

# **ECOGRAM®**

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Clean village, healthy future

#### **ECOGRAM PROJECT Y8**

Annual Report 2024-25

### **Before EcoGram Project**

Garbage from approx 2500 waste generators (~53 tons per month) was being dumped and burnt, causing AIR, WATER, and SOIL POLLUTION.







Frequent Garbage Dumping and Burning

Littering and burning in Farm Lands

## Before EcoGram Project





Mixed Waste dumped on Empty Site

Black Spots in the Villages

## After EcoGram Project



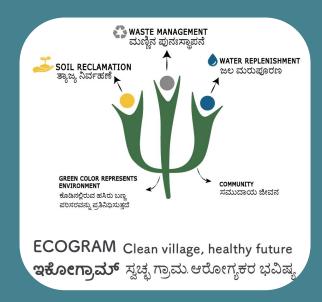




#### **About EcoGram Project**

The EcoGram Project, an initiative by The Anonymous Indian Charitable Trust (TAICT) and funded by Embassy REIT under the Sustainable Environment focus area, works towards addressing issues of irresponsible disposal of garbage and depletion of soil and water in the Bettahalasur Panchayat in North Bangalore. The focus of the project is to create a model Gram Panchayat by building processes and infrastructure for sustainable decentralised waste management, soil quality, and water conservation in order to lay a strong foundation for any future growth. The project brings together community members, local governance, and investors.

- A CSR project by 'The Anonymous Indian Charitable Trust' (TAICT.org) in partnership with Embassy REIT.
- The vision of the project is to create a model Gram Panchayat in terms of waste, water, and soil management.
- Started in 2016 in Bettahalasur Gram Panchayat in North Bangalore
- 10 villages in Bettahalasur Gram Panchayat



## **UN Sustainable Development Goals**



ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING



6 CLEAN WATER AND SANITATION



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



15 LIFE ON LAND



17 PARTNERSHIPS FOR THE GOALS



## **Solid Waste Management Highlights:**



Year 8 focused on strengthening the long-term sustainability of the project, particularly in the implementation and institutionalization of solid waste management (SWM) operations in Bettahalsur Panchayat. A key priority was ensuring that we move toward a financially viable and Panchayat-led SWM system, reinforcing long-term sustainability and community ownership.

- In 2023-24, we worked closely with the Gram Panchayat to implement SWM user fees as per the Karnataka Panchayat Raj (Management of Solid Waste) Model Bye-Laws 2020. Despite efforts, only around 20% of waste generators paid for seven months of SWM services. To improve compliance, user fee cards were distributed to non-bulk and commercial waste generators across all 10 villages for FY 2024-25. However, recognizing the challenges in direct collection, the Panchayat has decided to integrate the SWM user fee into property tax. As part of this transition, TAICT will generate user fee bills for services provided to the Panchayat.
   In FY 2024-25, we received ₹22,26,802 from the Gram Panchayat for SWM operations.
- To further enhance financial sustainability, a revised operational model was introduced. HDI, the service provider, continued processing dry, sanitary, and reject waste at gradually decreasing rates (Q1 ₹10/kg, Q2 ₹5/kg, Q3 ₹5/kg, Q4 ₹5/kg). Meanwhile, TAICT took over the collection, transportation, and management of wet waste in FY 2024-25 as an interim measure to improve efficiency before the Panchayat or another agency assumes responsibility.
- Institutionalizing project ownership was another critical milestone. A 15-member Steering Committee was successfully formed, as outlined in the MoU and bye-laws, to oversee SWM operations. The committee includes key stakeholders such as the Zilla Panchayat Executive Officer, Panchayat Development Officer, elected Panchayat President, prominent residents, and other local representatives. Four meetings were held in FY 2024-25, focusing on long-term governance and financial accountability.
   Key outcomes achieved:
  - \*The Panchayat has started installing CCTVs to monitor littering and ensure compliance.
  - \*User fee payments to TAICT have become more consistent, and bulk generator arrears were recovered with Panchayat intervention.
  - \*After five years of effort, MVIT College has agreed to onboard as a bulk generator, thanks to the pressure from the Steering Committee.

