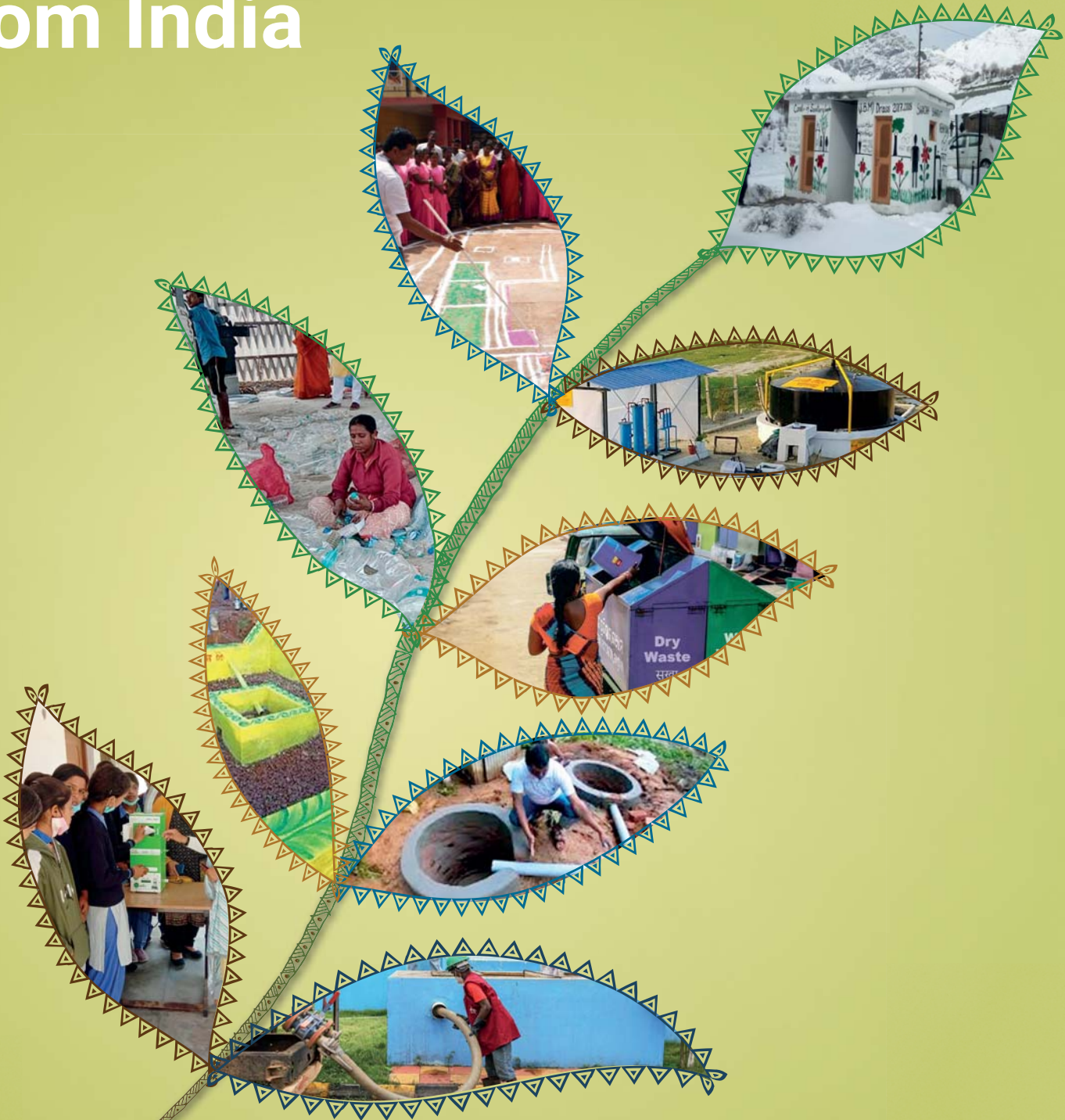


# Swachhata Chronicles

## Transformative Tales from India





# Swachhata Chronicles

## Transformative Tales from India



## ➤➤➤➤ MESSAGE



Swachh Bharat Mission-Grameen (SBM-G) has successfully reached every corner of our vast country, becoming a people's movement that has not only transformed behaviours but also become a household name. This flagship programme, promoted by the Prime Minister of India, has had a significant impact on the nation.

The progress achieved so far has been possible due to the collective support of the State and District machinery, panchayat leaders, development partners, non-governmental organizations (NGOs) and communities. They have made tremendous efforts to contribute to the health and well-being of their communities, embodying the spirit of a *Swachh* and *Swasth* Bharat.

