



Sahastradhara: A Zero-Waste Tourist Destination Dehradun, Uttarakhand

3 Years Report
(July 2019 to June 2022)

In Partnership With:

Supported By:



**MAKEMYTRIP
FOUNDATION**

Partnership with MakeMyTrip Foundation

About MakeMyTrip Foundation

MakeMyTrip Foundation's vision is to be a catalyst for positively impacting high-footfall destinations, people and the environment by promoting sustainable travel and tourism. The four pillars of their charter include inspiring responsible tourism, supporting local communities, helping maintain ecological balance, and restoring and preserving heritage. Through these four pillars, they are contributing towards reducing carbon footprints, eradicating plastic pollution, and supporting local economies.⁽¹⁾

About Waste Warriors Society

Waste Warriors is a decade-old non-profit organization aimed at solving the waste management crisis of the eco-sensitive Indian Himalayan Region. The quantum of waste generated in these regions, including high-footfall tourist regions and remote isolated villages, has increased significantly over the last decade, and all of the waste generated is either dumped or burnt. Waste Warriors believes that human actions should not end up destroying the habitats of the wildlife in the region, and designs programs to empower the local communities to manage their own waste. We're a team of 120+ Warriors working in 7 locations in 2 states of Uttarakhand and Himachal Pradesh. .

The Approach

Community Engagement and Awareness-Raising

Govt. Partnerships and Implementation Support

Direct Action and Transformation Initiatives

Collection and Processing of Waste

The Objectives

1. To increase community participation in responsible solid waste management by encouraging segregation at source and avoiding practices like littering, dumping, and burning of mixed waste.
2. To reduce the amount of mixed waste entering the municipal dumping ground from the local residents, shops and commercial establishments through regular and affordable door-to-door dry waste collection services.
3. To set up and operate DWMC (Decentralized Waste Management Centre) to prevent and minimize littered waste on roads, water bodies, trails, waterfalls, and tourist hotspots.
4. To set up a composting unit to manage wet waste (biodegradable waste) within Sahastradhara.
5. To build the capacity of all stakeholders involved, i.e., local authorities, Gram Pradhan, Aanganwadi women, members from panchayat and ward members to prioritize solid waste management in line with SWM Rules 2016 and with Swachh Bharat Mission.

The Big Picture (2019-2022)

**86.6
MT**

Waste collected

Total waste collected over 3 years that was diverted from reaching dumpsites.

58.7%

Dry waste percentage

Average percentage of the total waste collected, that was sent for recycling.

User fees collection

Number of beneficiaries who have contributed by paying user fees.

193

User fees received (₹)

Amount of user fees collected from the beneficiaries in a year

**INR
55,200**

245

D2D waste collection

Households and businesses that participated in door to door waste collection.

23

Cleanup drives

Organised around Sahastradhara market and Dhanola village.

People impacted

No. of beneficiaries who have participated in our activities and are directly impacted.

2330

Engagement and Awareness

Interactive campaigns with target audience.

29



Sahastradhara - Reaching Zero Waste



Sahastradhara Waterfalls

Sahastradhara Entry



In July 2019, Sahastradhara had no means of waste collection or understanding of solid waste management. Moreover, there was poor infrastructure within the geography to battle this menace. As a result, the shopkeepers and local villagers around would practice irresponsible means of waste disposal such as mixing, open dumping, and burning of waste. As time passed, with the increasing tourist footfall, the waste generated became an issue seeming beyond control, negatively impacting the ecological sensitive region.



Green workers at Sahastradhara

The Project aims at making Sahastradhara as a zero-waste tourist destination through a complete transformation of the area through a dedicated approach targeting local residents and commercial establishment. The approach included public-awareness initiatives, community engagement activities, introduction of dry waste collection services in market areas, and processing of the waste. However, due to the Covid restrictions in this time, the project teams had to first support the community with the distribution of essential items like ration and safety kits. As the situation eased, the team regrouped and devised a plan of action for implementing SWM initiatives to achieve project objectives.

