

MINUTES OF THE WORKSHOP/TECHNICAL EXPERTS COMMITTEE MEETING HELD ON 30.6.2014 ON SELECTION OF SUITABLE WATER TREATMENT TECHNOLOGIES FOR IMPLEMENTATION OF NTR SUJALA PATHAKAM IN RURAL AREAS OF ANDHRA PRADESH

List of participants

S/Sri

1. Ch.Ayyanna Patrudu, Hon'ble Minister for Panchayati Raj and Rural Water Supply, GOAP
2. Dr. K.S. Jawahar Reddy, IAS, Secretary, PR &RWS, Govt. of AP.
3. R.Kondala Rao, Engineer-in-Chief (Rtd), Panchayati Raj, Chairman, Technical Committee.
4. K.Ravi Babu, Chief Engineer, RWS&S, Convener.
5. Dr.P.Panduranga Rao, Engineer-in-Chief, PHED
6. Shaik Pentu Saheb, Chief Scientist & Head, NEERI, Hyderabad
7. S.R.Nalli, Project officer, UNICEF
8. Chief Chemist, Institute of Preventive Medicine, AP, Hyderabad
9. G.Veera Pratap, Chief Engineer, RWS&S
- 10.A.Ramulu Naik, Chief Engineer, RWS&S
- 11.B.Jagadeeswar Reddy, Chief Engineer, RWS&S
- 12.R.P.Nanda, Superintending Engineer, RWS&S, East Godavari
- 13.Kanthanath, Superintending Engineer, RWS&S, Visakhapatnam
- 14.K.Kishore Kumar, Dy Project Director, APRWSSP, Hyderabad
- 15.B.Ramana, Superintending Engineer, RWS&S, West Godavari
- 16.T.Prabhakar Rao, , Superintending Engineer, RWS&S, Anantapur
- 17.Alla Baksh, Executive Engineer, O/o ENC, RWS&S, Hyderabad
- 18.J. Viswanath, Chief Engineer (Rtd), RWS&S.
- 19.C.V.S. Ram Murthy, Engineer-in-Chief, PR, AP, Hyderabad.
- 20.NGOs.
- 21.RO/UV Supply firms.
- 22.Satya Sai Seva Samithi.

At the outset, the Secretary, PR&RWS welcomed the Hon'ble Minister, PR&RWS, GOAP, Technical Experts Committee members, Officers of RWS&S Department, and NGOs/firms who have attended the one day workshop on selection of suitable water treatment technologies for implementation of NTR Sujala Pathakam in rural areas of the State.

The Hon'ble Minister, PR&RWS inaugurated the workshop by lighting the lamp, assisted by Secretary, PR&RWS, Sri R.Kondala Rao, ENC,(Rtd.), PRED and Chief Engineers, RWS&S.

The Secretary, PR&RWS, while welcoming the participants to the workshop, briefed about the main aim of NTR Sujala Pathakam i.e., supply of safe and potable water in a can of 20 litres to each household @Rs.2/-, constitution of technical committee to go into various technologies available for purification of water for human consumption for different contaminants and identification of most effective technology. While briefing the ongoing programme in the State, Secretary stressed the need of adopting suitable technology and IEC activity for successful implementation of the Pathakam.

Sri R.Kondala Rao, ENC (Rtd.,) PRED and Chairman, Technical Experts committee has given an overview on the backdrop of the workshop. In his address, the Chairman informed that the Technical Experts Committee has to decide various types of technologies to be adopted in the programme. The Government has decided to cover 1144 Quality Affected and 4049 partially covered habitations in the first phase. The Government will provide shed and source and the agencies have to bear cost of establishments like unit cost, power, maintenance etc., The Chairman requested the participants to focus on the effluent disposal, the period for BOOT system, health education and the formation of water committees.

The Hon'ble Minister, in his inaugural address informed that the Government has already taken a policy decision for implementation of the Pathakam in the name of great Telugu personality NTR and hence the scheme to be implemented in fool proof. He further informed that, out of total 47,190 habitations, 5193 habitations will be taken in the first phase for implementation of the Pathakam. He further, noted that some NGOs/foundations have done commendable work in setting up of water treatment plants in rural areas. In the context of the programme, Hon'ble Minister requested the participant NGOs/firms to share their experiences in the field and come up with best suggestion for better implementation of the NTR Sujala Pathakam.

Sri Shaik Pentu Saheb, Chief Scientist & Head, NEERI, Hyderabad has given a presentation on the various technologies developed by NEERI for treatment of Fluoride water. He opined that EDFT is most suitable for removing high concentration of Fluoride content with minimum sludge, with treatment cost up to Rs.2/- per 100 litres.

Ms.B.Hyma, Secretary, M/s Dhatri foundation has informed that they have some Departments of State Governments as Partners and installed 50 water plants with support of Tata projects as knowledge partner. Further said that sludge and reject water may be used for white washing of walls, tooth paste manufacturing and also

for plantation to some extent. Dhatri foundation requested the Government to provide place, source, power to the agencies for better implementation of the scheme.

