



ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES::KADAPA

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## 7.1.4: Water conservation facilities available in the Institution

### Water Conservation Policy

Water is a scarce natural resource, which is fundamental to life, livelihood, food security and sustainable development. India has more than 18% of world's population, but has only 4% of world's renewable water resources and 2.4% of world's land area. The main emphasis of National Water Policy 2012 is treat water as economic good which the ministry claims to promote its conservation and efficient use. Annamacharya Institute of Technology & Sciences believes that educational institutions consume and pollute water resources majorly, so they also need water conservation mechanisms for saving and optimum utilization of water.

#### **Objectives:**

1. To optimize the use of natural water resource.
2. To increase the ground water table.
3. To efficiently use the water in the campus.
4. To reuse the waste water.

Institute implements the following practices/initiatives towards establishment and maintenance of water resources.

#### **1. Rain water harvesting:**

- The institution has established roof top rain water harvesting system with 1500 liters capacity. The harvested water is used for gardening and cleaning purpose.

#### **2. Soak pits and Bore well recharge:**

- The institution has constructed soak pits at different roof top outlets to increase the ground water table. And bore well recharge pits are constructed to increase the bore well water level.

#### **3. Construction of tanks:**

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#### **4. Drip & Sprinkler irrigation systems:**

- The institution has established drip and sprinkler irrigation systems in the gardens for wise utilization of water.

#### **5. Regular monitoring of water distribution system:**

- The institution plumber and his team regularly monitor the leakages at taps, joints, flushes, water tanks and water coolers to reduce the wastage.
- Fixing of low flow faucets in taps.
- Avoiding autoclaves and insisting the students to turn off the sink taps when smudging the glassware in the chemistry laboratory to reduce the use of water.

#### **6. Save water circular/sign boards:**

- The institution has displayed proper circulars/notices and placed sign boards at water bodies on giving awareness to wise utilization of water in the campus.

#### **7. Sewage Treatment Plant:**


- The institution has established Sewage Treatment Plant for purifying the effluents from canteen and washrooms. And the recycled water is used for cleaning in the campus.

#### **8. Reverse Osmosis Plant:**

- The institution has established Reverse Osmosis Plant with 500 liters/hour purifying capacity to provide safe drinking water in the campus. And the waste water generated from it is collected and reused for gardening and nurturing the plants.


#### **9. Observing of World Environment Day & World Water Day:**

- On World Environment Day mass tree plantation program is organized to increase the greenery and to reduce the green house gases.
- On World Water Day a pledge is taken by all the family members of the institution to save the water and to keep it pollutant free.

