Government of Andhra Pradesh

Innovative Technologies

Rural Water Supply & Sanitation Department
Innovative Technologies: Best Practices

• **Hydraulic RAM Operated Pump (without power)**

  **10 Schemes** are executed in hilly areas in the agency with ram operated pump in high elevated villages without power, water is being supplied 24X7 from the natural spring source with minimum maintenance.

*Collection Tank*  
*RAM operated Pump*

*Inspection of pump*  
*Tap Points*
NTR Sujala Pathakam

- The programme is implemented from 2\textsuperscript{nd} October 2014 to provide 20 litres of Potable Water for Rs. 2.00.
- So far 907 Plants are installed by various Firms under CSR, NGOs, Donors covering 900 habitations.

Government Concessions:
- To supply power @ Rs. 4/- per unit for the power consumed in running the water treatment plant.
- To reimburse VAT paid on the purchase of water treatment plants under NTR Sujala Pathakam.

Community Water Purification Plants (Niti Aayog)

- Government has taken a decision to cover all the left over fluoride affected habitations through community drinking water purification plants as short term measure.
  - Administrative sanction accorded for an amount of Rs.26.39 Crores towards installation of Community water purification plants in the fluoride affected habitations.
  - Rs. 21.26 crores released by NITI Ayog
  - 325 plants were sanctioned and installed.
• **Solar Based Dual Pump Water Supply Scheme**

1127 Schemes are executed in small remote habitations where there is no power supply or irregular supply. Maintenance of Scheme is Zero and catering the needs of the tribes and water is being supplied 24X7, with the provision of soak pit. The Solar based dual pump water supply schemes are taken under the grant of NRDWP (National Rural Drinking Water Programme) and funding by NCEF (National Clean Energy Fund) & MNRE (Ministry of New & Renewable Energy) Each Scheme Unit Cost Rs.4.90 Lakhs

Bangarammapet of Ananthagiri Mandal in Visakhapatnam District
• Solar based water plant with Bio-Toilets (SANA)

The technology involved in that, water is pumped from the Bore well through solar pumping to RO Plant and the waste water from the RO Plant is utilized for the Bio toilets with Bio digester. Finally waste water from the Bio toilets in turn can be utilized for agricultural purposes which is having high nutrients. The unit is successfully implemented in Devarapalli SC Colony of Visakhapatnam district and is functioning well.

National Human Rights Commissioner & Supreme court Chief Justice Sri K.G.Balakrishnan has inaugurated the unit.
• MVS to Ananthagiri (M) of Visakhapatnam District - World bank:

Under this scheme **5 no. of OHSRs** are constructed and the source is natural perennial spring, with treatment plant. The maintenance of the scheme is ZERO and the tribal people are covered with 100 % house hold connections **(450 HHs in 5 Habs)** with 24X7 water supply.
SCADA (Supervisory Control and Data Acquisition)

The Scientific Technology approach of controlling the water supply scheme in a Digital process without man power was implemented for the first time in Andhrapradesh @ Yetigairampeta, Narsipatnam Constituency, Visakhapatnam District covering 11 habitations.
• **Village Parks:**  

Village Parks are established by constructing Compound walls, Benches, Plantation etc. for the first time for all the service reservoirs taken up under World Bank.
Renovation of Dilapidated OHSRs

In the Visakhapatnam District 23 no. of OHSR’s which are in dilapidated condition are renovated with German technology (Force rock compounds) which reflects new appearance with less cost i.e., Rs. 3.00 lakhs per tank.
Renovation of 60KL OHSR at Ravikamatham Village of Ravikamatham Mandal in Visakhapatnam District