"Plastic Waste Management and Environment Protection Campaign"

Under "Azadi ka Amrit Mahotsav" & "75 Years of Azadi"

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Submitted To: - Gujarat Pollution Control Board

Prepared By NEPRA Foundation







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Summary

Under the "Plastic Waste Management and Environment Protection Campaign" for 100 days across Gujarat for the celebration of "75 Years of Azadi" & "Azadi ka Amrit Mahotsav", initiated by Gujarat Pollution Control Board, **Torrent Pharmaceuticals Ltd.-Indrad** has selected the below mentioned villages for the awareness programmes and management of plastic waste.

Sr.	Village	Collection Period	Plastic Waste	Awareness Activity
No.			Collected (kg)	
1	Ambavpura	17 th Nov,21 to 27 th Dec, 21	86	(A) Posters & Banners IEC (Information,
2	Bileshwarpura	17 th Nov,21 to 27 th Dec, 21	195	Education &
3	Chadasana	17 th Nov,21 to 27 th Dec, 21	96	Communication) (B) Door to Door
4	Dhanot	17 th Nov,21 to 27 th Dec, 21	76	(C) Commercial
5	Indrad	17 th Nov,21 to 27 th Dec, 21	119	(D) School (E) People Focused Awareness (F) Mass Awareness - Oath and Covid friendly awareness sessions
		Total:	572	





Overview

Plastic has become an integral part of our everyday life. Its varied characteristics- strong, light, cheap and versatile has made it ubiquitous, replacing other materials such as glass, metal, paper and wood. The quest for more and more plastic products in our everyday life has led to new developments to improve the quality and the strength of it and as a result increased the number of plastic products available in the market today. With its increased usage, the quantum of plastic waste being generated is also rising. While it is an important material for our economy, providing multiple benefits to modern day living, plastics take thousands of years to degrade naturally. Due to its long life in the environment, plastics today have accumulated everywhere.

There is no other material with the exact qualities and economic viability like that of plastic. Hence, it is important that we manage our plastic waste sustainably. There are many ways in which we can dispose of plastics in an eco-friendly manner. Depending on the nature of plastic- recyclables can be sent for recycling and the non-recyclables can be sent for Energy Recovery in Waste to Energy Plant or in cement plants where it is used as Refuse Derived Fuel (RDF) or for combustion, gasification and pyrolisation. This makes co-processing at cement plant the best option for continuous MLP waste disposal. It's also possible to now use non-recyclables to make roads.

Keeping in mind the various sustainable disposal practices of plastics, Gujarat Pollution Control Board (GPCB) initiated "Plastic Waste Management and Environment Protection Campaign" for 100 days across Gujarat for the celebration of "75 Years of Azadi" & "Azadi ka Amrit Mahotsav". Under the said campaign, the PIBOs have to carry out certain activities such as selection of villages, awareness programmes for people living in villages and management of plastic waste in co-ordination with sarpanch and nodal officer of GPCB.





Introduction of Company

Torrent Pharmaceuticals Limited is an Indian multinational pharmaceutical company, owned by Torrent Group and headquartered in Ahmedabad. The company's key areas are Formulations, API, Drug Discovery, Marketing and Sales of Drugs. Torrent pharmaceuticals limited – Indrad unit in Gujarat manufactures both API and Formulations.

Service Provider

NEPRA Foundation is a not for profit organization working for the upliftment of the underprivileged Bottom of Economic Pyramid (BOEP) workers of the waste management sector and spreading awareness about Dry waste management in different communities of the country. It undertakes awareness sessions in schools, universities, for ULBs etc. Over the years, the foundations efforts have been in increasing overall welfare of its target groups.

Objectives of the Initiative

- To make villages Plastic Waste Free with the motto of "zero waste to landfill" over a period of 100 days.
- ❖ To bring behavioral change in villagers for plastic waste management.
- ❖ To reduce environment pollution & improve quality of life in rural areas.
- ❖ To ensure end disposal of dry waste generated in rural areas.





The Process

As part of the initiative, NEPRA started with waste assessment of different villages. Identifying villages where there is a waste management system already in place and others where work needs to be done from scratch. The team approached the respective Panchayats to get an understanding of the current waste management scenario and plan a road way ahead.

