



## Solid waste management in Rameswaram Island - “Green Ramesawaram project”

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### Introduction

Hand in Hand Inclusive Development and Services (HHIDS), is a non-profit company registered under Section-25 of the Indian Companies Act, 1956 with its office at Kancheepuram, Tamil Nadu, India. HHIDS works in the field of Solid Waste Management. This involves educating the people in waste management principles, conducting awareness programs and on field implementation of waste management. The project also ensures that the practices are implemented in a sustainable manner through community participation. The long-term objective is thus to reduce the environmental degradation caused by the unscientific handling of solid waste. The project aims at ensuring environmental, social and financial sustainability in a period of three years and advocating the 3 R concepts (Reduce, Reuse and Recycle), to achieve that the people are educated on the importance of segregating garbage at source and avoiding usage of disposable plastics. At present, Hand in Hand’s solid waste management project is implemented with community participation at 22 locations, in 8 districts, in the State of Tamil Nadu, Andhra Pradesh, Gujarat, and Union Territory of Puducherry; covering 156,878 families with a total population of 6, 27,512.

Hand in Hand India (HIH) works in association with Vivekananda Kendra to implement solid waste management initiatives as part of “Green Rameswaram project” at Rameswaram Island since 2014. The main objective is to create a clean, environment friendly and Green Rameswaram island, which includes preserving the ecology and marine biodiversity.

### Awards and Recognitions

- Environment Award for the year 2010, by Govt. of Tamil Nadu
- Selected as ‘Runner up’ in the BBC’s World Challenge contest, 2011

- UNEP World Environment Day challenge, 2012
- The fourth State Finance Commission of Tamil Nadu had asked for the recommendations for a better implementation of solid waste management in the state.
- First prize for excellent performance amongst CSR Partners under 'Watershed Development Programme in Tamil Nadu' for Nammiyampattu Watershed from NABARD in 2018.

## Description of solid waste

Both bio-degradable and non-biodegradable wastes (including plastics) are handled. Bio-degradable waste is either sent for composting or converted to energy through bio-methanation, gasification and other similar technologies. The non-biodegradable waste is sent for recycling thus diverting waste from landfills, reducing air, water and soil pollution and thus ensuring environmental sustainability.

## Mode of collection/transportation/processing

Hand in Hand India's solid waste management team operates in 10 wards in Rameshwaram. The municipal solid waste collection is done through door to door waste collection using the goods auto. Every morning 6 am to 2 pm, green friends (people engaged in door to door collection and processing of waste) go to each and every household to collect the waste. Orientation was given to all the residents about segregation at source and two coloured dust bins were provided to collect organic and domestic hazardous waste respectively.

A specially designed non-oven bag was given to every household for collection of recycle waste. Regular mass cleaning drives are conducted in the coastal areas including Agnitheertham, Dhanushkodi and other beach areas. Mass cleaning drives are done by green friends along with the help of the general public, NSS volunteers and Pilgrim volunteers. Huge volumes of plastic items, discarded clothes by pilgrims after religious rituals and marine debris are collected during the mass cleaning drives. During the observation of special days like coastal day celebration, The District Collector along with the other key officials joined the SWM team on cleaning drive and motivated the volunteers. To create awareness and to promulgate source segregation, Hand In Hand organized various behavior change communication activities like one on one campaign, one to group (Self Help Group Women), awareness programme for school and college students, picking litter campaign and sensitization programme for various stakeholders like women, Resident Welfare association (RWA), General public, tourist etc. Special IEC Programme using folk media are conducted from time to time to impart knowledge on solid waste management concepts to the fisher folk community. To create awareness among the general public and tourist special awareness programme using tamil folk art like Thappattam, street play and traditional puppet show was conducted.

## Impact

The issues of plastic littering are quite common in the Rameswaram Island as the tourist inflow is high throughout the year. Though the usage of plastic is banned, it has not been effectively enforced. Through this project a solid waste management culture was established in Rameswaram, which made the people in these premises to carry out the waste management in much more systematic way. Under the project, a decentralised composting facility was constructed and vehicles were procured for collecting waste, and dustbins and bags were provided to the residents to segregate waste at source. This project is benefitting 3,000 households in four wards and provide employment to 24 'Green friends' and seven managerial staff, who would be engaged in collecting waste from door to door for processing.

## Adoption of this method by others

The general public, NSS volunteers and pilgrim volunteers are also actively involving in this project. The District Collector along with the other key officials also joined the team on cleaning beach areas and motivated the volunteers. As an outcome of the proper implementation of solid waste management programme, District administration supported Hand in Hand through various initiatives under Swachh Bharat Mission and entrusted the responsibility to create a clean and green Rameswaram Island. Impressed by the success of the Solid Waste Management Project, ONGC came forward to fund Tangachimadam Village Panchaychat, the gateway of Rameswaram Municipality, Ramanathapuram District.

## Economical Aspects

A user fee payment is collected on a monthly basis to ensure the financial sustainability of the project. Impressed by the success of the Solid Waste Management Project, ONGC came forward to fund Tangachimadam Village Panchaychat, the gateway of Rameswaram Municipality, Ramanathapuram District.

In 2016, the public sector Oil and Natural Gas Corporation (ONGC) has launched a mega solid waste management project in this island on an outlay of Rs. 68 lakh. The project is jointly implemented by ONGC, Hand in Hand India and Rameswaram Municipality, will benefit nearly 3,000 households. The total outlay of the project is Rs. 68 lakhs. The ONGC bear the recurring expenses for six months and later hand over the project to the local municipality.

S.No.	Verticals	Budget (in Rs)
1	Water Management	6,06,30,000
2	Waste Management	7,16,82,600
3	Renewable Energy	1,33,40,000
4	New merchandise and Livelihoods	1,67,80,000

5	Building Heritage	2,09,96,000
6	Green Health	84,55,000
7	Marine Biodiversity	1,04,55,000
8	Landscaping and Beautification	1,42,75,000
9	Eco Tourism and Green Transport	2,36,10,000
Grand Total		24,02,23,600

## Conclusion

Hand in Hand's Solid Waste Management project works in partnership with local government and communities to initiate an environmentally and economically sustainable system. The project helped to improve local environment, protect the pilgrim island from air, soil and water pollution and boost tour.