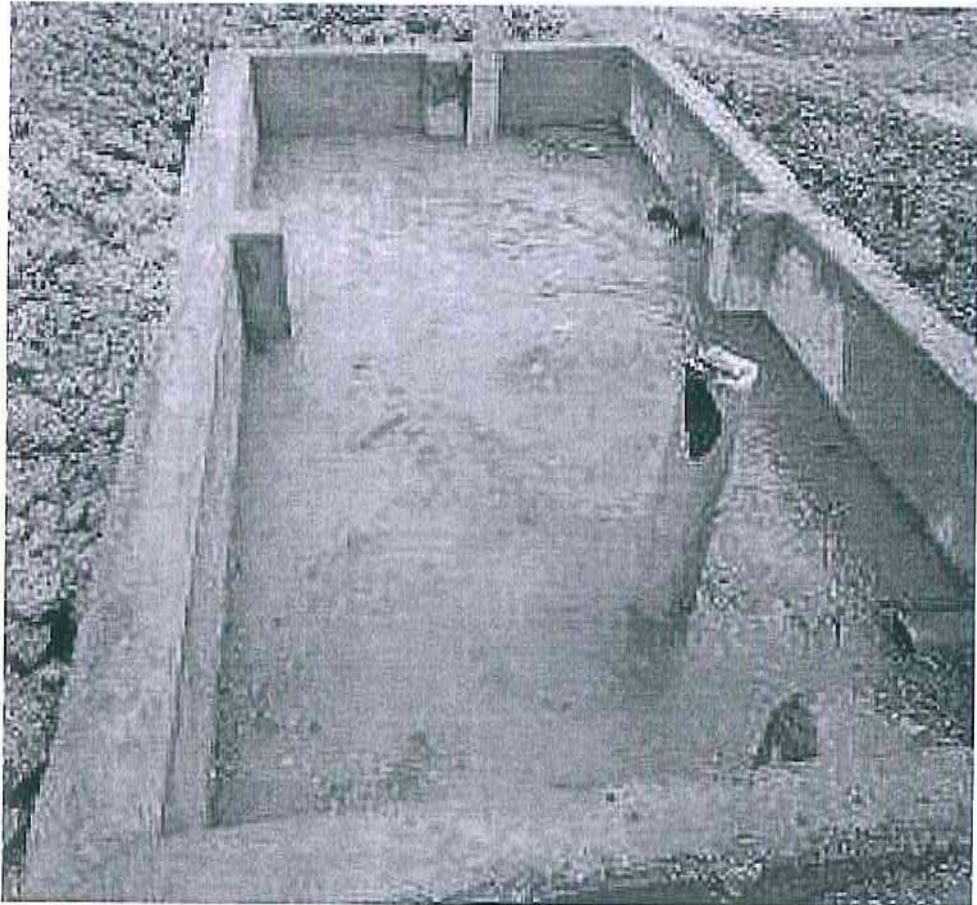
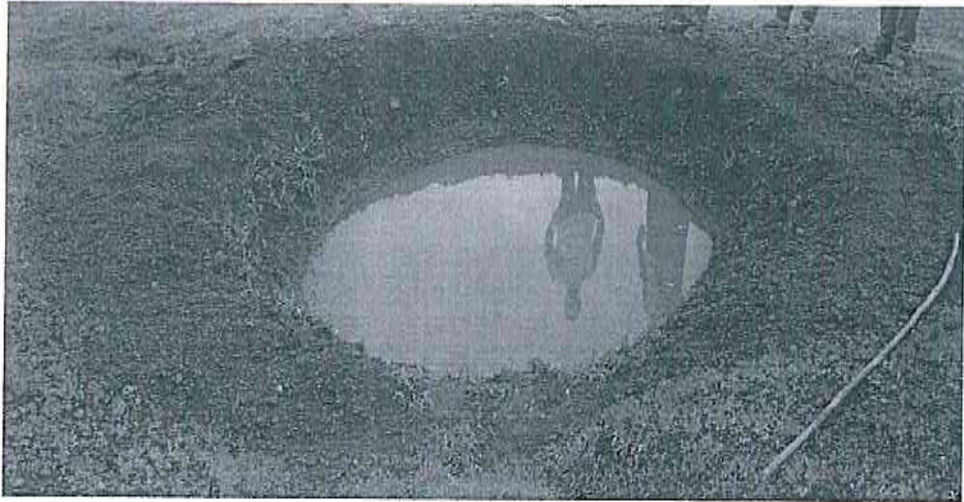
  
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#### 7.1.4: Water conservation facilities available in the Institution

S.No	Description
7.1.4.1	Rain Water Harvesting
7.1.4.2	Bore well Recharge
7.1.4.3	Construction of tanks and bunds
7.1.4.4	Waste water recycling
7.1.4.5	Maintenance of water bodies

