Success Stories and Best Practices

1. Turning Greywater into a Resource

Location: Serivelpuru, Andhra Pradesh

Mission LiFE Theme: Save Water

Serivelpuru, a village in Krishna district, faced a common rural challenge: most households generated greywater that either stagnated or flowed untreated into open areas. This created hygiene concerns and increased pressure on freshwater sources. To address this, the village adopted Soil Bio-Technology (SBT), a natural method that treats wastewater using layers of sand, gravel, red bricks, and microorganisms.

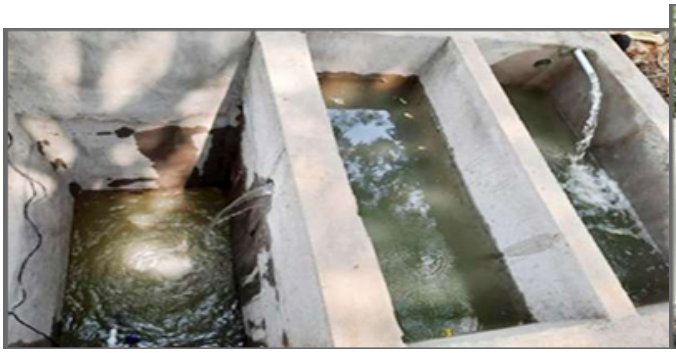
With support from the Rural Water Supply & Sanitation Department, Tata Trusts, and local development teams, a 30 KLD SBT unit was built. The system uses no chemicals, relies on gravity, and needs very little energy. Once operational, it began treating 100% of the village's greywater, making the water fit for non-potable reuse and reducing dependence on freshwater.

The community was fully involved. Awareness sessions helped residents understand how the system works and how they could maintain it. Over time, Serivelpuru became a self-sustaining model village, showing that rural water challenges can be solved through simple technology and strong community ownership.

Key Outcomes

- Full treatment and reuse of greywater within the village.
- Reduced pressure on freshwater sources.
- Near-zero energy use and carbon-free operations.
- A scalable model for rural greywater management.

Pictures:



2. **Clean Energy for Daily Living**

Location: Nirmala Das' Biogas Initiative, Tripura

Mission LiFE Theme: Reduce Waste, Save Energy

Abhanga village in Tripura relied heavily on firewood and traditional fuels for cooking. This meant long hours spent collecting wood, indoor smoke, and rising fuel costs. When Nirmala Das received support under GOBARdhan (Swachh Bharat Mission - Grameen) to install a household biogas plant, most villagers were unsure about switching from their age-old practices.

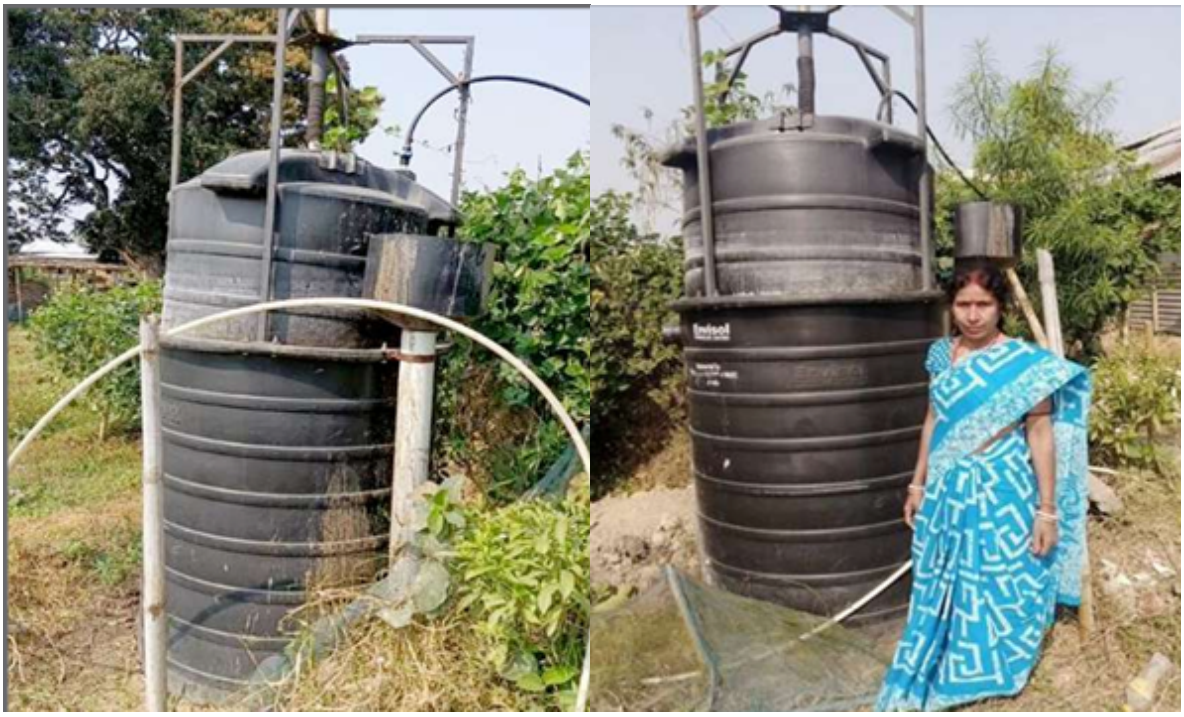
Nirmala's commitment changed that. She used cattle dung, kitchen leftovers, and farm waste to power a small biogas unit at home. The clean flame replaced smoky chulhas, cut down the need for firewood, and saved her family time and effort. As neighbours saw the benefits like cleaner kitchens, less pollution, and steady fuel, many households began adopting biogas plants as well.