Sahastradhara - Reaching Zero Waste



The path towards creating an impact first involved capacity building of the beneficiaries with the aim to empower the community to take ownership of its waste and its proper management. This was followed by organising meetings with the District Tourism dept, SWAJAL, Business Association, Ward Members, and the District Panchayat Members and introducing them to a robust waste management system. The system included conducting door-to-door awareness outreach, providing regular waste collection service to local residents and commercial establishments, and finally processing of the waste at the Material Recovery Facility. The infrastructural support introduced here included dustbins, dry waste bags, tricycle rickshaws and a community-driven initiative to install a Material Recovery Facility. Additional support to strengthen awareness among the community on the impact of their waste was done through organising campaigns like clean-up drives, painting wall murals, conducting waste upcycling workshops, and other community awareness activities.



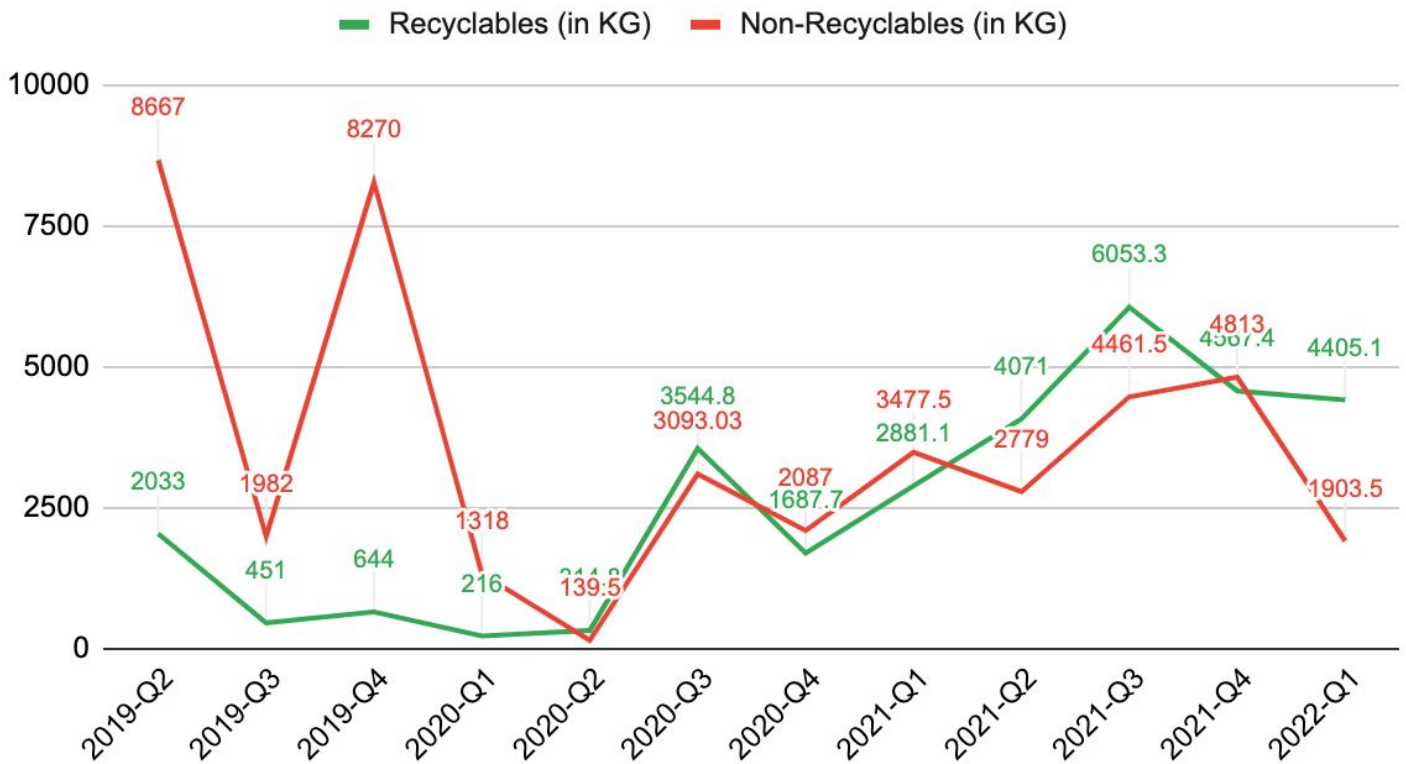
Green workers at Sahastradhara

These interventions have brought a positive behaviour change among the beneficiaries. While the businesses and tourists at Sahastradhara have regularised the practice of disposing their waste in the dustbins around the area, 94% households and businesses in the project have enrolled to the improved waste collection system where they provide wet and dry waste separately. This enthusiasm and increased participation by the community within this waste management system has motivated the Gram Panchayat, Zilla Panchayat, Panchayati Raj and SWAJAL departments to reroute their resources and augment this movement towards installing a Material Recovery Facility in Bandawali village. Thereafter, the district-level tourism department has aligned themselves and alongside imbibed the values of being responsible for one's own actions towards the community.

Impact Areas : 2021 - 2022

S. no.	Activity	Planned no.	Achieved no.
Community Engagement and Awareness Raising			
1	Cleanup Drives	2	5
2	Community Engagement Programs	2	4
Direct Action and Transformation Initiatives			
3	Door to door collection (Shops + HH)	160 + 100 (approx.)	120 + 125
