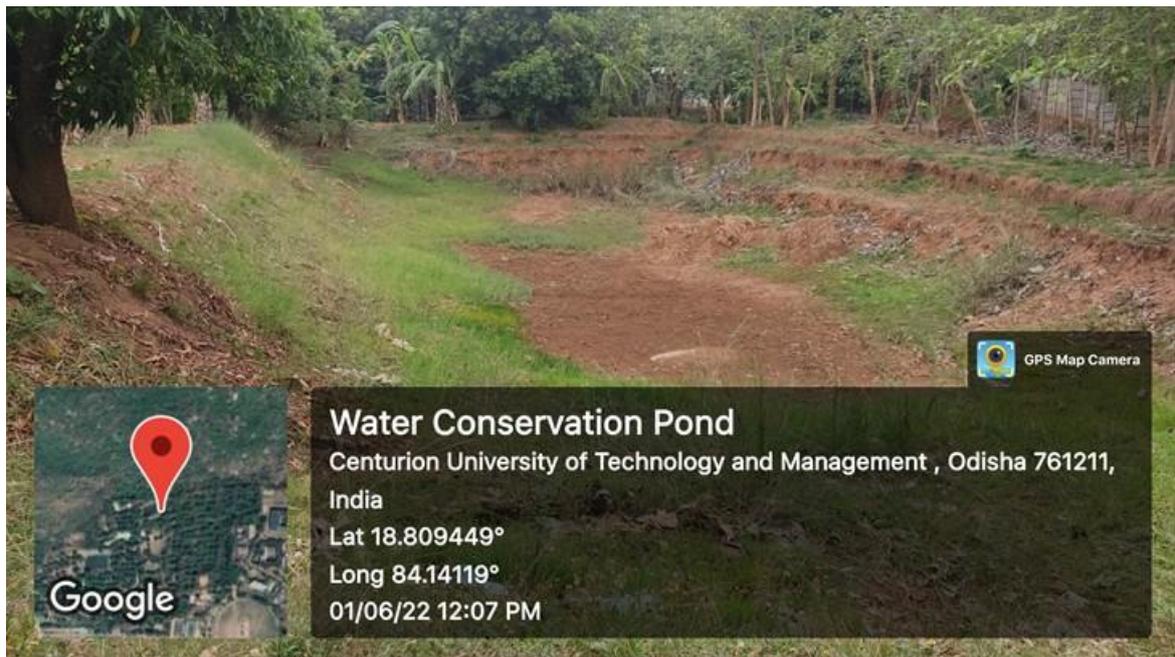


Construction of trenches at CUTM, Paralakhemundi campus

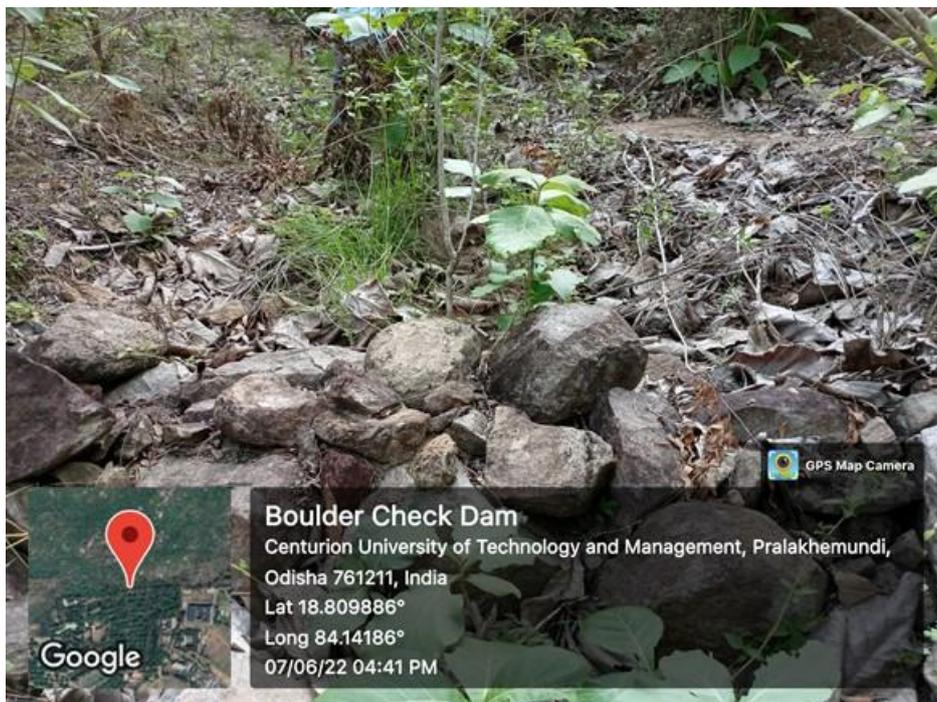
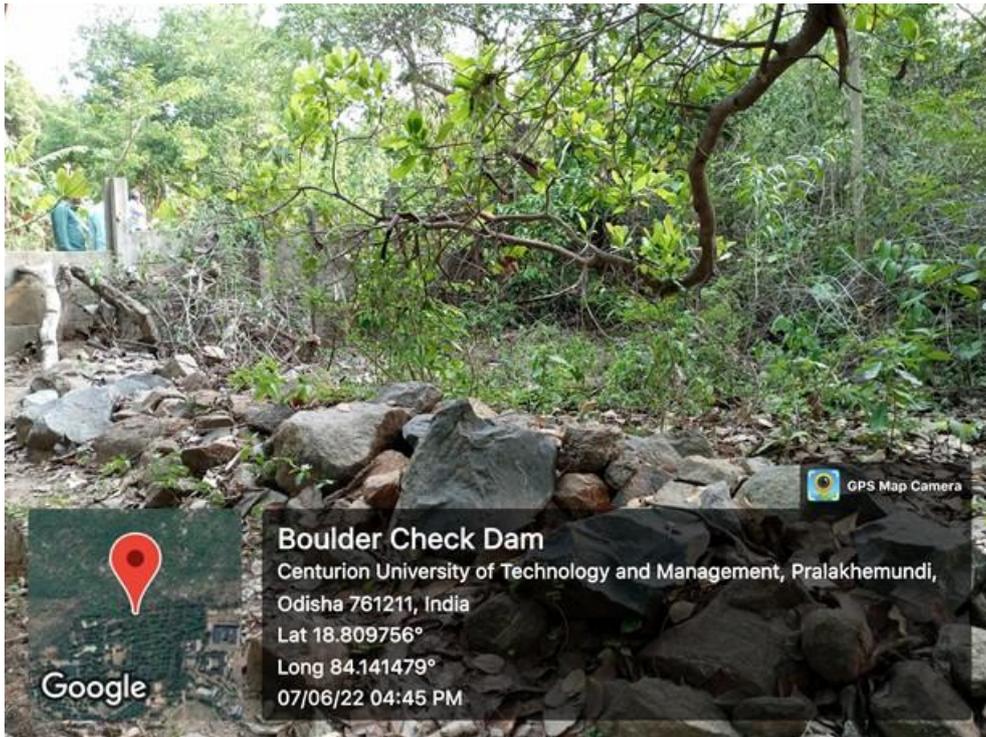