What started as one woman's initiative slowly turned into a village-wide movement. Families began to value their organic waste as a resource, not a burden.

Key Outcomes

- Clean and reliable cooking fuel for households.
- Reduced indoor air pollution and healthier living conditions.
- Time saved from collecting firewood, enabling education and income-earning work.
- A strong community shift from traditional fuels to renewable energy.

Pictures:



3. A Clean Village Movement: Sripura Gram Panchayat Transformation

Location: Sripura Gram Panchayat, Odisha

Mission LiFE Theme: Reduce Waste

Sripura Gram Panchayat once struggled with scattered waste, open defecation, and unhygienic surroundings. Under the Swachh Bharat Mission, the Panchayat launched a focused transformation plan. The first step was achieving Open Defecation Free (ODF) status. Once basic sanitation improved, the village turned its attention to solid waste.

The community set up a structured waste management system with simple, low-cost tools. Residents began segregating waste at home. Composting units were introduced, and dry waste was collected regularly. Old garbage hotspots were cleaned and monitored by village volunteers. With training and support from partner organisations, Sripura even created market linkages to sell compost and recyclables. Within five months, the Panchayat earned Rs 13,500 from compost and dry waste sales, showing that waste, when managed well, can generate local income.

Key Outcomes

- Complete elimination of open defecation.
- Community-led waste segregation and composting.
- Revenue generation through sale of compost and dry waste.
- A replicable rural model of zero-litter habits and responsible waste management.

Pictures:

4. **MeitY & C-MET Hyderabad: National Programme on Recycling, Skills and Technology**

Location: Hyderabad, Andhra Pradesh

Mission LiFE Theme: Reduce E-Reduce

As India's consumption of electronic products has increased, so has the volume of discarded devices much of which was traditionally handled by informal workers using unsafe practices. To address this challenge, the Ministry of Electronics and Information Technology and C-MET Hyderabad have developed a comprehensive national programme that integrates training, awareness, and indigenous technology to promote safe and formalised e-waste recycling.

C-MET conducts hands-on training programmes on safe dismantling and material segregation, where participants work directly with tools and sample components. These programmes are open to start-ups, recyclers, MSMEs, and informal-sector workers, supported by user-friendly manuals and learning modules that help them adopt safer and more efficient practices. A Train-the-Trainer initiative is also underway to build a network of master trainers and facilitate the development of 30 e-waste recycling clusters across the country.

To strengthen professional capacity, C-MET and IIT Hyderabad jointly offer a two-year M.Tech. programme in E-Waste Resource Engineering and Management, creating a new cadre of specialists in circular electronics.Save WaterSave Water The Centre of Excellence at C-MET Hyderabad serves as a national demonstration hub, equipped with pilot-scale facilities for

recycling printed circuit boards, lithium-ion batteries, permanent magnets, and solar cells. It showcases the complete recycling process from dismantling to metal recovery using advanced systems such as rotary furnaces and automated de-population units. The Centre also provides RoHS testing services for hazardous substances.

C-MET regularly organises workshops, public events, and open days to build awareness among citizens, students, officials, and industry representatives about the importance of safe e-waste handling. These engagements include lectures, group discussions, hands-on dismantling sessions, and guided visits to the demonstration plants.

C-MET's indigenous technologies have been transferred to 30 private industries, strengthening India's formal recycling ecosystem. More than 3,000 individuals have received structured training, including government officials involved in enforcing EPR rules. Additionally, seven start-ups have been incubated and supported in adopting formal e-waste recycling processes.

Key Outcomes

- A national framework linking skills, technology, and regulations.
- Formal pathways for informal workers to join registered recycling units.
- Industry-level adoption of indigenous recycling technology.
- Wider public awareness on safe disposal and recycling.
- Strong contribution to Mission LiFE's "Reduce Waste" theme.