SBM-G has set India on the path to achieving the United Nations (UN) Sustainable Development Goal (SDG) 6.2, which aims to provide access to adequate and equitable sanitation and hygiene for all and become Open Defecation Free (ODF). The programme particularly focuses on the needs of marginalized individuals, women, girls and those in vulnerable situations, with a target to accomplish these goals by 2030. Studies indicate that increased toilet usage due to SBM-G has led to significant economic, environmental and health impacts that also contribute to women's empowerment.

To further accelerate the momentum, the Department of Drinking Water and Sanitation (DDWS) has organized various iconic campaigns that have made a considerable impact. Notable among them were the Sujlam 1.0, 2.0 and 3.0 campaigns, which aimed to establish systems for managing greywater generated in households, establishments, institutions and community areas. A total of 5.1 million soak pits were constructed during these three campaigns.

During the Retrofit to Twin Pit Abhiyan held from 19<sup>th</sup> November 2022 to 30<sup>th</sup> June 2023, the focus was on promoting simple 'on-site' technologies by retrofitting existing single-pit toilets into twin-pit toilets and connecting septic tank toilets to air vents and soak pits. More than 11 lakh toilets were successfully retrofitted during this campaign.

With less than two years remaining to achieve the campaign's objectives, there is a strong emphasis on last-mile delivery. The DDWS has received the support of development partners and the corporate sector, who are playing a vital role in carrying out SBM-G activities. Their contributions, ranging from providing technical support and upskilling to awareness generation and construction of ODF Plus assets, are crucial to the success of the Mission.

Investing in hygiene and sanitation is not just an investment in health, but also in human dignity, economic progress and the overall development of our villages. I trust we will all continue to work together for this noble cause.

**Smt. Vini Mahajan**  
Secretary, DDWS



## ➤➤➤➤ MESSAGE



Since 2014, the Government of India has been actively addressing sanitation challenges through the Swachh Bharat Mission-Grameen (SBM-G). From ending open defecation by providing access to sanitation to all households and institutions, and enabling village communities to put in place systems for the effective management of solid and liquid waste, efforts have been consistent to promote rural cleanliness and strive towards *Sampoorna Swachhata*.

There has been remarkable progress in SBM-G in the last one year. On its part, the Government of India, supported by the Department of Drinking Water and Sanitation (DDWS) has created an enabling environment by making funds available from SBM-G, the 15<sup>th</sup> Finance Commission, and under MGNREGA.

An initiative that has gained prominence in recent months is the GOBARdhan Scheme which supports villages in the safe management of cattle, agricultural and organic waste, by converting it into clean fuel and organic manure to improve environmental sanitation and reduce vector-borne diseases. With adequate financial allocation, the initiative demonstrates the Government's commitment to waste-to-wealth models and clean energy.

Above all, SBM-G has shown that Sustainable Development Goals (SDGs) are achievable while making a perceptible difference in the level of cleanliness in rural India. The impact of the world's largest sanitation campaign is assessed from time to time. The ongoing Swachh Survekshan Grameen (SSG) 2023 is a survey that ranks states and districts based on their performance in key quantitative and qualitative SBM-G parameters. While promoting active participation in ODF Plus activities, it facilitates peer verification, fosters healthy competition among GPs, and recognizes outstanding performers at all levels.

With barely two years left for the campaign to meet its objectives, it is crucial to have effective partnerships between stakeholders at all levels – Government Ministries, private sector, development partners, NGOs, etc., given that SBM-G has always been a people's movement.

The Rural WASH Partners' Forum (RWPF) brings together stakeholders from across the WASH sector to support villages and districts in implementing ODF Plus activities and setting up ODF Plus assets. Their involvement is expected to accelerate activities and bring about sustainable change in matters related to hygiene and sanitation in the country, and finish the last mile of the country's journey towards a clean and healthy India.

**Shri Jitendra Srivastava**  
JS&MD SBM-G, DDWS





# **TABLE OF CONTENTS**

<b>LIST OF ABBREVIATIONS</b>	xi
<b>PREFACE</b>	xiii
<b>INTRODUCTION TO ODF PLUS COMPONENTS</b>	xv
<b>SOLID WASTE MANAGEMENT</b>	2
1. East Champaran Inaugurates 40 WPU's Simultaneously	4
2. Peri-urban Panchayats of Madurai Get Cleaned Through Community Participation	6
3. Melinajuganahalli Temple Waste is Managed, Farmers Benefit	8
4. West Bengal's Sindrani GP Reuses Waste Creatively	10
5. Sound Waste Management Practices Make Thimmapur an ODF Plus GP	12
6. Meghalaya Implements Decentralized Waste Management	14
7. West Bengal Conducts Beach Cleaning Drive in Digha Beach	16
8. Village Panchayats of Goa Organize Cleanup Drives	18
9. Kasganj, Hardoi and Raebareli Districts of Uttar Pradesh Organize Clean Ganga Gram Abhiyan	20
10. Sahibganj Observes Legacy Waste Removal Campaign	22
<b>PLASTIC WASTE MANAGEMENT</b>	24
11. Nadia Builds a Great Green Wall with Plastic Waste	26
12. Punjab Implements the 'Bring Plastic and Take Jaggery' Campaign	28
13. Siddipet Initiates Plogging Drive to Promote Waste Segregation	30
14. Sawai Madhopur Raises Environmental Awareness through Innovation	32
15. 'Give Polythene Get Gold' Campaign Makes Sadiwara Plastic-free	34
16. Tamil Nadu Raises Awareness on SUP Ban and Alternatives	36
17. Ratnagiri Marks World Environment Day with Plastic Waste Collection Drives	38
18. Purba Medinipur's PWMU Establishes Forward Linkages	40
19. Balrampur Sets Up Bartan Banks to Beat Plastic Pollution	42
20. Siddipet Offers Silver Coins in Exchange for Plastic Waste	44