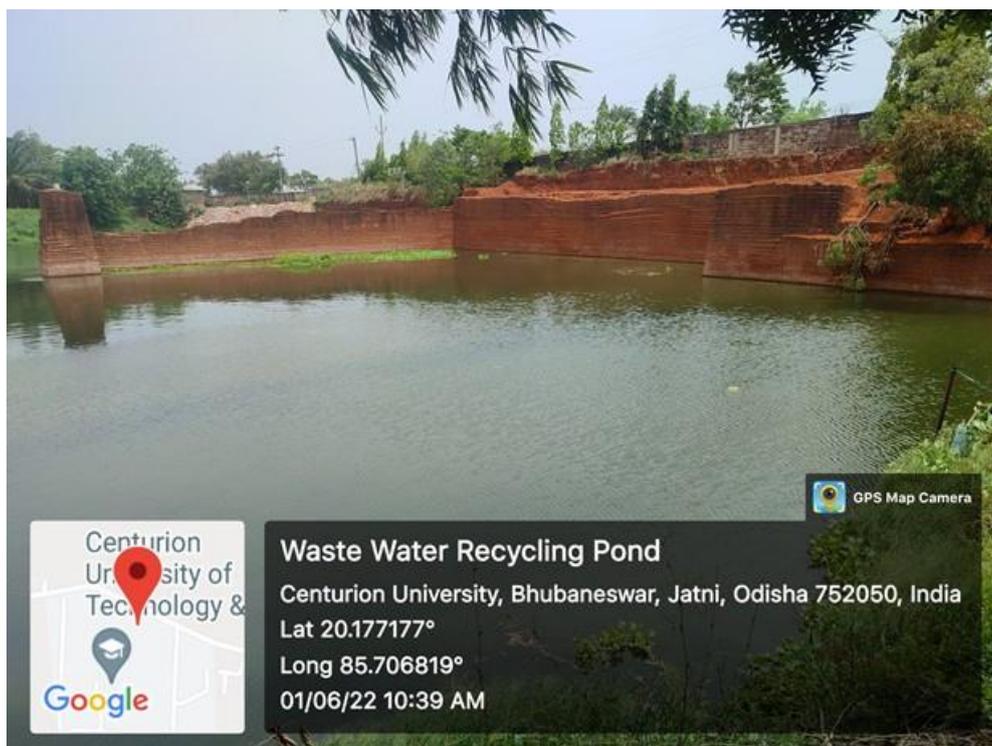
Percolation tanks at CUTM, Paralakhemundi



Bunds at CUTM, Paralakhemundi



Percolation tanks at CUTM, Bhubaneswar



4. Waste water recycling

The University has five Sewage Treatment Plants (STP) at different campuses for the treatment of waste water. Daily about 6 lakh liters of waste water is treated by mechanical, chemical and