NEPRA then ensured the collection and disposal of waste for the duration of 100 days in the villages. Together with the gram panchayat, different spots were identified where bins were placed for villagers to dump their dry waste (especially plastics) in. NEPRA's team conducted different levels of awareness in the villages to make people aware about the bins placed at different spots. They were asked to put their dry (plastic) waste in the bins. NEPRA now ensures regular collection of the accumulated dry waste and then sends it for its sustainable disposal- to recyclers or waste to energy plants based on the type of waste.

Village Identification and Waste Assessment Coordinating with Panchayats, arranging labours and deployment of dustbins

Regular Collection of Plastic Waste and ensuring its Sustainable Disposal

At each level of the process, several awareness sessions are conducted throughout the 100 days initiative to ensure behavioral change and proper execution.





Awareness Model

Awareness was conducted by NEPRA at different levels to ensure that villagers are sensitized and well informed about the initiative and how important it is. The levels of awareness engagement are as:

- The initial engagement is at the IEC (Information, Education and Communication); putting posters and banners at different village sites to spread knowledge.
- Second, individuals of the community were approached and informed by Interpersonal Communication: Door to door awareness for households were conducted.
- Engagement at Common Spaces and Shops: Main centers at the village where people gather everyday were identified and awareness was conducted for them at those times. Also, small stores and shops selling groceries and provisional stores, tea stalls and shops selling tobacco, etc. were identified and awareness was conducted especially with the shopkeepers to encourage their clients to use the right bin for disposal of items they buy.
- Waste Management Education Initiative: Schools in the villages were approached and waste awareness sessions were conducted for students. The students were given the role to be change makers, becoming "Swachhta na Sainik", encouraging villagers to use the bin, collect plastics in school and bring about an environmental impact.

The awareness drive included information on the following topics:

Waste and its type

Segregation and its importance

Why plastic and other dry waste should be segregated

Why burning waste is not a good practice

Sustainable Disposal methods for Wet and Dry Waste

Importance of Recycling





Posters & Badges



Types of Waste & Segregation



No Burning



Do's & Don'ts





NEPRA Releation

Importance of Waste Management

Single Use Plastic

Badge for "Swachhta Na Sainik"





Villages identified for the activity

Sr. No.	Village Name	Location	Sarpanch Name
1	Ambavpura	Kadi, Mehsana	Smt. Vankar Jashiben
2	Bileshwarpura	Kalol, Gandhinagar	Shri. Gambhirji Thakor
3	Chadasana	Kadi, Mehsana	Shri. Ranaji Thakor
4	Dhanot	Kalol, Gandhinagar	Shri. Dahyaji Thakor
5	Indrad	Kadi, Mehsana	Shri. Vikramji Thakor





IEC Awareness

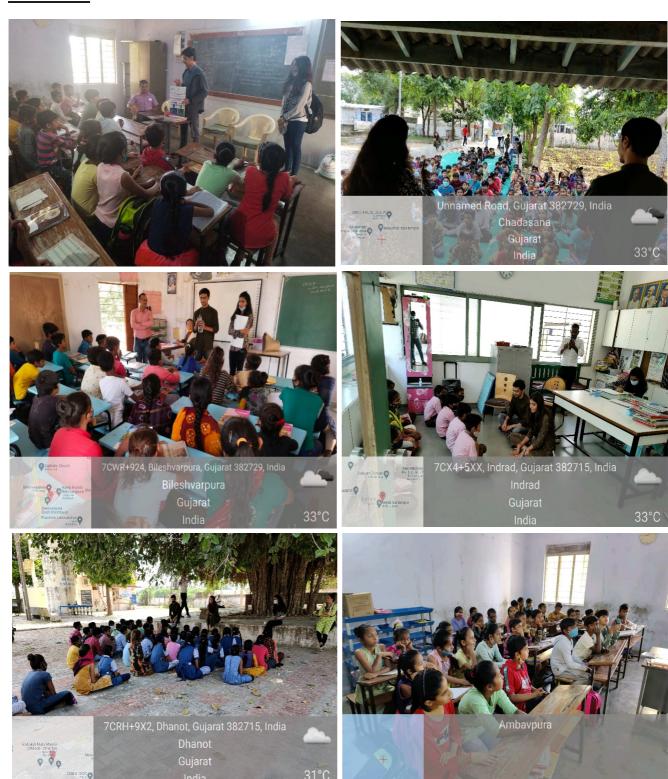


Banners & Posters are pasted at different location in village for awareness





At School



Awareness session with school students regarding waste management & types of waste.