## Solid Waste Management Highlights:



- Villagers purchased the 400 Butea monosperma (mutthuga) leaf plates, bowls, and spoons for the village festivals. Drums and jumbo bags were provided to keep waste separate.
- Presented the EcoGram FY 2023–2024 impact report to Revenue Minister Krishna Byregowda, who appreciated the efforts, suggested scaling the project, and directed us to meet the RDPR Commissioner to discuss replicating the model across Gram Panchayats.
- **25 commercial establishments** received the SUP ban pamphlets and agreed to not use the single-use plastics. **9 shopkeepers** paid the fines, and the marshal seized the plastic covers that were in stock at the vegetable shops and provision stores.
- In FY 2024–25, a total of 7,428 kg of compost was sold to local farmers at a subsidized rate of ₹2 per kg
- A marshal for the fines collection and blackspots monitoring was hired from the Karnataka Ex-Servicemen Welfare Society.
- Eco-friendly Ganesha Chaturthi awareness pamphlets were distributed to festival organizers. The PDO was requested to share them while granting idol permissions. Our staff visited all villages, resulting in proper waste segregation and increased use of biodegradable cutlery.
- **22 Solid Waste Management Workers Honoring Ceremony** organised by the Bettahalasur Gram Panchayat on the account of Gandhi Jayanti.
- Lunch for 30 solid waste management (SWM) workers is being provided daily by the Akshaya Patra Foundation.
- Two interns from Samvada Baduku worked for 2 months under TAICT for the EcoGram Project.
- The EcoGram entrance board, displaying the slogan "Our Clean Gram Panchayat, Our Pride," highlights SWM penalties to promote awareness and behavior change, signaling a litter-free zone to visitors.
- A total of 53 awareness boards were installed in all the villages.
- 85 employees from All State India participated in the Betthalasuru Lake cleanup drive, which was coordinated by EcoGram, Gram Panchayat, and Forward Foundation. The employees collected 210 kg of waste from the lake.
- Awareness was provided to event organizers, and cleanup drives were monitored after six major events, with organizers' housekeeping staff managing event waste and main road cleanups ensured post-events.
- The MoU for solid waste management with 28 bulk waste generators has been renewed for FY 2025–26 with revised rates to ensure continued efficient SWM service.

#### Solid Waste Management Infrastructure



Installation of **72 Nos solar panels** with a total capacity of 545 Wp each. The EcoHub Solar System (as part of EcoHub Solar Project) is funded by ANZ Support Services India Pvt Ltd.

Setting up 1 Hybrid inverter of capacity 40 KVA for system conversion and optimization. However, after commissioning, the inverter began tripping due to overload. A subsequent load analysis revealed that the demand exceeds the installed capacity. As a result, it was decided to upgrade to a 100 KVA hybrid inverter to accommodate the higher load.

The Neox Version 2 machine was installed at EcoHub for testing incineration cycles.

The Tata Ace vehicle compartment was refabricated, and the tires have been replaced.

Nine solar lamps were installed at EcoHub, funded by Athang Tollways Pvt. Ltd.

A safety barricade has been set up for worker protection during the weekly cleanup drive, funded by Trident Automobiles Pvt. Ltd.

Tarpaulins were installed on two Tata Ace vehicles to prevent waste spillage and ensure safe transportation.

A lock system has been installed on four Tata Ace fuel tanks to prevent fuel theft and enhance security.

A recce was conducted to identify the most suitable shredder and chopper machines for wet waste operations. ANS Consultant's machines were finalized, and the order has been placed, with delivery expected in April 2025.