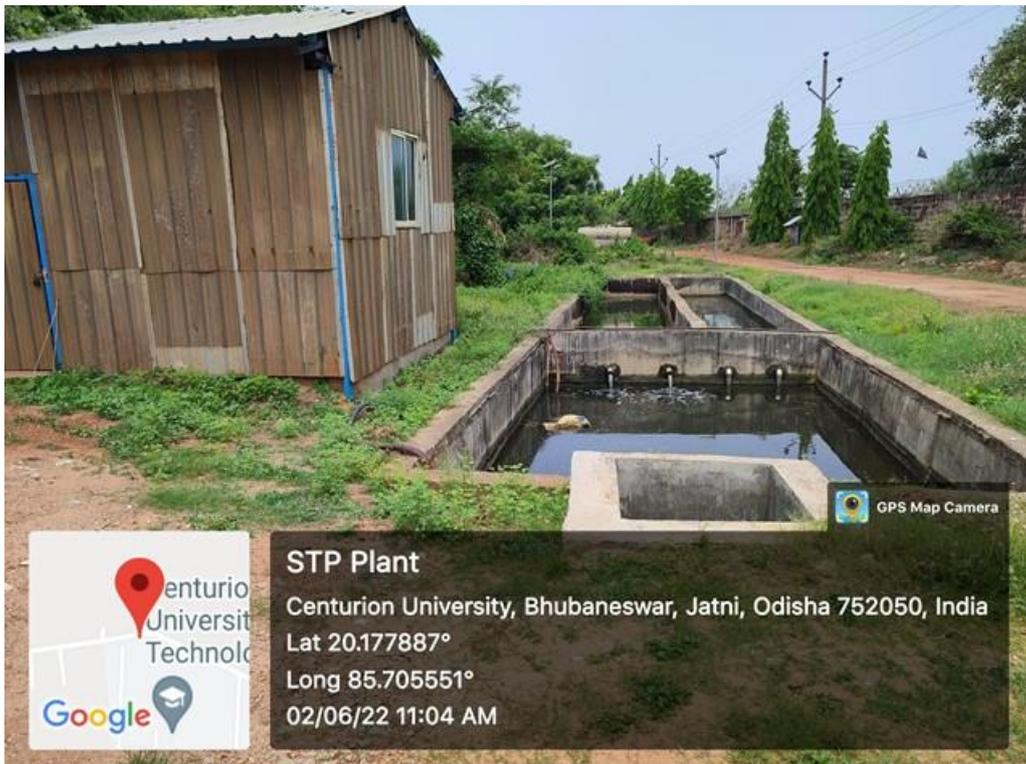
biological processes in these plants. The treated water is used for irrigating the campus gardens, lawns, playground and agricultural fields. University has also implemented drip system for irrigation to avoid the wastage of water. All the lawns are equipped with sprinkler system to increase water use efficiency.

Sewage Treatment Plant at CUTM, Paralakhemundi





Sewage Treatment Plant at CUTM, Bhubaneswar





Jatni, Odisha, India

Sewage treatment plant, CUTM, Jatni, Odisha 752050, India

Lat N 20° 10' 40.3788"

Long E 85° 42' 20.0124"