Sri Anand Anil Kumar, a representative of M/s TATA Projects has informed that they have developed knowhow to restrict the waste water to the maximum of 40%. The RO plants and the machinery developed by them are good in Fluoride removal from reject water. Further suggested to adopt new systems like prepaid card system and swipe card system. The maintenance cost is about Rs.3/- per 20 lit.

Sri Srinivasulu, Co-ordinator, Satya Sai Seva Organisation have shared their experiences in maintenance of water treatment plants and informed that they are collecting Rs.1/- per 12 lit can. It is informed that 12 lit can is introduced based on problems being faced in carrying 20 lit can by the individuals. He informed that Water committees are formed with 5 members and out of which 2 are female members being the very user group. Further informed that the committee will operate and maintain the system and have right to utilise the saving accrued for village development. He has further clarified that every household shall be educated and the maintenance cost can be brought down to Rs.0.50/- when 80-90% households are covered with the scheme.

Sri Seshu, representative of M/s Sri Sai Water Treatment Pvt., Ltd., has informed that they have 14 years experience in the field and are using the Electrolytic De-fluoridation Technology developed by CSIR-NEERI in fluoride affected areas and Terrafil Technology developed by CSIR-IMMT-Bhuvanewar for Iron removal. Further informed that they have installed about 500 plants in AP & Karnataka and maintaining rapid action team for attending repairs on war footing basis.

Scientist, CSIR, Bangalore has informed that the technology developed by them are cheaper in treating the fluoride (Electrolytic de-fluoridation technology), Iron (Terrafil technology), TDS and other contaminable problems.

Sri Prasanth, representative of M/s SWISS TECH INDIA PVT., Ltd., has informed that they have been operating in Chittoor, Nellore and Prakasam districts. They have requested the Government to evolve the costs considering the factors such as small and interior habitations, increase in power tariff etc., for better implementation of the scheme.

Ms Shivani, representative of M/s NAANDI Foundation has shared their experiences in the field. It is informed that the maintenance cost is about Rs.4/- per 20 litres can. Further informed that they involve donors and community together for effective maintenance of the scheme.

Sri Ch.Chinna Rao, Extension Officer, Panchayati Raj, West Godavari district elucidated the problems in implementation and suggested practical solutions. He suggested to involve donors, corporate sector and NGOs in the programme. He suggested to implement novel ideas such as naming the donor on the plant, income tax exemption to donors and single window permissions. Further suggested that the local body to provide site, building, raw water & electricity.

Sri Mangalesh, Executive Director of M/s Adhisa Water Solution has suggested the Government to bear 50% of the Capital cost and informed that break even stage will be arrived in 5 years.

Sri Adinarayana, CMD, Mahila Seva Trust, an NGO, Vizianagarm district has shared their experiences and suggested to ensure the ISI Spares and machinery with ISI specifications. Further informed that the cost of the plant is about Rs.1.70 lakhs for 1000 LPH RO plant.

Sri Sai of M/s Abhra Water Tech Solutions Pvt., Ltd., has shared their experiences in Tamilnadu State. He suggested for re-use of rain water as source so that quality problems in raw water is minimised. Further informed that the capital cost and O&M cost will be reduced to a greater extent with the re-use of rain water source. He suggested to involve organisations of proven record such as Rotary International and Lions International for effective implementation of the scheme.

Sri Vara Prasad, representative of M/s Saint John Welfare Society has shared their experiences in involving DWACRA and Youth in operation and maintenance of the water treatment plants.

Sri Vara Prasad, representative of ATM Water Systems has informed that the power tariff is high in the State and hence requested the Government to bear the power costs in addition to source and shed.

Sri Maheswara Reddy, representative of Nandi Pipes suggested to install Voltage stabilizers and Solar systems for uninterrupted operation of the plant.

Secretary, PR&RWS has summed up the proceedings and thanked all the participants for their initiatives.

In his concluding remarks, Sri Ayyanna Patrudu Hon'ble Minister expressed satisfaction over the brainstorm session and informed that the technical expert committee will discuss on the points raised in the workshop and workout the modalities, technology, costs, budget and other relevant issues. He suggested to explore the possibility of adopting solar based systems instead of solely depending on the Power supply. He further advocated the need of utilizing the services of service organizations like Rotary, Lions International and tap the funds of corporate

social responsibility to this scheme. Hon'ble Minister requested the NGOs and other agencies to furnish the list of areas of present operation.

The meeting ended with the vote of thanks by Sri K.Ravi Babu, CE, RWS&S and Convener.

Sd/- 01/07/2014

R. Kondala Rao,
Engineer-in-Chief (Rtd), PR,
Chairman, Technical Experts Committee

To

1. The Secretary to the Government, PR &RWS Departments, AP.
2. The Deputy Advisor (WQ), Ministry of Drinking Water & Sanitation, New Delhi.
3. The Engineer-in-Chief, I&CAD, AP, Hyderabad.
4. The Engineer-in-Chief, PHED, AP, Hyderabad.
5. The Chief Scientist & Head, NEERI, Hyderabad.
6. The Project officer, UNICEF, AP, Hyderabad.
7. The Director, Institute of Preventive Medicine, AP, Hyderabad.
8. PS to Hon'ble Minister for PR&RWS, NREGS, Andhra Pradesh.