4	Decentralised Waste Management Centre (MRF)	1	1 (WIP)
5	Dustbin Installation and Maintenance	45	45
6	Engagement Activities: Painting and Best out of waste activities with college and school students	2	3
Events			
7	Events with DMC / Local Bodies	1	2

Recyclables vs Non-Recyclables



The project has turned the waste composition around and has reduced the amount of non-recyclable waste generated in the project area from 81% in 2019 to 19% in 2022. Total recyclables and non-recyclables collected between 2019-2022 are 41.2 MT and 45.5 MT respectively.

Impact Areas: 2021-2022

	Q1 (Jul-Sep)	Q2 (Oct-Dec)	Q3 (Jan-Mar)	Q4 (Apr-Jun)	Total	Year Beginning	Year End
Eradicating Plastic Pollution							
Tonnes of waste collected	10.5 MT	9.3 MT	6.3 MT	12.7 MT	38.8 MT	10.5 MT	12.7 MT
Number of hotspots at the project site that have plastic load/ were used as waste dumping groups	7	3	2	2	14	7	2
% of dry waste collected and sent for recycling/reuse	57% (6053 kg)	48% (4567 kg)	68% (4231 kg)	81% (10286 kg)	64.5% (25137 kg)	57%	81%
% of wet waste collected (quarterly) (Note: No composting due to lack of infra.)	43% (4461 kg)	52% (4813 kg)	32% (2103 kg)	19% (2470 kg)	35.5% (13847 kg)	43%	19%
Supporting Local Economies							
Number of local job opportunities/livelihoods generated - local Green Workers	6	6	6	7	7	7	7
Number of establishments supported - DTD waste collection service	40	82	150	176	176	120	176
Monthly income generated from activities supported by the project (quarterly) - Sale of Recyclables and User-Fees	Rs 16906/- (Rs 12106/- - Sale of Recyclables Rs 4800/- User Fee)	Rs 18884/- (Rs 9134 - Sale of Recyclables Rs 9750/- User Fee)	Rs 19462/- (Rs 8462 - Sale of Recyclables Rs 11000 /- User Fee)	Rs 50222/- (Rs 20572 - Sale of Recyclables Rs 29650 /- User Fee)	Rs 105474/-	Oct 2021	June 2022
Gender Inclusion and Empowerment							
Number of women beneficiaries - Women in households we've taught source segregation to	0	0	0	0	0	0	0
Monthly income generated for women beneficiaries from activities supported by the project (quarterly)	NA	NA	NA	NA	NA	NA	NA

Program Achievements 2019-2022

Impact and Outreach				
Outreach	2019-20	2020-21	2021-22	Total
Villages	0	1	2	2
Households	0	60	125	185
Businesses	120	82	120	322
Green Workers	5	4	4	4
Community Participants	684	716	930	2330

