

# PPP Model for Developing Faecal Sludge Treatment Facilities at Scale Andhra Pradesh, India

**Dr. Y. Malini Reddy**

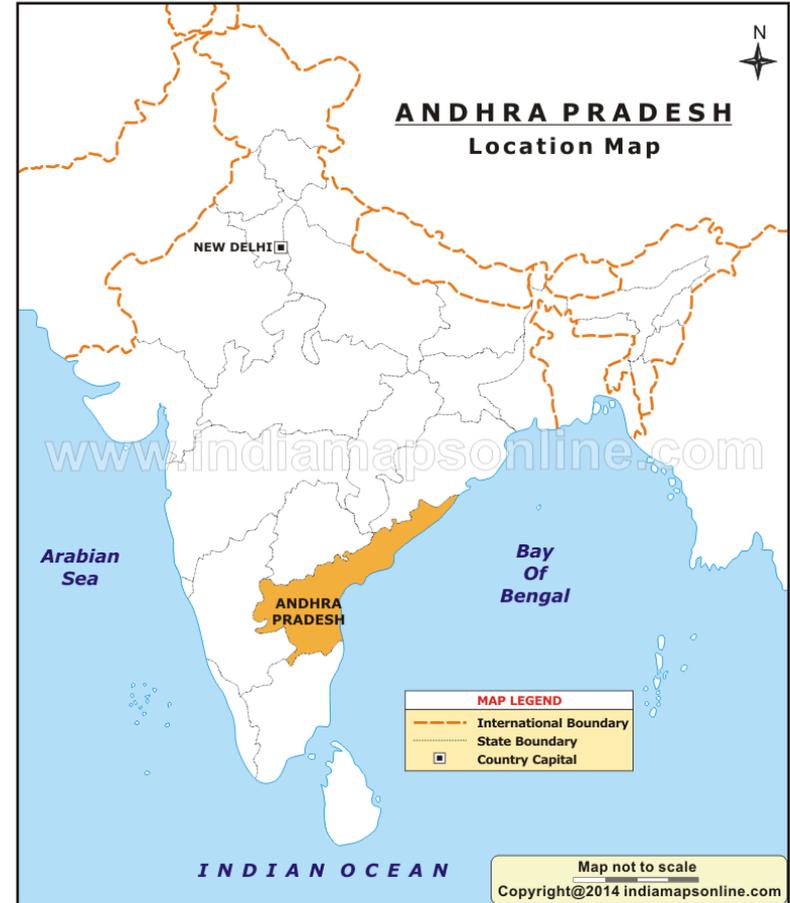
Prof. Srinivas Chary



**Administrative Staff College of India**

# About Andhra Pradesh

- 8th largest state in India
- Urban population of **14.6 million** (29.6%) residing in **110 towns**
- All towns declared Open Defecation Free (**ODF**) in October 2016 and sustained
- Faecal Sludge and Septage Management (**FSSM**) prioritized



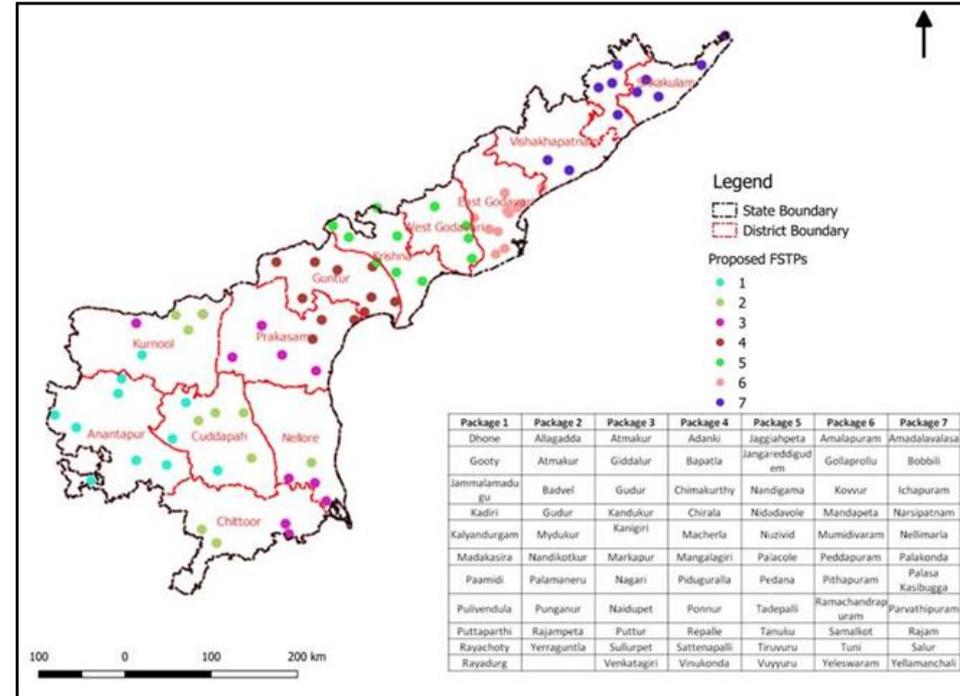
# FSSM in Andhra Pradesh

- State **policy** and operative guidelines for FSSM issued
- State **Helpline** established to support ULBs for operationalising policy
- State **Non-sewer sanitation cell** to drive and monitor FSSM implementation
- Multi-pronged approach for **treatment facilities** in all towns:
  - New **combined treatment STPs** in 33 towns
  - Conversion of existing STPs to co-treatment facilities in 10 towns
  - **Stand-alone Faecal Sludge Treatment Plants (FSTPs)** piloted in 2 towns and scaled up to 76 towns through innovative **Public Private Partnership (PPP) based on Hybrid Annuity Model (HAM)**



# Salient Features of PPP – HAM Model for FSTPs

- **76 FSPs are clustered into seven packages**
- The **design, build, operate & transfer (DBOT)** model requires the concessionaires to complete construction activity in 6 months and operate the plant during the **concession period of 10 years.**



# Salient Features of PPP – HAM Model for FSTPs

- Technical and financial bids are evaluated using **Least Cost Selection (LCS)** process on the basis of lowest assessed Bid Price
- Bid price calculated as a summation of **(a) Bid Project Capital Cost and (b) Net Present Value (NPV) of O & M Cost.**
- **50% of the capital cost** quoted is paid on completion of construction while the remaining 50% is paid over the life of the project as annuities along with O&M expenses
- **Technology agnostic** approach for project development. Evaluation by Technical Advisory Committee

# Salient Features of PPP – HAM Model for FSTPs

- Both the **Annuity and O&M payments are linked to the performance** of the FSTP. This is to ensure continued performance of the assets
- The bidder can **monetize resources recovered** like biogas, treated wastewater, biochar, compost. Low energy usage option are encouraged.
- ULBs shall earmark land, regulate desludging operators and direct them to deliver faecal sludge at the project Site for treatment.
- As on date Letter of Award issues for 4 packages, and remaining 3 packages are in different stages of tendering process

# Points to Remember

- Clear commitments and risk sharing from both the parties essential
- Linking Annuity and O&M payments to the performance of the FSTP is important to ensure continued performance of the assets
- Deep engagement with private sector for market development - promoting the project
- Regulation, Capacity Building in FSSM and PPP, standard operating processes for ULBs and state, allotment of land allotment are condition precedents for successful implementation of FSTP projects on PPP.