09/12/20 04:29 PM



Google



Water Recycling System

Centurion University, Bhubaneswar, Jatni, Odisha 752050, India

Lat 20.17719°

Long 85.706977°

01/06/22 10:35 AM

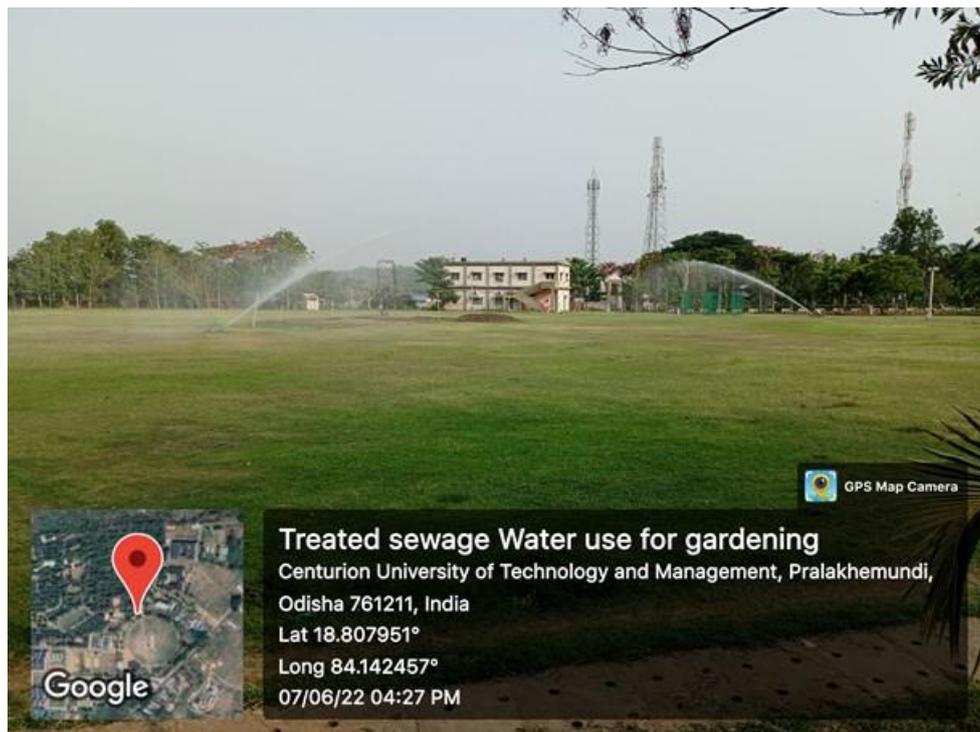


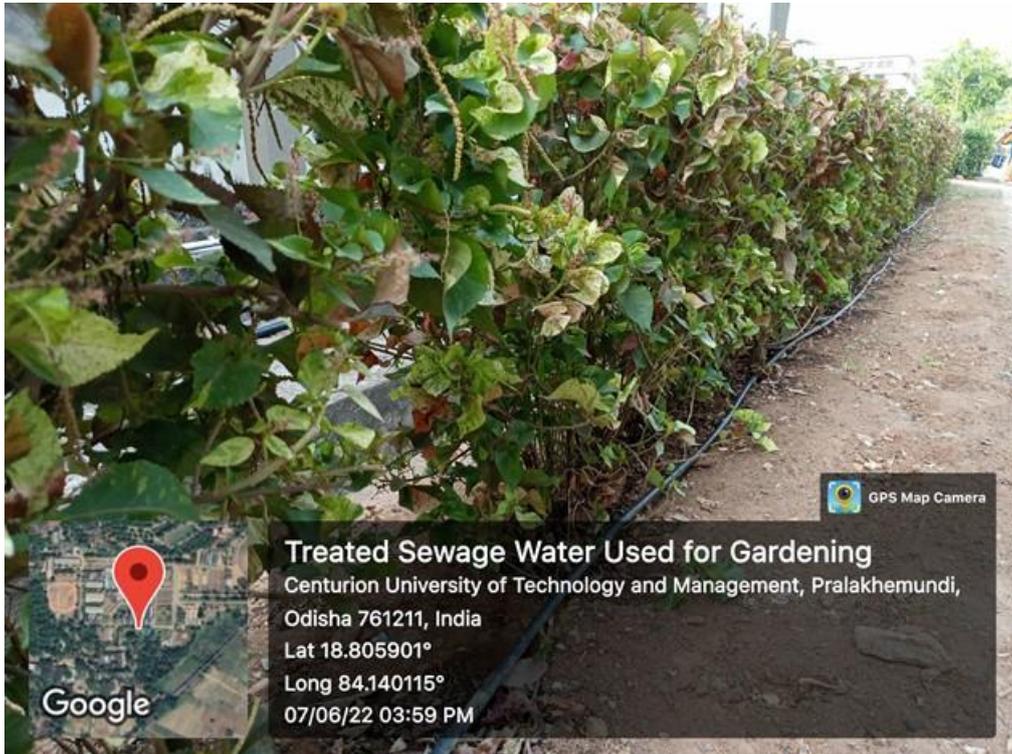
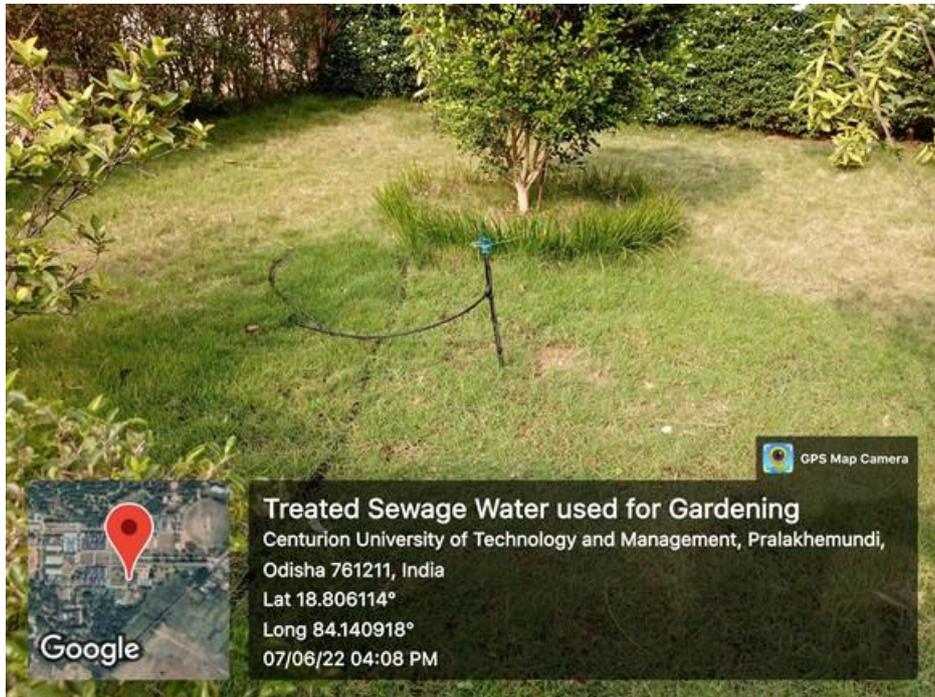
Centurion University of Technology &

Google

GPS Map Camera

Irrigation using treated water at CUTM, Paralakhemundi





