

Government of Andhra Pradesh

Success stories

**Rural Water Supply and Sanitation
Department**

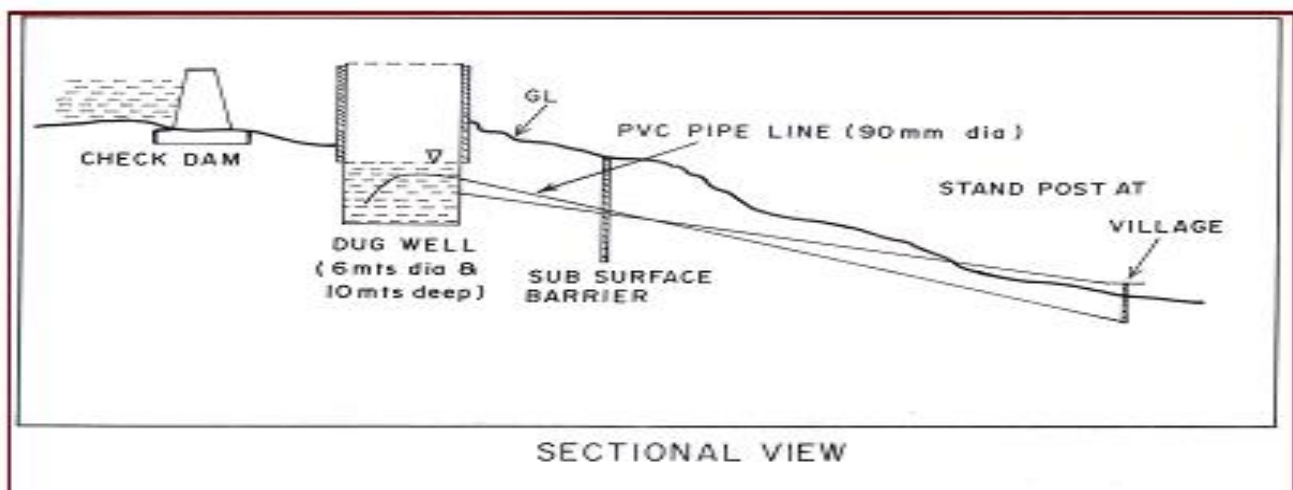
CAPTIVE RESOURCE MANAGEMENT
AND
GROUNDWATER SANCTUARY DEVELOPMENT
IN
CHITTOOR DISTRICT OF ANDHRA PRADESH

Concept

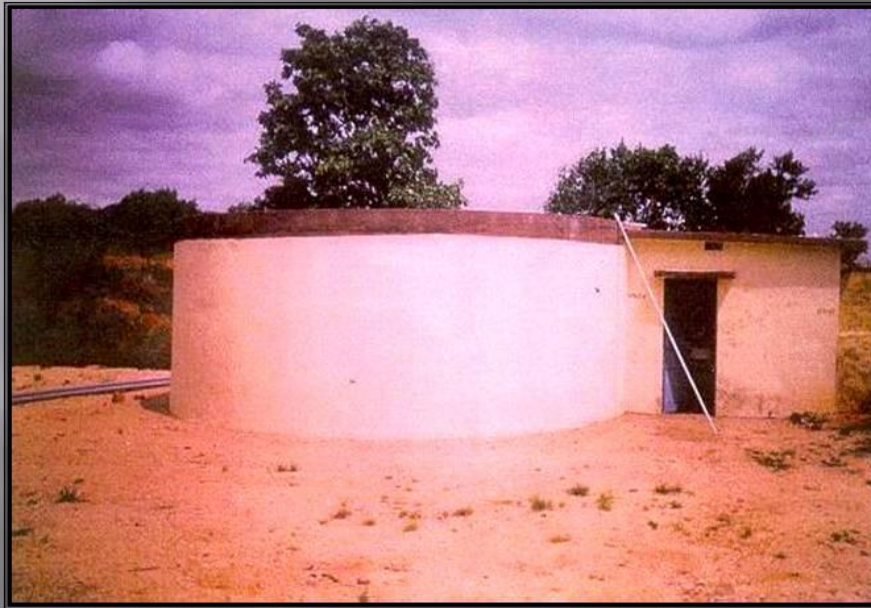
Uncultivable land areas are often located near the foot hills or hill ranges at a higher elevation and it would be easier to harness the run-off potential from areas of origin of drainages itself. Since, the drainages flowing over the uncultivable land area are to be of second to third order streams, it is possible to harness the runoff potential with required storage capacity reservoirs such as small ponds/tanks or check dams in the uncultivable land area itself. A source can become a sustainable one by adopting shallow aquifer management in uncultivable land part of a village/s.