  
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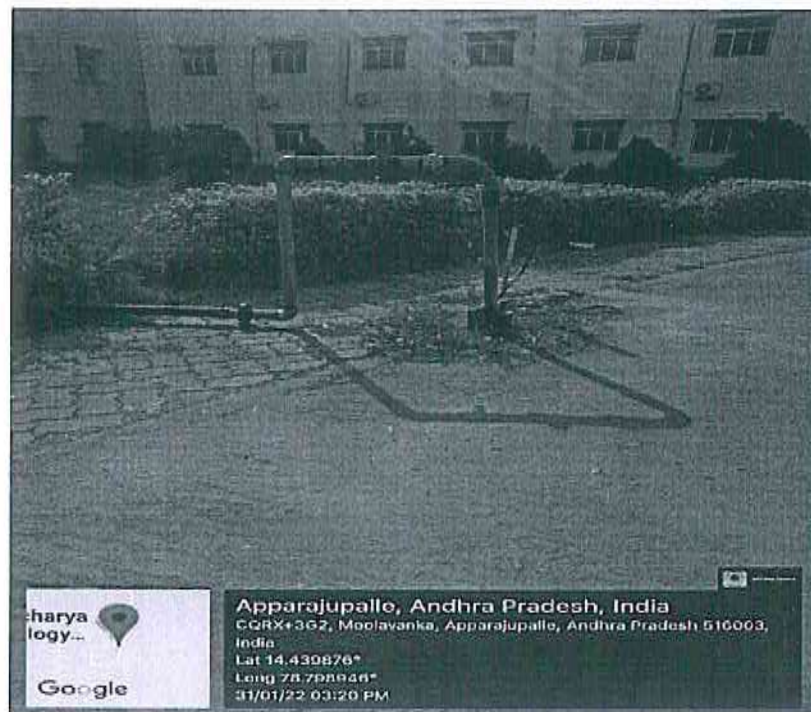
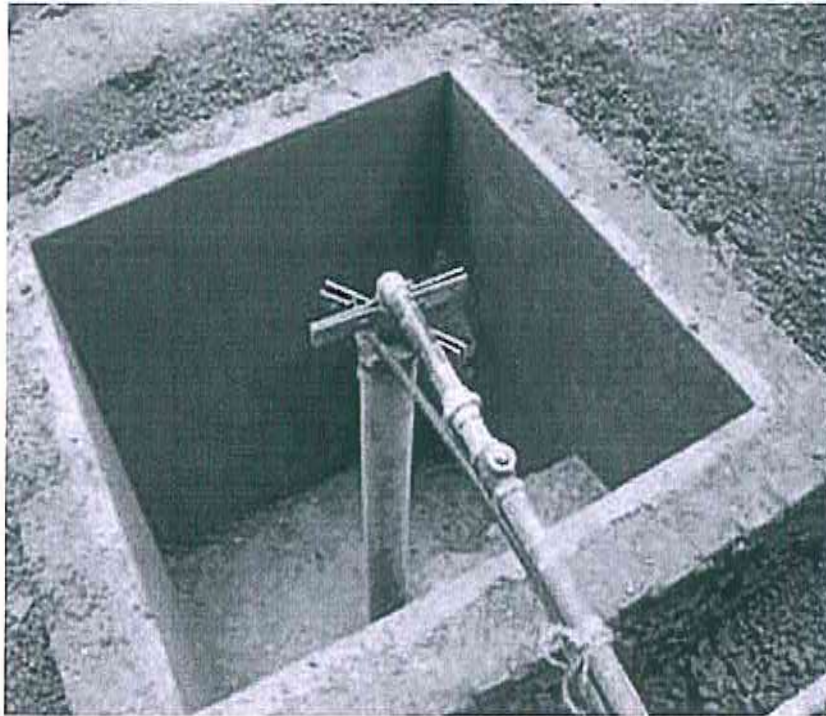
## 7.1.4.1 Rain Water Harvesting



**Percolation pond to collect rainwater and for water recharge at field**

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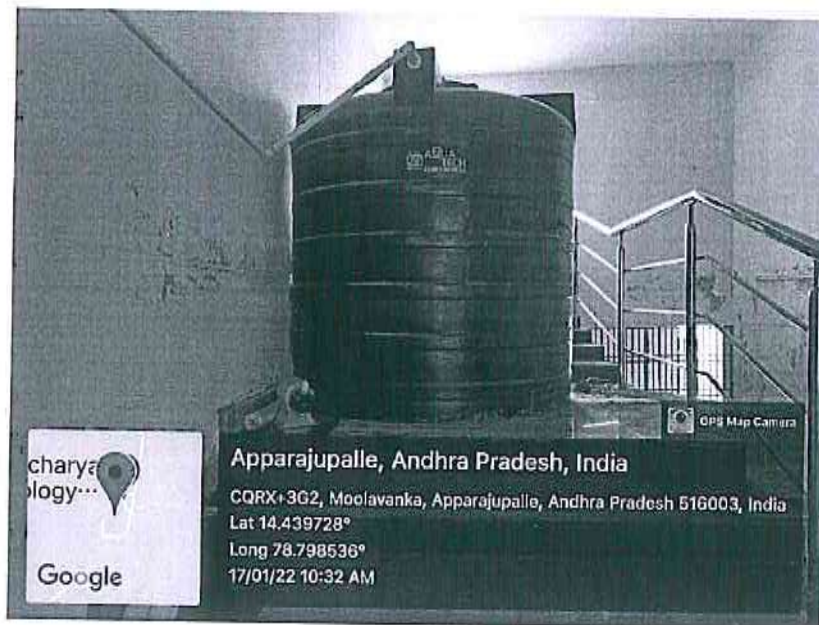
## 7.1.4.2 Bore well Recharge Pit