Category	Heads	2019-20			2020-21			2021-22	
		Target	Achieved	Pending	Target	Achieved	Pending	Target	Achieved
Community Engagement and Awareness Raising	Clean-Up Drives (with IEC canopy)	12	6	6	6	12	0	2	5
	Community Engagement Programs	12	6	6	6	7	0	5	8
	Swachhta ke Sipahi	20	22	0	22	10	12	0	15
	Village Enrollment	0	0	0	2	1	1	0	1
	Anti-Littering Placards Distribution (for public transport)	550	0	550	550	150 (Buses and Taxi)	400	0	0
	Clean Business Program Enrollment	30	0	30	30	0	30	0	45
Direct Action and Transformation Initiatives	Door to door collection (B+H)	100	120	0	180	142	-	160 + 100	120 + 125
	Decentralized Waste Management Centre (DWMC)	1	0	1	1	0	1	1	1 (WIP)
	Installing and Maintaining Dustbins	50	50	0	50	50	0	45	45
	Area Beautification (murals)	10	3	7	7	1	6	1	1
	Anti littering Awareness Raising Sign boards Installation	12	9	3	3	26	0	0	0
Government Partnerships and Implementation Support	Events with DMC/ Local Bodies	2	1	1	1	1	0	1	2
Capacity Building	Staff Training and Skill building	0	0	0	3	3	0	0	0

Direct Action



Awareness activities:

- ❖ With groups in the villages
- ❖ With communities and stakeholders
- ❖ With school children
- ❖ With tourists
- ❖ With waste workers

2300+ People Engaged

Residents in Sahastradhara are now aware of the impact of their waste and now know why it is important to segregate waste and how waste can be of value when managed and processed properly.



Behaviour change:

- ❖ Improved understanding of waste and the stages of solid waste management
- ❖ Increased practice of segregation at source
- ❖ Induced practice of storing dry waste for daily waste collection

125 Families Onboarded

Households are now segregating their waste and give it to the waste collection vehicle. This has resulted in a reduction of waste entering the dump site.

Stakeholder Liasoning and Participation



Shopkeepers were sensitized on the benefits of source segregation and take responsibility for their waste. The team distributed awareness materials to help them and the tourists to understand source segregation easily.

120 Shopkeepers

Dedicated in-person activities with the shopkeepers have taught them how to deal with their waste and contribute to a cleaner locality.



From local shopkeepers to residents, the team identified active citizens from the area and with their support, encouraged the community to participate in project-related activities.

12 Swachhta ke Sipahi

Active citizens were recognized for taking part in our events like clean-ups, community engagement programs etc.

Area Transformation



Clean up drives Impact:

- ❖ Behaviour change in attitude and understanding towards waste
- ❖ Adoption of practices such as segregation at source and recycling
- ❖ Reduction of dumping spots to improve quality of life for the neighborhood

Art and Engagement Impact:

- ❖ Increased environmental awareness
- ❖ Reduction of waste dumping spots through beautification of areas
- ❖ Increased community spirit and participation

~2350 KGs Cleaned Up

Out of which approx. 1050 kg dry waste collected from the different black spots and dumping areas in the area.

Wall Murals

Created 5 beautiful wall murals around Sahastradhara.

Waste Management



Activation of Waste collection:

- ❖ Onboarding of households
- ❖ Onboarding of businesses
- ❖ Installation of community dustbins

Interventions include:

- ❖ D2D waste collection in 3 villages
- ❖ Primary segregation in 3 major categories
- ❖ Further segregation and processing at MRF

75.9 MT Collected

Waste collected in 3 years by the green workers through DTDC and from community dustbins installed at the location.

39 MT Recyclables

Dry waste sent to our Dehradun MRF which will be processed and sent for recycling.

Infrastructure



MRF Construction at Bandawali



Signboard installation at Dhanaula Bus Stand



Dustbin installation alongside Sahastradhara River



Tricycle rickshaws being used for daily waste collection



A Green Worker with self-made tools



A community member picking waste with litter picker



Providing Sanitizers to Green Workers



The Waste Truck during Waste Collection

Activities in 2021-22 Q4



With the aim of imparting awareness through art on littering and source segregation around the Sahastradhara market, the team organised a Wall Mural Painting competition. The competition was wrapped up with a prize distribution ceremony in the presence of Mr. Vir Singh Chauhan (Zila Panchayat Member), Mr. Jaspal Singh Chauhan (Uttarakhand Tourism DTO), Karliguard GP, members of Sahastradhara business association and the participants. Mr. Mohammad Moeen from Chitrarekha Art Institute judged the murals and announced the top 3 winners.