## **SWM Fines and Penalties :**

Village Name	# Violations	Total Fines collected
Bettahalasuru	20	₹17,000.00
Gadenahalli	1	₹2,000.00
Kudrugere	1	₹5,000.00
MVIT Road	8	₹12,200.00
Narayanapura	4	₹3,200.00
Nellukunte	20	₹19,200.00
Papanahalli	5	₹7,300.00
Sugatta	27	₹23,800.00
Tarahunise	3	₹11,000.00
Thimmasandra	10	₹39,000.00
Grand Total	99	₹139,700.00



## **Community Outreach/Visitors:**

Visitors to the Project	# Visitors/teams	# of Students
Elected Reps	22	
Gram Panchayat/Municipalities Officials	21	
Govt Officials	77	
College Students	4	117
School Students	3	110
Other	81	
Employee Engagement	94	
Total Visitors in 2024-25	302	227



## **Community Outreach/Education:**

Activity	Number	Outreach
SWM and WWM Workshops	19 workshops	-1 SHG -7 Bulk Generators -2 Government school's housekeeping staff -2 college. 489 participants in total
Door-to-door SWM Awareness	10 villages	The number of WGs reached 4282, 127 new residents in the GP, and 43 units of 2-bin-1-bag sold. EcoGram TOL ladies had conducted the door to door awareness village segregation at source, which is 96.77%.
Trashonomics Workshops	5 workshops	205 students
Health Checkup	3	25 staff from the operations/TAICT team received a full-body health checkup.
Fire Safety workshop	1	30 staff from the operations/TAICT team and 3 staff from lake participated in the workshop.
Snake safety workshop by the Wildlife ARRC organisation	1	29 staff and farmers participated in the snake safety awareness workshop, helped the farmers and solid waste management workers to improve the public outlook on snakes, reduce fear through education, ensure the safe handling of snake encounters, and promote the conservation of these vital ecosystems.
Alcohol rehabilitation workshop for all the workers	1	Since we observed that many of our employees suffer from alcohol addiction, we contacted the Shri Kshetra Dharmasthala Rural Development Project (SKDRDP). Mr. Narashimanna led a workshop for 22 employees during which he discussed the adverse health consequences of alcohol addiction and provided information about free rehabilitation programs run by the SKDRDP.
Event waste management awareness and collection	51 events	8,933 kgs of waste collected

## Clean Up Drives/Black Spot/Weekend Clean Ups in Villages:

Village	Number of Clean Up Drives	Total Amount of Waste Collected in Kgs
Agrahara	6	66
Bettahalasur	122	8,433
Gadenhalli	5	236
Kudhrugere	27	2484
Narayanapura	18	1862
Nellukunte	42	4923
Papanahalli	24	3034
Sugatta	77	11,489
Tarahunise	28	1217
Thimmasandra	84	6496

## **Solid Waste Management Coverage:**

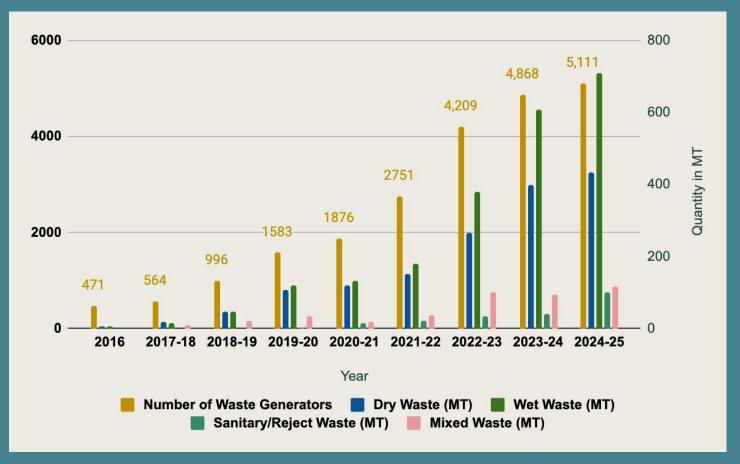


- Door-to-door stream-based waste collection for the waste generators.
- Alternative day collection of organic (wet), recyclable (dry), sanitary, reject, and mixed waste for all villages.
- All collected organic waste is processed at the EcoHub Wet Waste Shed using windrow composting and at the EcoHub Land through trenching.
- All collected dry waste is sorted at DWCC (dry waste collection center) into 26 categories and sold to aggregators and recyclers.
- Rejects from dry waste, sanitary waste, and mixed waste are sent to MSGP Infra Tech, Pvt. Ltd. (govt-approved landfill).
- Weekly meetings assessing the 19 Key
   Performance Indicators