This programme shows how coordinated action can build a circular economy for electronics in India.

5. **Micro-Sprinkler Irrigation for Potatoes**

Location: Gurdaspur (Punjab)

Mission LiFE Theme: Save Water, Adopt Sustainable Food Systems.

Farmers in Gurdaspur had long depended on flood irrigation, which used large volumes of water and often resulted in uneven moisture levels. For potato growers, this meant lower yields and greater vulnerability to pests.

Lakhwinder Singh, a farmer from Jogowal Jattan, installed a micro-sprinkler irrigation system with subsidy support under Pradhan Mantri Krishi Seenchayi Yojana (PMKSY). The new system distributed water evenly, reduced disease incidence, and enabled precise fertilizer application. It also helped him adjust irrigation based on the crop's micro-climate conditions.

Key Outcomes

- Potato yield rose from 330 to 400 quintals per hectare.

- Net income increased from ₹50,800 to ₹1,01,878 per hectare.
- Water use dropped, and crop quality improved noticeably.

This shift demonstrated how water-saving systems can transform crop productivity and income while supporting Mission LiFE's call to save water and adopt sustainable food systems.

6. **Drip Irrigation for Dragon Fruit**

Location: Gurdaspur (Punjab)

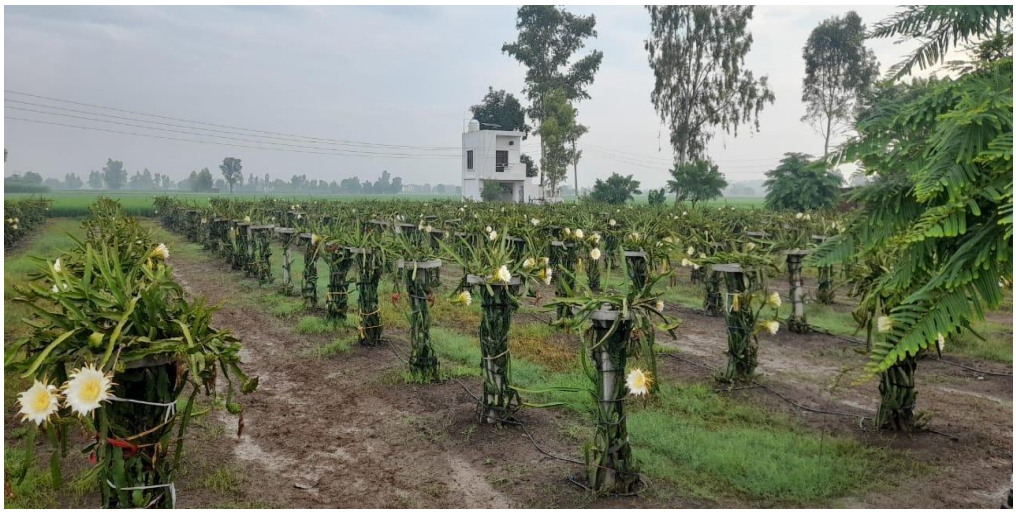
Mission LiFE theme: Save Water

As dragon fruit cultivation grew in Punjab, many farmers struggled with excessive water use and irregular moisture when using traditional irrigation. Tajinder Singh from Raheemabad decided to try drip irrigation on half a hectare of his farm, with support under PMKSY.

The drip system delivered moisture directly to the plants' root zone, cut water usage by up to 85%, and reduced weed growth. The plants grew steadily and produced better-quality fruit.

Key Outcomes

- Yield rose from 16–18 to 20–22 quintals per hectare.
- Net income increased from ₹46,000 to ₹1,72,840 per hectare.
- Labour needs fell, and water was used far more efficiently.
- This case shows how drip irrigation can support high-value horticulture while conserving water.



7. **Restoring Orans through Waterbodies**

Location: Rajasthan

Mission LiFE Theme: Save Water

In Rajasthan, “orans” have long been sacred community forests that also serve as natural water-conservation zones. Over the years, many of these orans became dry and degraded due to neglect and changing land-use practices. This affected water availability, grazing areas, and local biodiversity.

To revive these landscapes, village communities worked with civil-society organisations to restore traditional water structures. They desilted old tanks, rebuilt broken embankments, and repaired rainwater-harvesting systems that had supported local life for generations. Women played an active role, from planning to maintenance, strengthening community ownership.

The restoration brought visible change.

- Groundwater levels improved, and water became more easily available for people and livestock.
- Biodiversity returned, and fodder supply increased, supporting rural livelihoods.
- Women spent less time collecting water, and many cultural practices linked to orans were revived.

The story of these orans shows how local knowledge and collective effort can restore water security in some of India’s driest regions.