**BORE WELL NEAR LAWN**

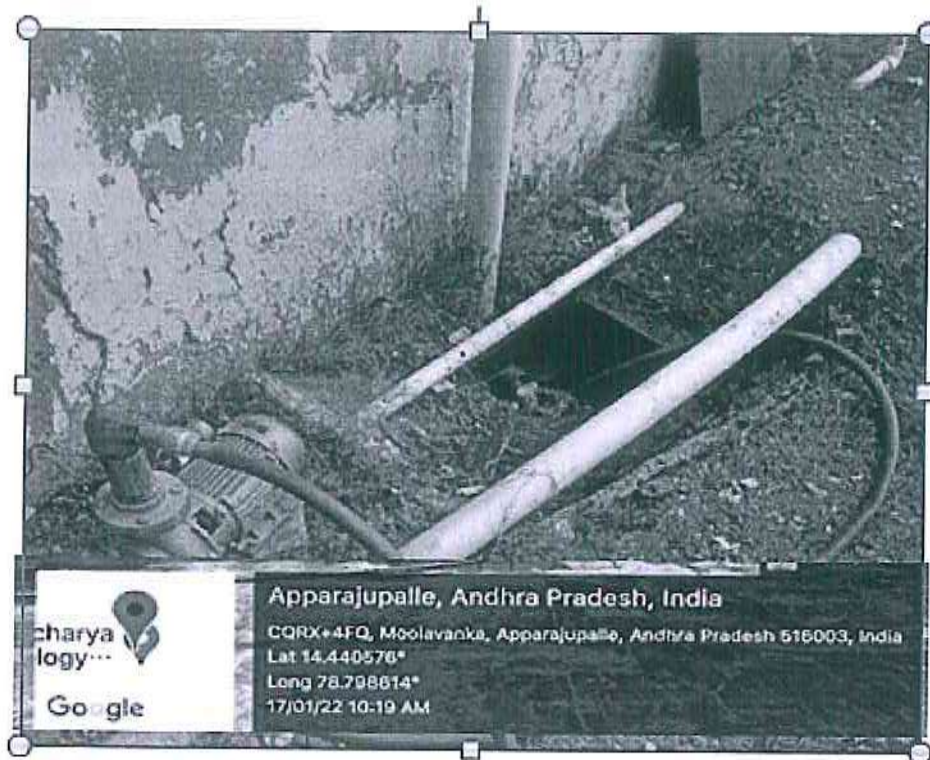
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### 7.1.4.3 Tanks and Bunds



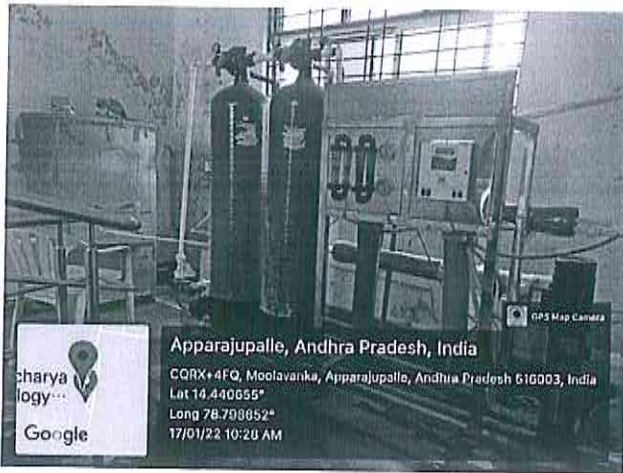
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## 7.1.4.4 Waste Water Recycling