At Common Spaces



Sensitizing the people at common areas of gathering





At Households



Door to Door awareness & sensitizing on disposal of segregated waste in dustbins





At Shops



Shop to Shop awareness & sensitizing on disposal of segregated waste in dustbins





Collection

NEPRA's team arranged regular collection pickup from each village. The waste collected regularly belongs to the multi layered category and contaminated in non-recyclable films. It shall be ensured that the collected dry waste (mostly plastic) was sorted and sent to coprocessing for sustainable disposal of the waste. The model of collection is placing the dustbins at the village where people gather every day and handpicking of the waste by the laborers. The details of the waste collected is shown in the table below:

Village 1 Ambaypura Collection Report

Sr. No.	Date	Plastic Waste Collected
		(Kgs)
1	27-Dec-2021	3
2	26-Dec-2021	1
3	25-Dec-2021	1
4	24-Dec-2021	3
5	23-Dec-2021	2
6	22-Dec-2021	2
7	21-Dec-2021	3
8	20-Dec-2021	4
9	19-Dec-2021	2
10	18-Dec-2021	2
11	17-Dec-2021	2
12	16-Dec-2021	2
13	15-Dec-2021	2
14	14-Dec-2021	3
15	13-Dec-2021	3



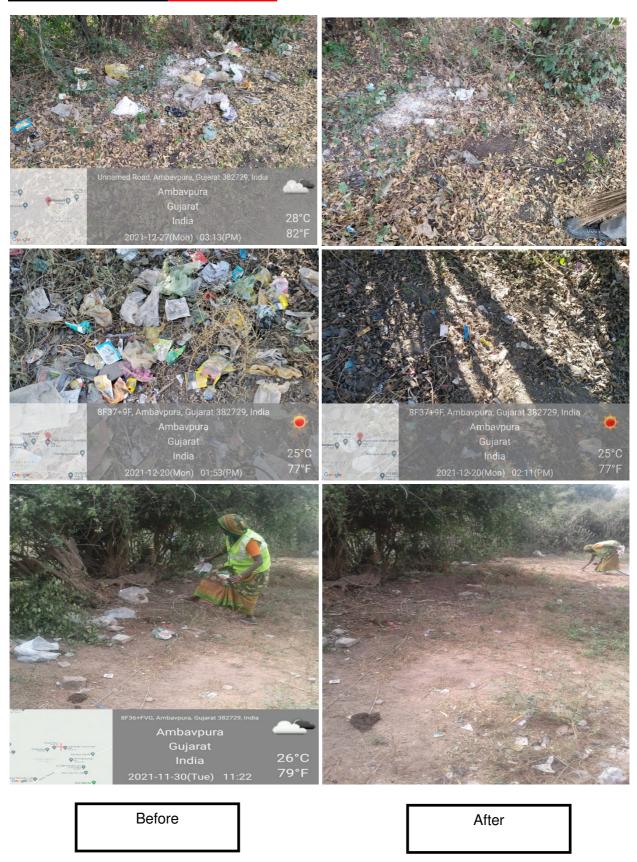


16	12-Dec-2021	2
17	11-Dec-2021	2
18	10-Dec-2021	4
19	09-Dec-2021	6
20	08-Dec-2021	1
21	07-Dec-2021	2
22	06-Dec-2021	2
23	05-Dec-2021	2
24	04-Dec-2021	3
25	30-Nov-2021	2
26	29-Nov-2021	2
27	28-Nov-2021	2
28	26-Nov-2021	3
29	24-Nov-2021	2
30	23-Nov-2021	2
31	22-Nov-2021	5
32	20-Nov-2021	4
33	18-Nov-2021	3
34	17-Nov-2021	2





Collection of Waste (Ambaypura)







Village 2 Bileshwarpura Collection Report

Sr. No.	Date	Plastic Waste Collected
		(Kgs)
1	27-Dec-2021	4
2	26-Dec-2021	2
3	25-Dec-2021	5
4	24-Dec-2021	3
5	23-Dec-2021	7
6	22-Dec-2021	7
7	21-Dec-2021	7
8	20-Dec-2021	9
9	19-Dec-2021	6
10	18-Dec-2021	3
11	17-Dec-2021	6
12	16-Dec-2021	7
13	15-Dec-2021	5
14	14-Dec-2021	3
15	13-Dec-2021	8
16	12-Dec-2021	7
17	11-Dec-2021	6
18	10-Dec-2021	6
19	09-Dec-2021	10
20	08-Dec-2021	8
21	07-Dec-2021	8
22	06-Dec-2021	3