Village	WGs	Bulk Generators - Residential	нн		
Village	WGS	nesideriliai	nn		
Agrahara	178	Utopia	45		
Bettahalasur	399	Utopia Phase 3	17		
Bettahalasur-2	567	After The Rain	56		
Bettahalasur-3	348	Lubimaya	15		
Gadenhalli	227	ATR Labour Shed	500		
Kudhrugere	264	Embassy Boulevard	170		
		Bulk Generator	27		
Narayanapura	203	Institutions			
Nellukunte	548				
Papanahalli	63				
Sugatta	688				
Tarahunise	501				
Thimmasandra	296				
Total WGs in Villages	4282	Total BG's	830		
Total WGs	5112				

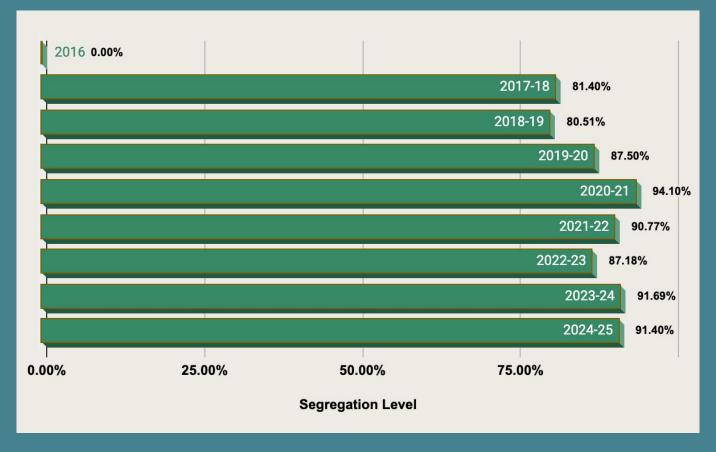
## Solid Waste Management Data





## Solid Waste Management Data - Segregation Level





## **Dry Waste Categories :**



		Weighed				15	PET Bottles Green	113.00	₹30.00	0.03%	Plastic
SL No	Waste Type	quantity (kg)	Average Rate (Rs/kg)	Percentage	Category	16	PET Bottles White	877.00	₹35.00	0.20%	Plastic
1	Aluminium Foil	735.00	₹39.05	0.17%	Metal		Plastic Articles				
2	Aluminium Tins	1,147.00	₹92.35	0.26%	Metal	17	(Phugga)	13,889.00	₹17.93	3.19%	Plastic
3	Carton Boxes	36,418.00	₹21.77	8.37%	Paper		Plastic LDPE				
4	Coconut Shells	6,813.00	₹7.30	1.57%	Others		(Kadak)	5,758.00	₹5.50		Plastic
						19	Plastic Milk Bags	3,442.00	₹12.90	0.79%	Plastic
5	Colour Paper	71,446.00	₹30.43	16.42%	Paper						
6	E-Waste	983.00	₹0.00	0.23%	Others	20	Thermocol	874.00	₹24.38	0.20%	Plastic
7	Foam	748.00	₹14.13	0.17%	Plastic	21	White Paper	4,278.00	₹13.55	0.98%	Paper
8	Glass Bottles	25,588.00	₹3.50	5.88%	Glass		Woven Bags (HDPE				
9	LD Cover	2,861.00		0.66%	Plastic	22	Bags)	7,786.00	₹4.96	1.79%	Plastic
	LVP (Road	_,				23	Textile Rejects	82256	-5	18.91%	Rejects
10	Waste/ Super)	34,405.00	₹5.23	7.91%	Plastic						
11	Metal MS Heavy	442.00	₹19.00	0.10%	Metal	24	Mattress Rejects	11446	-2.8	2.63%	Rejects
12	Metal MS Light	6,160.00	₹17.44	1.42%	Metal			00 500 00	0.0	00.000/	D : (
13	MLP(Laminates)	15,205.00	₹2.50	3.50%	Plastic	25	Dry waste Rejects	90,583.00	-0.6	20.82%	Rejects
14	PET Bottles	10,747.00	₹28.06	2.47%	Plastic		Total	435,000.00	₹6.69	100.00%	