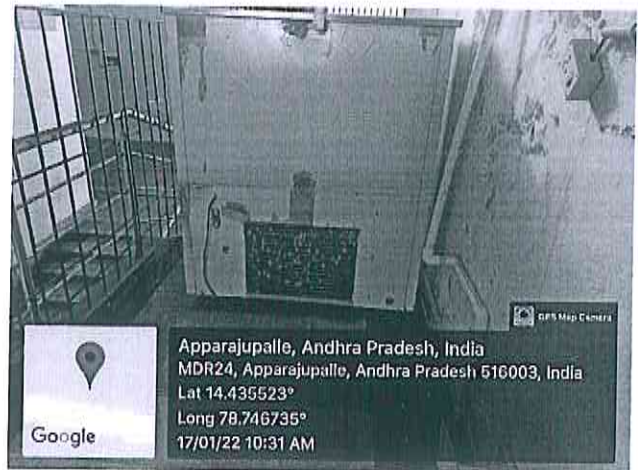


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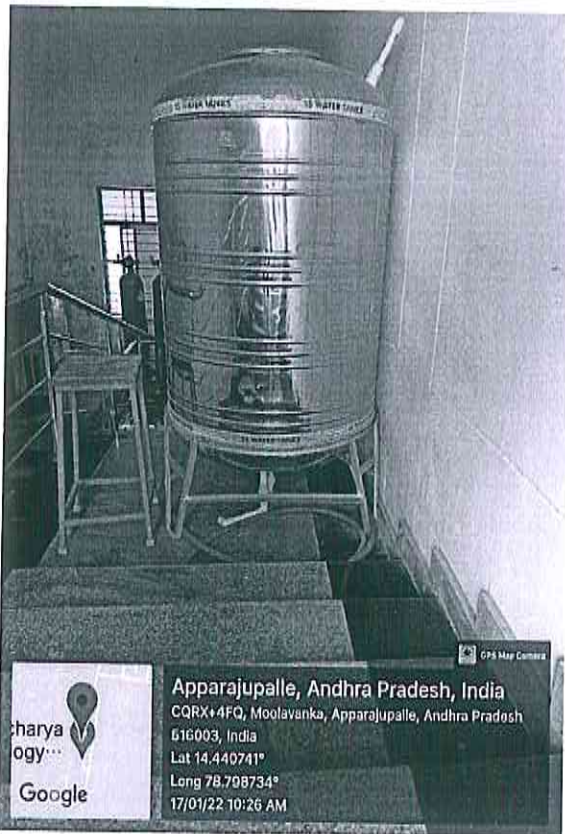
## 7.1.4.5 Maintenance of water bodies



