



# CPCL VLLAGE DEVELOPMENT PROGRAMME IN 5 VILLAGES OF P. PANANGUDI (2 Nos) & GOPURAJAPURAM PANCHAYTS (3 Nos) IN THIRUMARUGAL UNION OF NAGAPATTINAM DISTRICT

# **CSR Project Funded by**

**CPCL** 



Executed by

**IIT Madras** 



**Project Coordinators** 

Prof. Ligy Philip and Prof. B.S. Murty

June 2021





### **PROJECT TEAM**

# **Project Coordinators:**

Prof. Ligy Philip Prof. B.S. Murty

# **Project Consultant**

K. Vivekanandan, Chief Engineer (Retired)/TWAD Board

# **Project Associates**

Mr. R. Kaviyarasan Mr. S. Yoganathan Mr. Kumaran

### **Research Scholars**

- Dr. Anu Raichal Thomas
- Mr. Karthik

### M. Tech Students

• Dr. Abilarasu A

## **Project Partners**

- CUBE, IIT Research Park, Chennai
- United Way, Chennai
- CSIE, IIT M, Chennai





### **EXECUTIVE SUMMARY**

The project area falls in the tail end reach of Cauvery-Kollidam River basin comprising 21 Waterbodies comprising Ponds/Kuttais. The main stay of their livelihood is Agriculture. Most of them are agricultural farm labourers. The Project conceptualized by IIT M, envisioned a clean and healthy Village Development Programme by adopting sustainable Water supply, water conservation, waste management, resource recovery practices and Solar energy alternatives.

The pre-implementation status revealed dysfunctional Toilets which are neither operational nor used and no Septic tank in the existing system. The existing water supply from Kollidam CWSS is scanty during summer months besides the local sources turned brackish and thus water scarcity is rampant in summer months. The shallow aquifer sources either dried up or can't yield sufficiently during summer and not potable beyond 6 to 10 m. The cumulative neglect of 21 waterbodies dependent on Cauvery basin flow and rainfall needed rejuvenation. The power shortage during summer months left them in dark and hence it is proposed to provide solar lights to households and Streets under this Project. Schools and Anganwadi buildings were neglected and sanitation was very poor.

M/s Chennai Petro Chemicals Limited (CPCL) sworn MoU with ICSR of IIT-M on the 21<sup>st</sup> of June 2018, to undertake Corporate Social Responsibility (CSR) initiatives. The scope caters Village Development Programme in the selected beneficiary villages of P.Panangudi, M.Pannagudi in Panangudi Panchayat and Gopurajapuram and Vellapakkam in Gopurajapuram Panchayt of Thirumarugal Union in Nagapattinam District.

The IIT M- Civil (EWRE) took up Survey and concept Design of the component activities envisaged under this Project and the project executed by concerted coordination with the following Project Partners since conception to completion:

- CUBE's Activities: Infrastructure works (Household Toilets, Pond Rejuvenation, Water Supply improvements & Drinking water distribution, Solid Waste Management, Waste water Treatment School improvements/, Anganwadi renovation & Community Hall.
- UWC's Activities: Awareness Programmes, Medical camps, Pedagogy improvement &
   Providing Solar Lanterns (2 nos each Household) and Street lights-150 nos
- CSIE/IIT M: Skill Development Activities in Tailoring & IT Skills identified in needs assessment.





IIT M- Civil (EWRE) completed the assigned task comprising topographic survey, Geohydrological investigations, and allied design activities for Water Supply, Solid Waste Management and Waste water Treatment Systems after appropriate onsite studies. The factual backdrops from the Geophysical Studies in the project villages revealed the need for new Deep Bore wells. Accordingly, after intensive scientific study, 2 nos of 300 m depth drilled during July 2019 and one more in P. Pannangudi near CPCL quarters during March 2021 to ease water scarcity. Both water quality and yield satisfy our requirements. The first 2 sources commissioned during March 2020 alleviated drinking water scarcity in both the Panchayats and is perceived happily by the public.

The multitude of Natural Calamities (Heavy Monsoon, Gaja storm, Corona pandemic for about 15 months) and 3 public elections (Parliament in May,2019, Panchayat in Jan 2020 and Assembly in May 2021) besides adversities after Panchayat elections hindered progress with inherent delays. Amongst all these hindrances and oddities, the project is being propelled by our enthusiastic infrastructure partner CUBE, United Way and CSIE by their sustained coordination and follow-up with all stake holders.

The gist of progress of various Activities implemented is itemized below:

- CUBE hitherto completed 432 Household Toilets with Drainfield drainage system in every household for onsite treatment within the available space was designed.
   Rejuvenation of Ponds (Total 17 nos) was successfully completed.
- 2. Training and awareness programmes were conducted for SWM in all the 5 villages. Communities were distributed two coloured dustbins for waste segregation at source (household level). Three garbage tricycles for waste collection were given to the Panchayats. Compost yard with all the necessary instruments like comprising Shredder, sieve shaker, packaging and allied tools for composting was constructed.
- 3. Water supply improvements in 5 villages with 2 nos deep borewells duly energized since March 2020 supply copious piped water in streets, Water supply distribution completing pipes procurement for Distribution and house connection,
- 4. UWC completed 27 Awareness Activities covering WaSH, SWM, and Water Conservation including Covid Awareness and health camps including provision of disabled friendly





Scooty with assistive devices. The project facilitated construction of new school building in P. Panangudi and renovation in 3 Anganwadis with safe sanitation facilities. School teachers and staff were trained in Pedagogy. House hold lanterns 900 nos with 2 per household completed during July 2019 including 150 Solar street-lights along with 250 additional lanterns during March 2021.

- 5. CSIE completed 4 batches of training for Tailoring and IT to benefit around 100 and 41 for Spoken English and 12 1<sup>st</sup> batch trainees formed SHG and earning revenue readily signify self-reliance and enhanced local employment as envisioned.
- 6. The much-needed synergy in place amongst CPCL, IIT M and our vibrant Project partners will ensure project completion as envisaged under the scope of the benign project.

The following Awards and Recognition 3 nos received by CPCL based on the project catalysed immense interest to perpetuate improvements amongst our partners:

- o "Best Practice Award in CSR" on 31.01.2020 from IoPE, Hyderabad
- Award for "Integrated Village Development" from M/s. Fun & Joy, Mumbai and ET on World CSR Day 18.02.2020, besides.
- CPCL had been declared Winner under the sector Oil Refining and received
   Golden Peacock Award for Corporate Social Responsibility (GPACSR) for the year 2019.