## **Impact**



Year	2016	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	
Number of Waste Generators	471	564	996	1583	1876	2751	4,209	4,868	5,111		
Dry Waste (MT)	5	19	48	107	121	153	267	398	435	1553	Metric Tons
Wet Waste (MT)	7	16	47	120	134	180	380	609	709	2202	Metric Tons
Sanitary/Reject Waste (MT)			0	4	16	21	33	41	100	215	Metric Tons
Mixed Waste (MT)		8	23	33	17	36	100	95	117	429	Metric Tons
Segregation Level		81.40%	80.51%	87.50%	94.10%	90.77%	87.18%	91.69%	91.40%		
Tons of Dry Waste Recycled (MT)	5	19	48	72	110	125	158	221	342	1100	Metric Tons
Number of Trees Saved	39	144	365	553	587	601	951	1,505	1,896	6641	Trees
Landfill Area Saved (m3)	63	222	571	929	1342	1503	2273	3,247	4,414	14564	Cubic Meters
Fuel Saved (KL)	6	22	54	81	106	115	190	280	326	1180	Kilo Liters
Energy Saved (MWh)	13	47	119	180	235	256	422	622	725	2619	MegaWatt Hour
Carbon Dioxide Equivalent (MT)	18	59	156	279	333	391	680	1,053	1,230	4199	Metric Tons
Equivalent number of cars taken off the road	4	13	34	60	72	84	147	227	267	908	Cars

## **Impact**













#### Water Highlights - Lake Maintenance :



- Regular watering of saplings, deweeding, and cleanup activities continue at Thimmasandra and Tarahunise lakes.
- A letter was submitted to the Panchayat requesting alternative arrangements for idol immersions and mandating the use of non-Plaster-of-Paris idols. However, no action was taken by the Gram Panchayat.
- A snake safety awareness workshop was conducted with the participation of 29 staff members and farmers. The session aimed to improve public perception of snakes, reduce fear through education, ensure safe handling during encounters, and promote the conservation of these vital species.
- A bird-watching session and biodiversity workshop were conducted at Tarahunise Lake in collaboration with FERNSS for 31 eighth-grade students from Bettahalasur Government School.



## Community Outreach - EcoGram Threads of Life and Upcycled Product Development:

As part of EcoGram's community outreach, The Anonymous Indian Charitable Trust (TAICT), in collaboration with its knowledge partner Yuvalok Foundation, launched the *Threads of Life* (TOL) skill development program in 2022. Initially established in Tarahunise village, the program has since expanded to Bettahalasuru and Meenakunte villages through partnerships with Embassy REIT, WeWork India Pvt Ltd, and ADT Pvt Ltd. In alignment with EcoGram's commitment to environmental preservation, TOL incorporates an extended upcycled product development initiative where trainees upcycle waste materials into functional products. This fosters a culture of sustainability and builds a community dedicated to environmentally conscious practices.

FY 2024-25 Highlights:

41 students graduated from the three batches. Two graduation ceremonies were held where students received certificates. Students were given an option of purchasing sewing machines with a 50% subsidy. 40 students purchased the machines in order to start businesses at home.