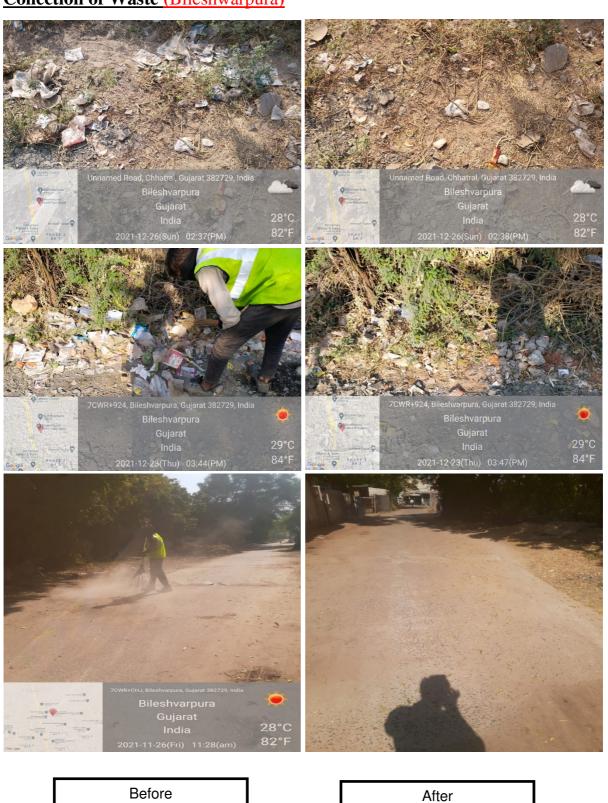


23	29-Nov-2021	4
24	28-Nov-2021	2
25	27-Nov-2021	7
26	26-Nov-2021	6
27	25-Nov-2021	6
28	24-Nov-2021	7
29	23-Nov-2021	6
30	22-Nov-2021	8
31	20-Nov-2021	5
32	19-Nov-2021	8
33	18-Nov-2021	6





Collection of Waste (Bileshwarpura)



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Village 3 Chadasana Collection Report

Sr. No.	Date	Plastic Waste Collected
		(Kgs)
1	26-Dec-2021	2
2	25-Dec-2021	1
3	24-Dec-2021	2
4	23-Dec-2021	2
5	22-Dec-2021	3
6	21-Dec-2021	2
7	20-Dec-2021	2
8	19-Dec-2021	3
9	18-Dec-2021	5
10	17-Dec-2021	2
11	16-Dec-2021	4
12	15-Dec-2021	2
13	14-Dec-2021	1
14	13-Dec-2021	2
15	12-Dec-2021	1
16	11-Dec-2021	3
17	09-Dec-2021	3
18	08-Dec-2021	3
19	07-Dec-2021	2
20	06-Dec-2021	2
21	04-Dec-2021	2
22	03-Dec-2021	3





23	02-Dec-2021	3
24	01-Dec-2021	3
25	30-Nov-2021	1
26	29-Nov-2021	2
27	27-Nov-2021	5
28	26-Nov-2021	2
29	25-Nov-2021	3
30	24-Nov-2021	1
31	23-Nov-2021	3
32	22-Nov-2021	3
33	21-Nov-2021	6
34	20-Nov-2021	2
35	19-Nov-2021	4
36	17-Nov-2021	6





Collection of Waste (Chadasana)



Before

After





Village 4 Dhanot Collection Report

Sr. No.	Date	Plastic Waste Collected
		(Kgs)
1	27-Dec-2021	2
2	26-Dec-2021	3
3	25-Dec-2021	2
4	24-Dec-2021	1
5	23-Dec-2021	1
6	22-Dec-2021	2
7	20-Dec-2021	2
8	18-Dec-2021	3
9	16-Dec-2021	2
10	14-Dec-2021	1
11	13-Dec-2021	1
12	12-Dec-2021	1
13	10-Dec-2021	2
14	09-Dec-2021	2
15	08-Dec-2021	2
16	06-Dec-2021	3
17	05-Dec-2021	2
18	03-Dec-2021	4
19	02-Dec-2021	2
20	01-Dec-2021	1
21	30-Nov-2021	4
22	29-Nov-2021	2