Irrigation using treated water at CUTM, Bhubaneswar





5. Maintenance of water bodies and distribution system in the campus

All the water bodies are maintained well across all the University campuses. Tanks are cleaned on regular basis. The silt accumulated in ponds is removed once in a year during summer season.

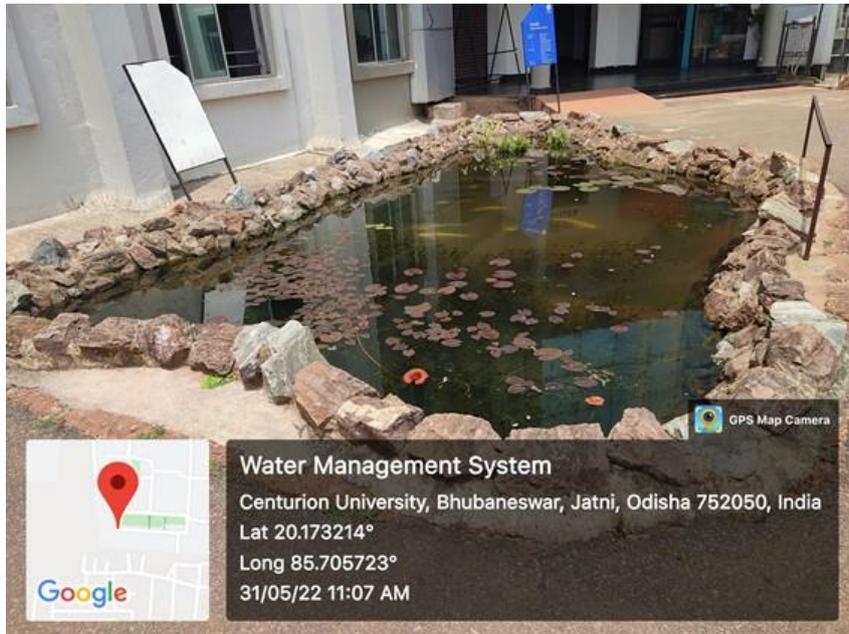
Maintenance of tank at CUTM, Paralakhemundi