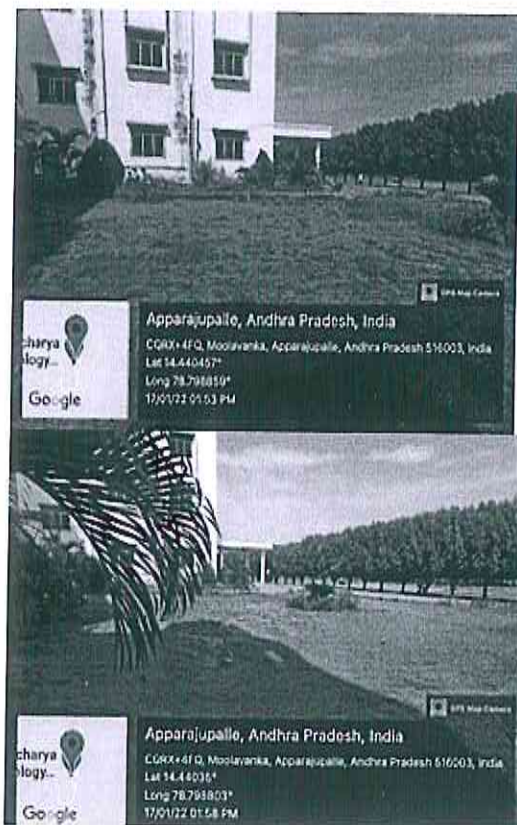
**RO PLANT**



**DISTRIBUTION OF WATER TO COOLER**



**DISTRIBUTION OF COOL WATER TO TANKS**



**WATER DISTRIBUTION TO LAWN**

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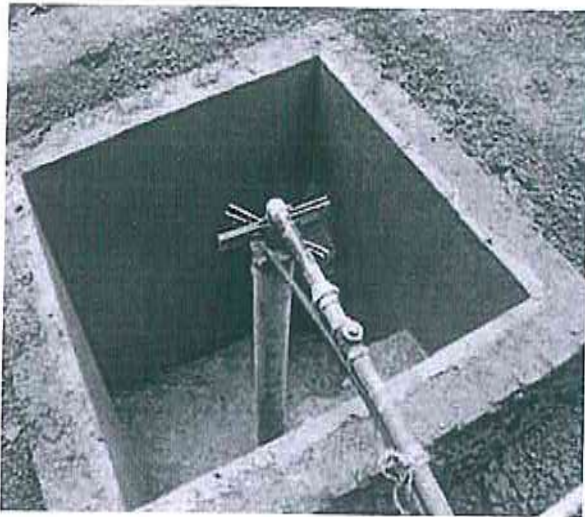
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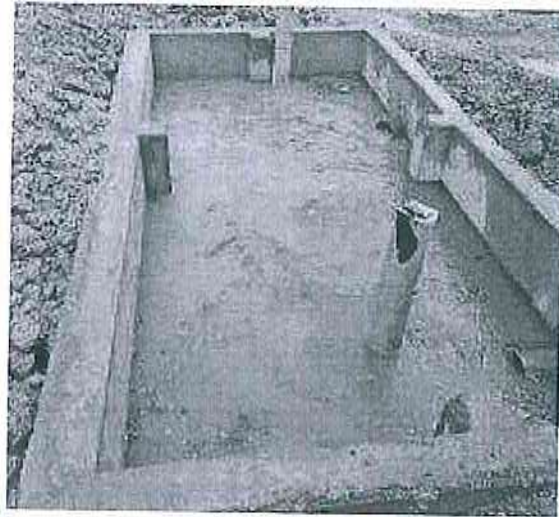
MAINTENANCE OF WATER BODIES	
SOURCE OF WATER	Borewell with a depth of 220 feet with 2 inches of water, pumping to overhead tanks with 2hp motor
No.of water tanks with capacity	2 each with 5000 ltrs capacity
No.of RO plants with capacity	2 with a capacity of 500 ltrs per hour
No.of.Water coolers with capacity	2 each with a capacity of 100 ltrs

USAGE OF WATER BODIES	
Mineral water (R O plant)	2500 ltrs mineral water
Wash room, Toilets and cleaning purpose	6000 ltrs
Lawn and trees maintenance	7500 ltrs
<b>TOTAL USAGE PER DAY</b>	<b>16000 ltrs</b>

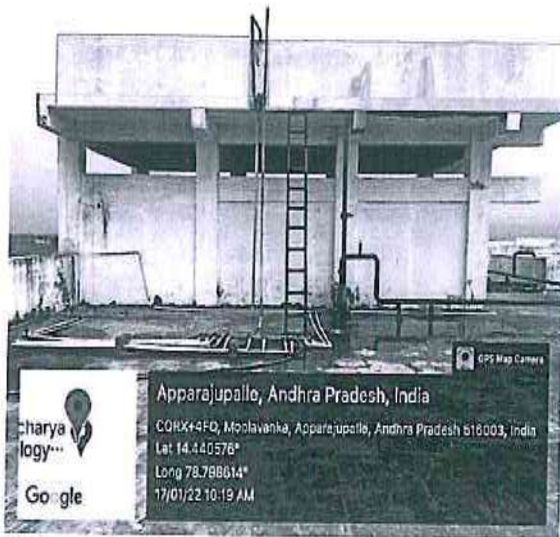
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BOREWELL RECHARGE PIT



RAIN WATER HARVESTING PIT



CONSTRUCTION OF TANKS AND BUNDS



WASTE WATER RECYCLING

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