23	28-Nov-2021	4
24	27-Nov-2021	3
25	25-Nov-2021	1
26	24-Nov-2021	4
27	23-Nov-2021	4
28	21-Nov-2021	6
29	20-Nov-2021	3
30	19-Nov-2021	2
31	17-Nov-2021	4





Collection of Waste (Dhanot)



Before

After





Village 5 Indrad Collection Report

Sr. No.	Date	Plastic Waste Collected
		(Kgs)
1	27-Dec-2021	1
2	26-Dec-2021	1
3	25-Dec-2021	2
4	24-Dec-2021	2
5	21-Dec-2021	2
6	20-Dec-2021	4
7	19-Dec-2021	1
8	18-Dec-2021	2
9	17-Dec-2021	1
10	16-Dec-2021	2
11	15-Dec-2021	3
12	14-Dec-2021	2
13	13-Dec-2021	2
14	12-Dec-2021	2
15	11-Dec-2021	3
16	10-Dec-2021	3
17	08-Dec-2021	3
18	07-Dec-2021	5
19	06-Dec-2021	5
20	05-Dec-2021	4
21	04-Dec-2021	4
22	03-Dec-2021	6



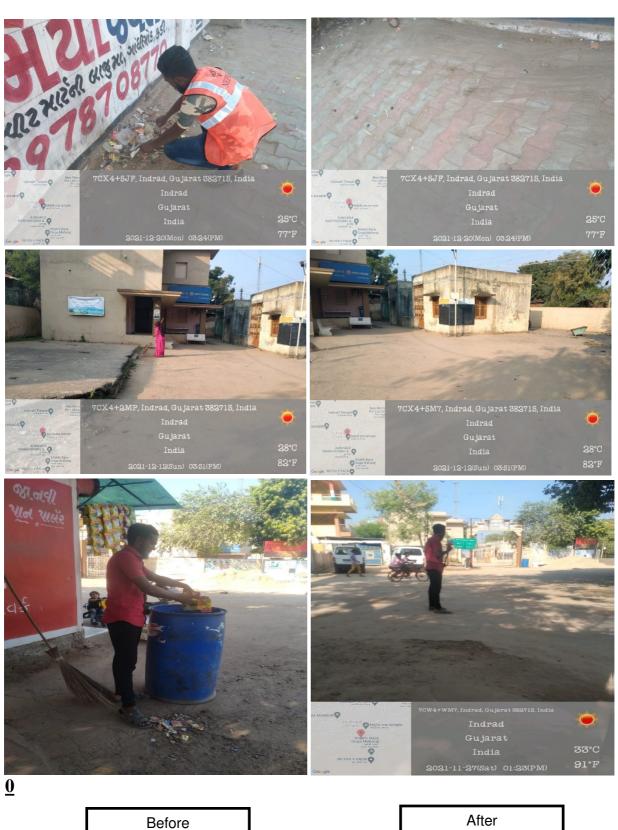


23	02-Dec-2021	1
24	01-Dec-2021	6
25	30-Nov-2021	2
26	29-Nov-2021	3
27	28-Nov-2021	5
28	27-Nov-2021	3
29	26-Nov-2021	2
30	25-Nov-2021	3
31	24-Nov-2021	3
32	23-Nov-2021	6
33	22-Nov-2021	4
34	21-Nov-2021	2
35	20-Nov-2021	4
36	19-Nov-2021	6
37	17-Nov-2021	9





Collection of Waste (Indrad)



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Pictorial photographs of collection activities across all the villages







Conclusion

The 100-day initiative under 'Azaadi ka Amrut Mahotsav' focusing on rural waste management is a landmark initiative of its kind implemented by GPCB. While Swachh Bharat 1.0 has proven to be a game changer for urban areas, we really look forward to Swachh Bharat 2.0 bringing massive changes in rural space.

Torrent Pharmaceuticals Limited – Indrad Unit along with NEPRA has made extensive efforts in establishing a structured waste management system for villages in a span of 100 days. Covering all the aspects like different levels of awareness, collection, segregation and sustainable disposal of collected waste has made a huge impact on the overall wellbeing of the villages.

Initiatives like this, can truly act as a pilot instrumental for a long-term policy. A collaborative effort of panchayats, PIBOs and waste management companies can help lead change.