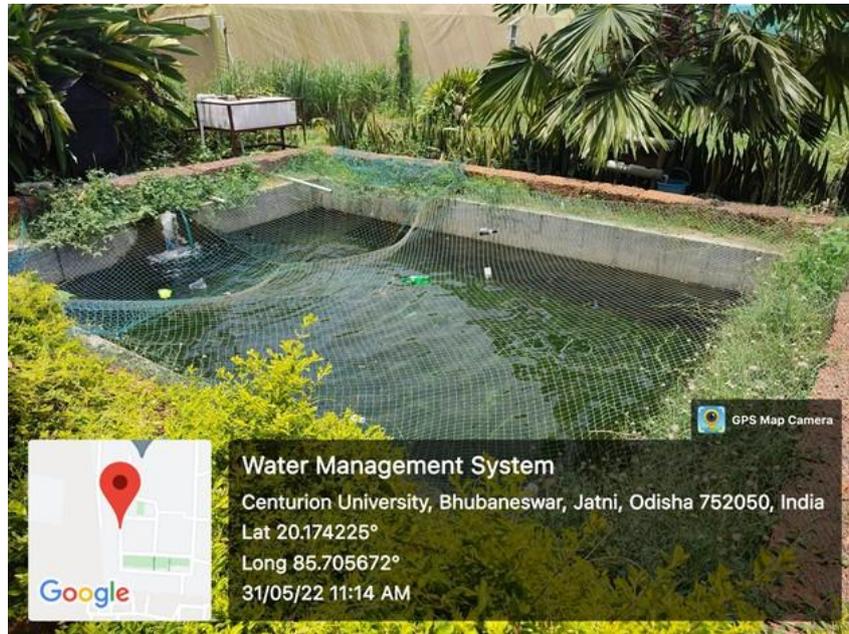




Maintenance of tank at CUTM, Bhubaneswar



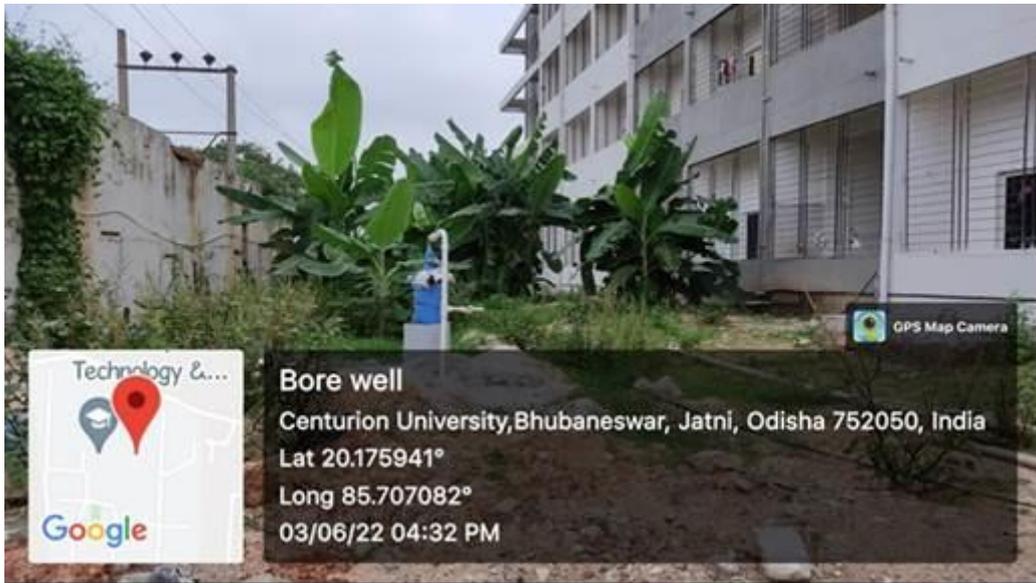




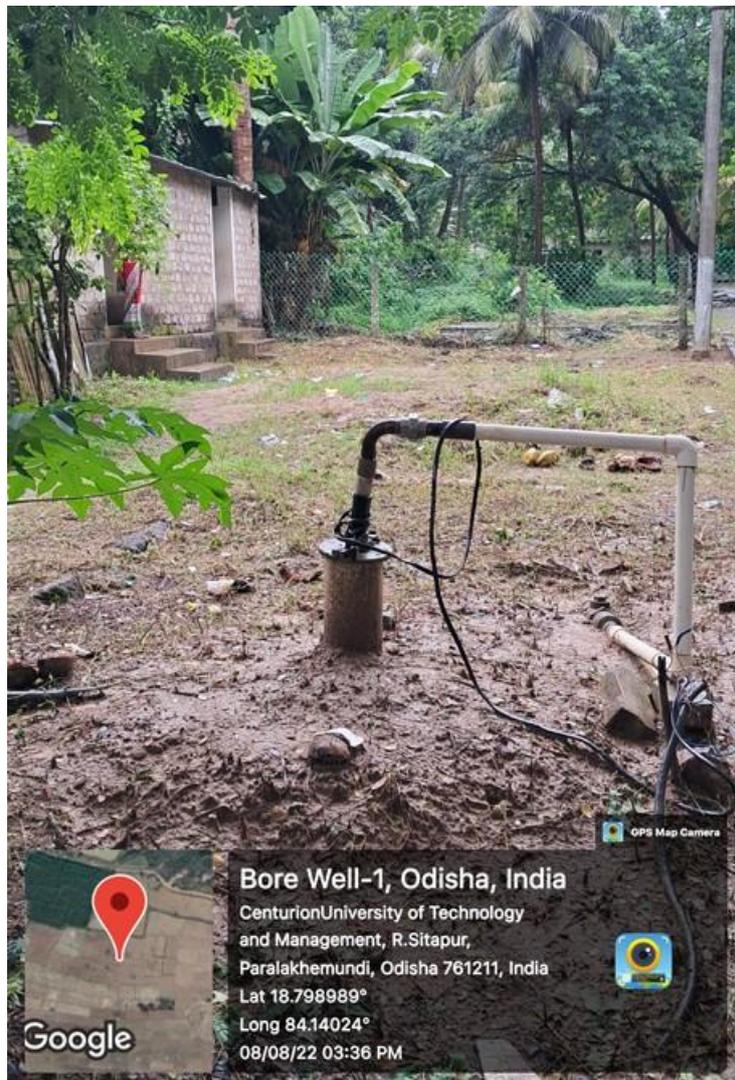
Water distribution system in the campus:

All the CUTM campuses depend on ground water for its domestic water requirement. Total water demand is being met with number of bore wells with different depths as per the sub-soil water level. The ground water is pumped into storage tanks located at different places in the campus. The water is distributed through well laid pipe network. Drinking water is supplied through a separate set of distribution pipes after treating in RO plant. Water needed for other purpose is supplied through another set of distribution pipes. Entire distribution system is well supervised by committee to ensure that there are no leakages and wastages of precious water through joints, valves, taps, flushes etc. Wastages of water is reduced using low pressure flushes. Awareness programmes regarding economic and efficient use of water conducted on regular basis to educate all the stakeholders of the campus.

Borewells at CUTM, Bhubaneswar



Borewell at CUTM, Paralakhemundi





GPS Map Camera



Google

Bore Well-2, Odisha, India

CenturionUniversity of Technology
and Management, R.Sitapur,
Paralakhemundi, Odisha 761211, India
Lat 18.798989°
Long 84.14024°
08/08/22 03:37 PM