Wall Mural Painting

5 wall murals hand painted by 18 young participants in and around the locality.



The team organised a Best out of Waste activity to introduce the concept of waste upcycling among young minds. Schools children and their parents participated in this activity and created some beautiful art made out of used bottles, CDs, cardboards and earthen lamps etc.

Best out of Waste

42 participants, including schoolchildren of classes 5 to 10 and their parents participated in this activity and received a participation certificate.

Activities in 2021-22 Q4



The team collectively along with Himvant Foundation Society and students of Graphic Era University, organised a cleanup drive at Bandawali village. The drive started from the Bandawali anganwadi centre with the intent of spreading the message to "Save Soil" in the community.

Cleanup Drive

The drive kick-started with with inspirational songs, making the listener feel like the hero of their own story. 60 participants geared up and collected 57 kg dry waste that was lying in a 2km long patch, within 30 minutes.



To prepare the coming generation to be aware about the waste problem and take responsibility to protect their community and environment, the team organised 3 waste management awareness sessions with children of Dhanola village primary school and Gujrara Inter College, Sahasthradhara Road.

School Awareness

- ❖ Educated 40 children on the benefits of Reduce, Reuse and Recycling waste.
- ❖ Gave context to the importance and impact of segregation
- ❖ Provoked thinking for innovation with waste

Milestones



Best out of Waste



Dry Waste Bag Distribution



Door-to Door Awareness Raising



Engaged with tourists through Clean-up Drives



Business Association Meet with MMT Foundation Team



Jharipani Trail Cleanup Drive



Awareness Event with Gujrara Inter College students



Community Awareness at Bandawali village

About Waste Warriors

ABOUT OUR ORGANISATION

- Waste Warriors is a solid waste management NGO that was founded in 2012. We are a registered society that works through a combination of direct action initiatives, awareness-raising and community engagement programs, local advocacy, and long-term collaborative partnership with various government bodies.

OUR MISSION

- Our mission is to develop sustainable solid waste management systems by being a catalyst for community-based decentralized initiatives in rural, urban, and protected areas, and to pioneer replicable models of waste management, innovative practices in awareness and education, and to formalize and improve the informal livelihoods and stigmatized conditions of waste workers.

Our Impact since 2012

Waste Awareness

125,000+ people

directly engaged to raise public awareness to improve waste management.

Waste Management

5000+ MT

of waste collected to keep Himalayan ecosystems clean.

Waste Workers

500+ waste workers

engaged, onboarded, or trained through our efforts.

WASTE WARRIORS

REDUCE RE-USE RECYCLE

Head Office Address:

Waste Warriors Society
136/2/2, Shivam Vihar,
Jakhan, Rajpur Road,
Dehradun, Uttarakhand, 248001

Thank You. Let's Discuss.



+91-7895267144



www.wastewarriors.org



Info@wastewarriors.org

www.instagram.com/wastewarriors

Meet Mr. Naresh Godiyal



Naresh, now 51 years young, is the first Green Worker to join this project in 2019. Tasked with cleaning the dustbins, the Sahastradhara market lanes, and segregating the collected dry waste, Naresh says he likes the work, especially the part where he gets to talk to various people. Outside work, Naresh imparts awareness in his society on source segregation and has even inspired his son who now works in waste management with the Dehradun Nagar Nigam, all of which has added to his family's respect among his community peers.

Nowadays, Naresh is trying to speak in English, so that he can interact with a wider range of people.

Meet Mr. Anil Negi

Ever concerned with the cleanliness of his village, Anil joined the project as an Active Citizen in 2020 and as Community Mobiliser in 2021. As a resident of Dhanaula village and restaurant owner at Sahastradhara market, Anil helps in organising meetings with the gram pradhan, villagers and businesses owners. Although Anil has left Waste Warriors in September 2021, he continues to support our project as an Active Citizen. A true warrior in spirit, Anil practices source segregation at his home and insists his fellow community members to be responsible towards their waste.