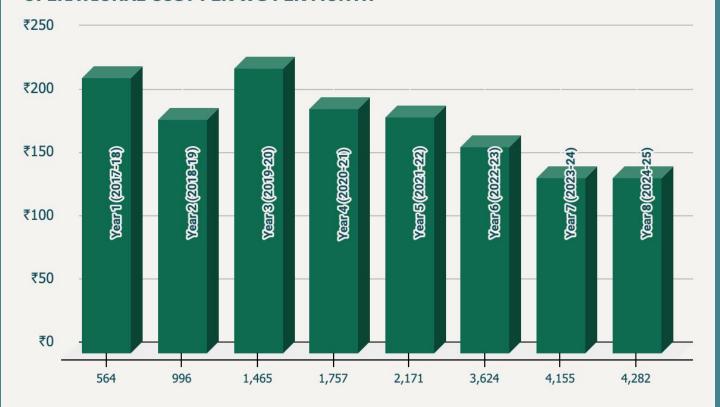
- Out of 28 students who graduated from batch 6 and 7, 1 is in the process of opening a boutique, 1 lady is taking tailoring orders from home, 9 other ladies are stitching clothes for themselves and their close family, thereby saving an average of Rs 3000 per month.
- The students participated in extracurricular sessions that included yoga ,fitness, saree prepleating, a legal upskilling workshop, art therapy, finance, inheritance law, domestic violence, and social media marketing along with talks on the importance of environmental conservation, including solid waste management. Employees of WeWork India conducted 6 of these sessions for three batches of students.
- As a part of the upcycled product development program, Post consumer textile waste collected from the project area (Approx 70 kgs: very small percentage of the total textile waste collected) was used to make a total of 460 products. The product range includes pouches, sling bags, totes, trays, baskets, keychain charms, and cord organisers. Techniques such as embroidery, patchwork and quilting were utilized to make functional products. 12 graduates of the TOL program worked to make these products and a total payment of Rs. 37965 was made as makers fee There were seven pop-up events where products were sold, including various WeWork locations across Bangalore, Stonehill International School, and SMVIT College. A total of ₹51,720 in sales was made during Q3−Q4.

Summary	Y8 Total Expenditure	Y8 Total Income	Percentage
Community Engagement: EcoGram Threads of Life: Upcycled Product	₹1,428,600		10.35%
Community Engagement: EcoGram Shakthi :SHG	₹47,400		0.34%
Awareness: Water	₹7,110		0.05%
Awareness: Waste	₹101,364		0.73%
Weekly Clean up Drives	₹243,143		1.76%
EcoHub Capex	₹309,107		2.24%
Project Management and Implementation	₹1,984,794		14.38%
Collection & Primary Transportation OpEx	₹4,126,114		29.90%
Dry Waste Processing & Disposal OpEx Wet Waste Management Op Ex	₹5,116,885 ₹435,178		37.08% 3.15%
BG Income		₹2,569,940	
Wet Waste ( Compost Sale) Income	50 50	₹10,863	
Dry waste Sale Income		₹141,791	
TOL Registration Fees		₹25,500	
TOL Sewing Machine Fees		₹210,300	
TOL Product Sales		₹56,065	
2Bin1 Bag Sale		₹9,730	
SWM User Fees		₹2,226,802	
Honorarium / Shaina		₹156,000	
Y8 Total	₹1,37,99,695	₹5,406,991	
Projected Budget	₹15,127,872		
Balance from Previous Year	₹218,737	i i	
Embassy REIT Funds	₹6,078,786		
ANZ Funds	₹2,500,000		
Trident Hyundai Funds	₹300,000	2	
WeWork Funds	₹2,393,818		
		Y8 OpEx	₹99,21,320
Y8 Balance	₹3,098,637	%Recovery of OpEx from Income	50%





#### **OPERATIONAL COST PER WG PER MONTH**



#### **Photos and Testimonials**



BEFORE AND AFTER PHOTOS	https://drive.google.com/drive/folders/1-EsYG7L8XZPA 83x8Bf6jcVrw2K2CCuRJ?usp=sharing
TESTIMONIALS/FEEDBACK	https://www.youtube.com/playlist?list=PLrgMHlOPcA7w Nh htyBE2ExrwobcTJ4mj