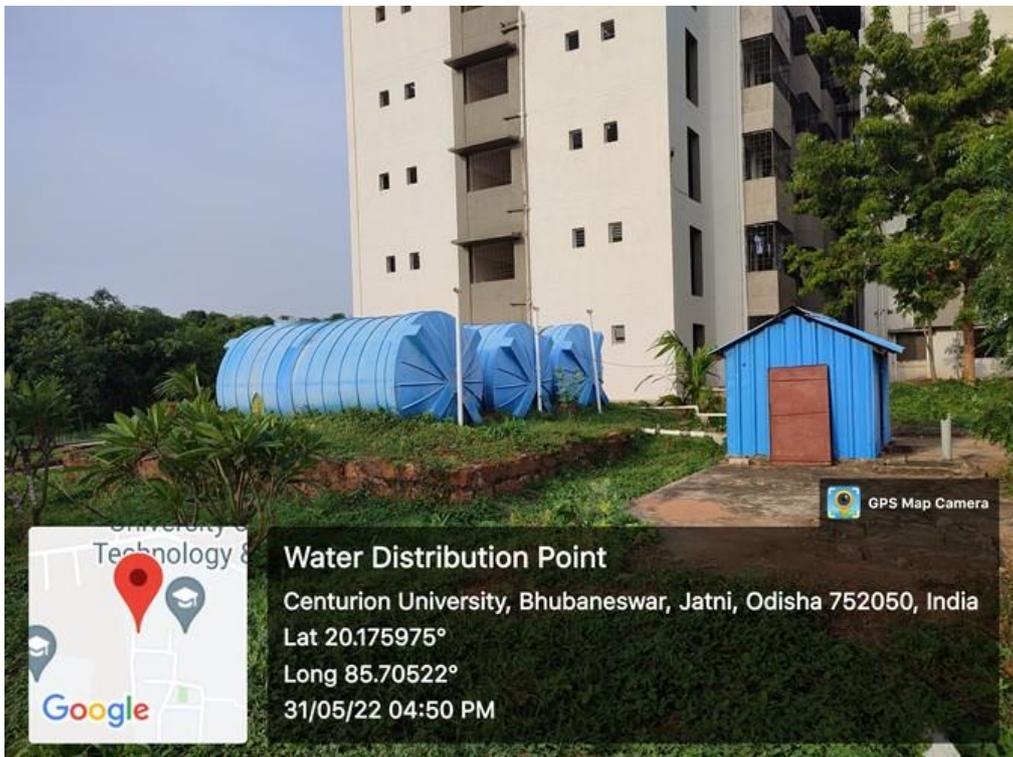
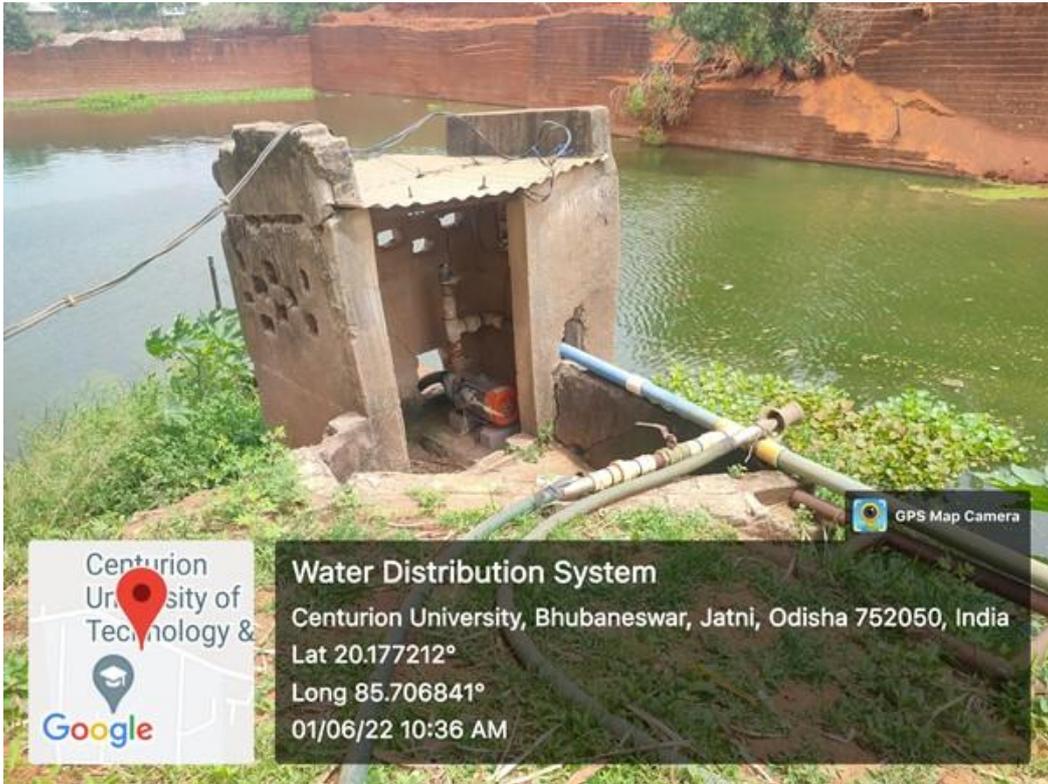
Borewell at CUTM, Rayagada

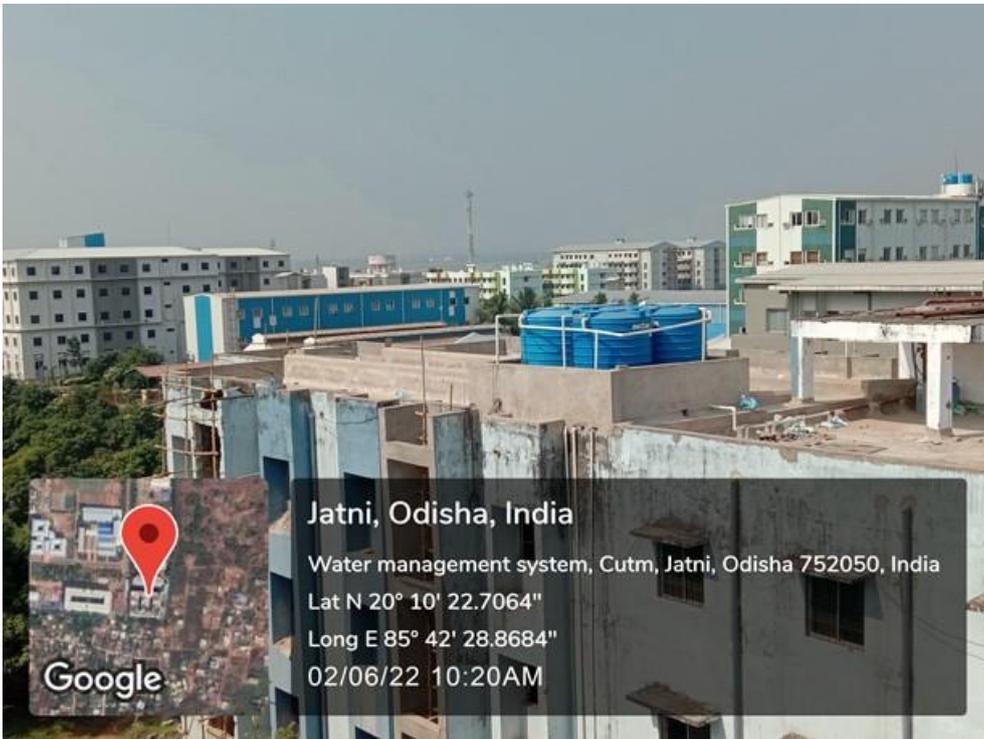


Borewell at CUTM, Bolangir



Water distribution at CUTM, Bhubaneswar





Jatni, Odisha, India

Water management system, Cutm, Jatni, Odisha 752050, India

Lat N 20° 10' 22.7064"

Long E 85° 42' 28.8684"