Project

National Geophysical Research Institute (NGRI) of Council of Scientific & Industrial Research (CSIR) in collaboration with Rural Water Supply & Sanitation (RWSS) and Water Land Management Training & Research Institute (WALAMTARI) of Govt of Andhra Pradesh successfully demonstrated the creation of groundwater sanctuary exclusively for village drinking water supply in the district of Chittoor in the year 2002. Under this water supply scheme nearly 2000 population in three villages namely Seelaigaripalle, Gurikanipalle and Gattuvaripalle of Somala Mandal are getting the benefit of having drinking water round the clock through gravity-siphon thereby avoiding the dependency of scheme on energy. The O & M cost on the Scheme has been Rs. 2000/- per annum during the past 12 years



RESOURCE WELL



Dr.D.Muralidharan

CHECK DAM



INSPECTION BY SECRETARY

SRI SATYA SAI

WATER SUPPLY PROJECT

ANANTAPUR DISTRICT

Back Ground

Anantapur is the second most arid district in India with about 553mm rainfall. The ground water levels in the district have gone down abnormally, and scarcity of water is a problem in some villages, while quality of water is problem in others.

Vision

Sri Satya Sai Central Trust, founded by Sri Satya Sai Baba, has proposed to the Government of Andhra Pradesh, to execute a drinking water supply project to quench the thirst of the Anantapur District and to supply safe drinking water to the parched villages. The aim was to provide safe drinking water to at least 700 villages by the 70th Birth Anniversary of Sri Satya Sai Baba.

Execution

Government accepted the offer by Sri Satya Sai Central Trust and appointed Nodal Officers for preparation of the Detailed Project Reports for the schemes proposed by the Trust. Government Departments like Panchayati Raj Engineering, Irrigation, Remote Sensing Application Centre and the State Ground Water Department were involved on top priority. The SSSC Trust entrusted the execution of project to M/s. Larsen & Toubro Limited, one of the India's largest Engineering & Construction organization. Finally the project was envisaged to cover 731 very needy habitations in 57 mandals of the district.

Accomplishment

4 Nos. of Major CPWS Schemes, 22 Nos. of CPWS Schemes and 278 Nos. of PWS Schemes were executed under Sri Satya Sai Water Supply Project in Anantapur District to cater safe drinking water to 731 habitations. A part from this, certain infrastructure to extend this safe drinking water to several habitations in 12 mandals of the District was also executed.

278 Nos of PWS Schemes covering 280 habitations were directly handed over to concerned Gram Panchayats for further maintenance. 1 No. of CPWS Scheme was handed over to Anantapur Municipality and 2 Nos. of CPWS Schemes were handed over to RWS Department.

Sri Satya Sai Water Supply Project Board was constituted by the Government of Andhra Pradesh for Operation and Maintenance of 4 Nos. of Major CPWS Schemes and 19 Nos. of other CPWS Schemes covering 440 habitations.

Later on 4 Nos. of CPWS Schemes were handed over to respective Gram Panchayats by Sri Satya Sai Water Supply Project Board.

SRI SATYA SAI

WATER SUPPLY PROJECT

EAST GODAVARI DISTRICT

Scope of the Project

Sri Satya Sai Central Trust has taken up Drinking water supply project in East Godavari District to supply Godavari water to 212 habitations in 10 upland Mandals of the District after filtration. The work was started in 2005 by the Sri Satya Sai Central Trust, Puttaparthi. AND completed IN 2007.

Project scope:

Habitations covered	:	212
Population covered	:	2.50 Lakhs
Intake well	:	2 Nos.
Treatment Plants Provided	:	a) 3.5 MLD at Kutrawada. b) 10.5 MLD at Purushothapatnam

Structures completed under Sri Satya Sai Project:

i.	Intake well	-	2Nos.
ii.	Water treatment Plant	-	2 Nos.
iii.	Sump and Pump houses	-	38
iv.	Break pressure tanks(BPT)	-	13
v.	GLBR & OHBRs	-	12
vi.	OHSRs	-	4os
vii.	Cisterns	-	283
viii.	GLSRs	-	4
	Pipelines (PSC/AC/HDPE/MS/DI)	-	520 Km