<b>FAECAL SLUDGE MANAGEMENT</b>	46
21. FSTP Provides Livelihood Opportunities for Transgenders in Odisha	48
22. FSM in Karnataka’s 80 Badagabettu GP is a Source of Income	50
23. Rajasthan’s Urban FSTPs Serve Neighbouring GPs	52
24. FSTP in Benipur Services 11 GPs	54
25. Patora FSTP Handed Over to GP for O&M	56
26. Retrofit to Twin Pit Abhiyan Leads to Retrofitting of Over 1 Million Toilets	58
<b>GREYWATER MANAGEMENT</b>	60
27. Matauli Adopts Seechewal Model for GWM	62
28. Jammu and Kashmir Implements Soak Pits for GWM	64
29. Pappankuzhi Efficiently Manages Greywater	66
30. Bhiwani Adopts Nehveen Model for Community-level GWM	68
31. Karnataka Constructs a GWM Unit in Shirur GP	70
32. North 24 Parganas Sets Up GWM Assets in 86 Villages	72
33. Bharasar Village Utilizes DEWATS for Sustainable GWM	74
34. Sultanpur Improves Cleanliness and Health through GWM	76
35. Haveri Builds Inline Treatment System for GWM	78
36. Aamwala Sainwala Resolves Greywater Issues through WSP Technology	80
37. Sujlam 3.0 Campaign Constructs Over 28.6 Lakh Soak Pits	82
<b>CAPACITY BUILDING</b>	84
38. Odisha Organizes Exposure Visits to FSTPs for PRIs	86
39. Andhra Pradesh Conducts Workshop on SLRM for Waste Prevention and Management	88
40. Punjab Enhances Efforts to Train SLRPs in GWM	90
41. OSSS WASH Mitras Ensure Timely Repair and Maintenance of WASH Facilities	92
42. Tamil Nadu Trains Women Masons and SHG Members in Toilet and Soak Pit Construction	94
43. Punjab Delegation Studies Bharwara STP and Amethi FSTP	96
44. UNICEF Conducts Training of Trainers on Safety and Dignity of Sanitation Workers	98
45. Bihar Strengthens Capacities of Stakeholders to Achieve ODF Plus Goals	100
46. Jal Sahiyas Drive Change in Jharkhand’s Rural WASH Sector	102

<b>GOBARDHAN</b>	104
47. GOBARDhan Initiative Gets a Major Boost	106
48. Transition from Waste to Wealth: Story of Community Biogas Plants in Nartap GP, Kamrup Metro	108
49. Biogas Plant in Kanpur Nagar District (Uttar Pradesh) Meets Fuel Needs of Households	110
50. Patna Gets a GOBARDhan Plant under SBM-G	112
51. Puducherry Gets Two Biogas Plants	114
52. Tripura Sets up GOBARDhan Projects in All its 8 Districts	116
53. Nashik Gets a New GOBARDhan Plant	118
54. Punjab Launches GOBARDhan Projects in 19 Gaushalas	120
55. Jammu and Kashmir's Directorate of Rural Sanitation Sets Up GOBARDhan Projects for Residents Living Near the International Border	122
56. Migrants Contribute to a Biogas Plant in Goa's Nagoa Panchayat	124
57. MoJS Launches Unified Registration Portal for GOBARDhan Plants	126
58. Gujarat Boasts of 38 Cluster Model GOBARDhan Plants	128
<b>MENSTRUAL HYGIENE MANAGEMENT</b>	130
59. Jhabua Becomes a Period-friendly District	132
60. Bangalore Rural Installs Incinerators in All GPs, High Schools and Hostels	134
61. Bihar Makes Impact through a Week-long MHM Awareness Campaign	136
62. Jammu and Kashmir Improves School Attendance through Pink Toilets	138
63. Jharkhand Pioneers Innovative MHM Practices	140
<b>ODF PLUS</b>	142
64. Kerala Achieves ODF Plus Status	144
65. Odisha's Jitkar Suanlo is an ODF Plus Village	146
66. UP Showcases Live Models of ODF Plus Assets in Shravasti Mahotsav	148
67. Odisha's Sasan Ambagam GP Becomes ODF Plus	150
68. Mizoram's Leng Village is on the Road to ODF Plus Model Status	152