02/06/22 10:20AM



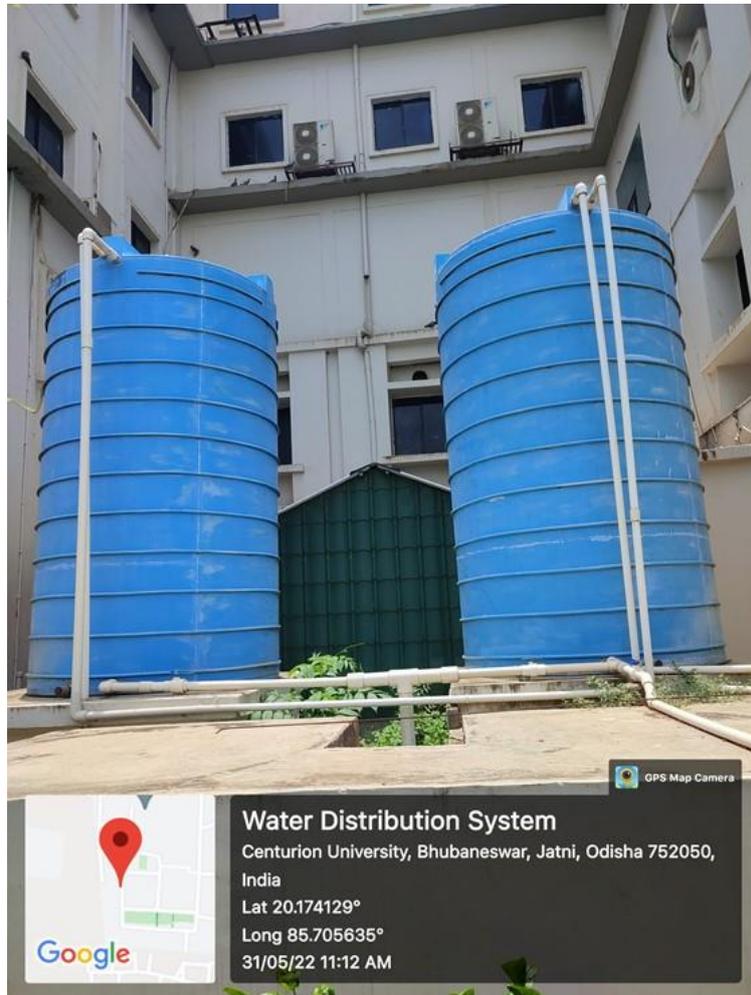
Jatni, Odisha, India

Water management system, Cutm, Jatni, Odisha 752050, India

Lat N 20° 10' 24.5676"

Long E 85° 42' 27.36"

02/06/22 11:50AM



Water distribution at CUTM, Paralakhemundi







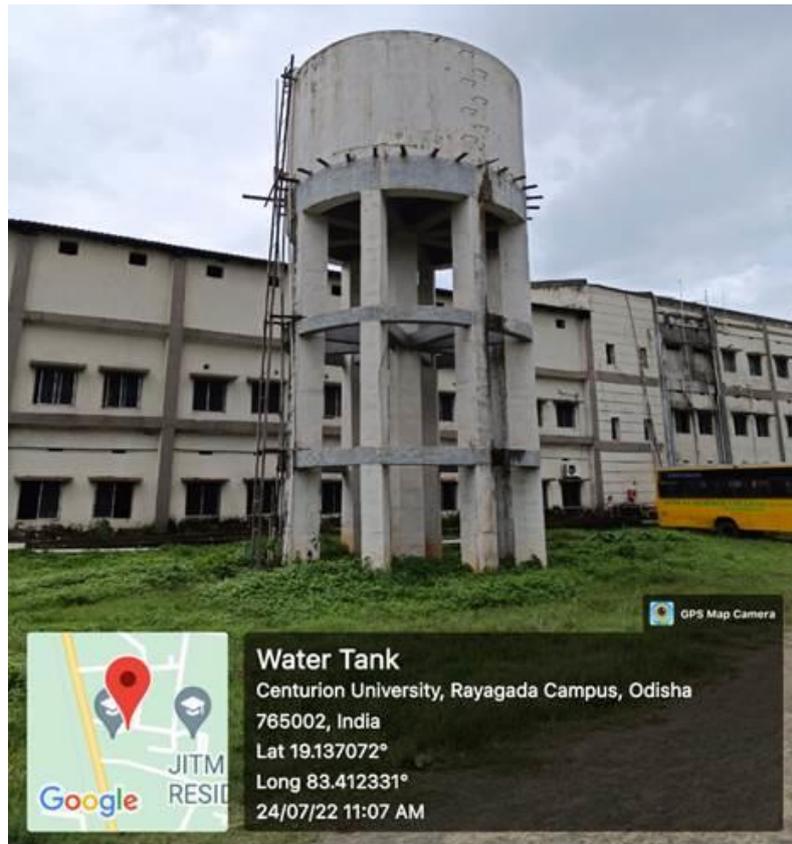


GPS Map Camera

Overhead Tanks, Odisha, India
CenturionUniversity of Technology
and Management, R.Sitapur,
Paralakhemundi, Odisha 761211, India
Lat 18.798989°
Long 84.14024°
08/08/22 03:48 PM



Water distribution at CUTM, Rayagada



Water distribution at CUTM, Bolangir



Anita Patra

Registrar, CUTM
REGISTRAR
Centurion University of
Technology & Management
ODISHA