Sri Satya Sai Water Supply Board is taking up of the Operation & Maintenance

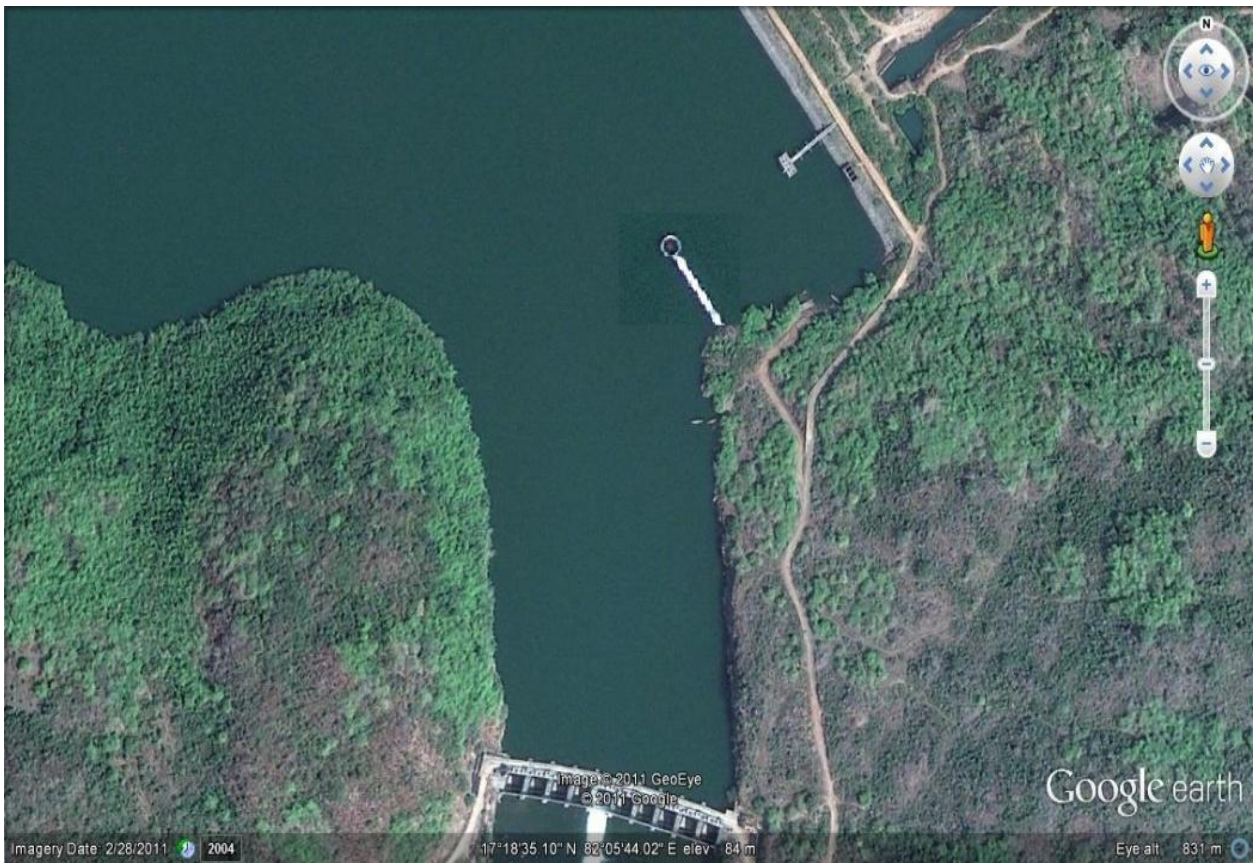


***C.P.W.S.Scheme to
Yeleswaram, Prathipadu,
Sankhavaram and
Kirlampudi
in EAST GODAVARI Dist***

Salient features

Administrative Sanction Date	: 05.05.2010
Date of Project Commissioning	: March,2014
Grant	: NRDWP
Estimate Value	: Rs. 2000.00 Lakhs
No of habitations covered	: 36
Population covered	: 76,287
Design:	:
Raw Water Demand(Ultimate)	: 50 LPCD (16066 LPM)
Clear water Supply(Ultimate)	: 40 LPCD (Clear water 12853 LPM)
Treatment plant Capacity	: 8.50 MLD
Treatment Process	: Micro filters
GLBRs	: 1 No. (500 KI Capacity)
No of OHSRs	: 31 Nos
Clear water Gravity main length	: 52.09 Km
Raw & Clear water Pumping main length	: 10.89 Km
Raw water Pump sets	: 3 Nos of 100 HP (1 No. standby)
Clear water Pumpsets	: 2 Nos of 100 HP (1 No. standby)





INNOVATIVE TECHNOLOGIES

IN

VISAKHAPATNAM DISTRICT

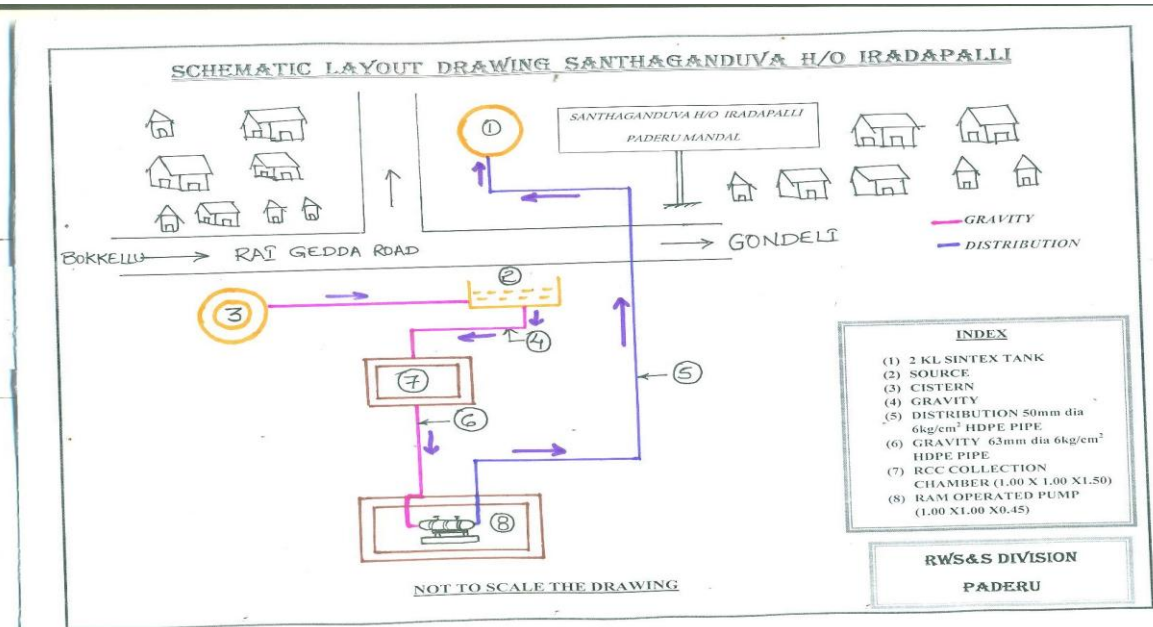
New Innovation Works Taken up During the Period of Oct 2013 to May 2014

Under the stewardship of the ITDA Authorities, the RWS Dept. is able to achieve a Powerless (ROP) to Supply Drinking water to Hilly habitations where the source of supply (Natural Spring is located in lower end of the village with a Pumping head of 50 mtr..)

Brief Notes on Ram Operated Pump

- Habitation Name : SANTHAGUNDAVA
- Population : 144
- Grampanchayat Name : Iradapalli
- Mandal Name : Paderu
- Name of the Work : Providing SVS Scheme to Santhaganduva
- Estimated Cost : Rs. 6.00 Lakhs
- Grant : 13th Finance Commission Grant
- Date of Start : 17/02/2014
- Date of Fixed for Completion : 16/06/2014
- Components :
 1. Source – Spring and Cistern (Existing)
 2. Pumping System – Ram Operated Pump (Power Less)
 3. Storage Facility – 2 KL Sintex Tank

- The village has a spring source at lower level and the village is located on hill slope. Hence no Gravity Scheme possibility.
- If power pump is erected, Power erection as well as consumption charges will be more and the Grampanchayat is so poor to maintain the power system.
- Hence pumping spring water to the village through the pipe line by erecting a Ram Operated Pump (ROP).
- The Ram Operated Pump is designed to function round the clock a day without power.



A GRAVITY SCHEME

The work "Providing Drinking Water Scheme to Cheeruvaveedhi H/O Nurmathy in G.Madugula Mandal of Visakhapatnam District" was sanctioned with an amount of Rs.7.50 lakhs under IAP grant (PhaseIII).

The habitation is a remote and inaccessible, whose population is 171. There is neither spot source nor any safe source existing in the village. The villagers are depending on the cistern which is located downstream of the village. During field visit along with the Dy. Executive Engineer, RWS&S Paderu, the villagers have shown the perennial spring source, which is located on hill portion side of the village, whose GL is +100.00 Mtrs. The village RL are in an average +28.00 Mtrs. The merits on the installation of the gravity scheme, as per field experience since last three years are:

1. The village is at present served with 24 X 7 safe naturally protected drinking water originated from the natural spring.
2. No power consumption charges needed.
3. Minimal operational charges being borne by the GP due to maintenance constant hydraulic pressure.
4. Reduced water borne diseases in the village due to potable water consumption thro' the gravity scheme.

The Gravity Scheme has been executed with the following provisions:

- Construction of spring source tank with due protection against external contamination during rainy season as per the site conditions.
- Filter tank with media.(it also acts as break pressure tank for the gravity flow}
- Provision for 2 KI GLSR in the village
- Provision for 5 No of Single tap Public Fountains in the village.
- Gravity main length 962m from source to village with 63 mm dia HDPE 6kg/cm².