<b>IEC</b>	154
69. Fatehpur's WASH Vaani Promotes WASH Behaviour	156
70. World Hand Hygiene Day is Observed across Schools in Punjab	158
71. Jammu and Kashmir's Swachhata Karwaan Covers 695 GPs	160
72. Tamil Nadu Launches Namma Ooru Superu Campaign	162
73. Children's Sanitation Clubs Sprout across Mizoram	164
74. Gujarat Takes Commendable Steps toward Coastal Cleanliness	166
75. Jammu and Kashmir Ensures a Swachh Sustainable & Zero Landfill Shri Amarnath Yatra 2023	168

# LIST OF ABBREVIATIONS

<b>ABR</b>	Anaerobic Baffled Reactor	<b>DEWATS</b>	Decentralized Wastewater Treatment System
<b>ACS</b>	Additional Chief Secretary	<b>DPO</b>	District Panchayat Officer
<b>AKAM</b>	Azadi Ka Amrit Mahotsav	<b>DPR</b>	Detailed Project Report
<b>AMRUT</b>	Atal Mission for Rejuvenation and Urban Transformation	<b>DRDA</b>	District Rural Development Agency
<b>ASHA</b>	Accredited Social Health Activist	<b>DRDO</b>	District Rural Development Organization
<b>AWC</b>	Anganwadi Centre	<b>DWSC</b>	District Water and Sanitation Committee
<b>AWW</b>	Anganwadi Worker	<b>FC</b>	Finance Commission
<b>BBEL</b>	Bharat Biogas Energy Limited	<b>FLW</b>	Frontline Worker
<b>BCC</b>	Behaviour Change Communication	<b>FOM</b>	Fermented Organic Manure
<b>BDO</b>	Block Development Officer	<b>FPO</b>	Farmer Producer Organization
<b>BOD</b>	Biochemical Oxygen Demand	<b>FSM</b>	Faecal Sludge Management
<b>BPCL</b>	Bharat Petroleum Corporation Limited	<b>FSMU</b>	Faecal Sludge Management Unit
<b>BRC</b>	Block Resource Centre	<b>FSTP</b>	Faecal Sludge Treatment Plant
<b>BWM</b>	Biodegradable Waste Management	<b>FY</b>	Financial Year
<b>CBG</b>	Compressed Biogas	<b>GHG</b>	Greenhouse Gas
<b>CBO</b>	Community Based Organization	<b>GIS</b>	Geographical Information System
<b>CCEA</b>	Cabinet Committee on Economic Affairs	<b>GOBARdhan</b>	Galvanizing Organic Bio-Agro Resources Dhan
<b>CNG</b>	Compressed Natural Gas	<b>GP</b>	Gram Panchayat
<b>CSC</b>	Community Sanitary Complex	<b>GWM</b>	Greywater Management
<b>CSR</b>	Corporate Social Responsibility	<b>H&amp;UD</b>	Housing and Urban Development
<b>CSTR</b>	Continuous Stirred Tank Reactor	<b>ICAR</b>	Indian Council of Agricultural Research
<b>CW</b>	Constructed Wetland	<b>ICDS</b>	Integrated Child Development Scheme
<b>CYDA</b>	Centre for Youth Development and Activities	<b>IEC</b>	Information, Education and Communication
<b>DARE</b>	Department of Agricultural Research and Education	<b>IMIS</b>	Integrated Information Management System
<b>DAY-NRLM</b>	Deendayal Antyodaya Yojana – National Rural Livelihoods Mission	<b>JJM</b>	Jal Jeevan Mission
<b>DDC</b>	Deputy Development Commissioner	<b>KBR</b>	Konyala Ball Reddy
<b>DDWS</b>	Department of Drinking Water and Sanitation	<b>KGBV</b>	Kasturba Gandhi Balika Vidyalaya

<b>KLD</b>	Kilo Litres Per Day	<b>PROM</b>	Phosphate Rich Organic Manure
<b>kVA</b>	Kilo Volt Amperes	<b>PSCST</b>	Punjab State Council for Science and Technology
<b>KVK</b>	Krishi Vigyan Kendra	<b>PWM</b>	Plastic Waste Management
<b>LG</b>	Lieutenant General	<b>PWMU</b>	Plastic Waste Management Unit
<b>LSG</b>	Local Self Government	<b>RDW&amp;SD</b>	Rural Drinking Water and Sanitation Department
<b>LWM</b>	Liquid Waste Management	<b>REAP</b>	Renewable Energy Agency Puducherry
<b>MDA</b>	Market Development Assistance	<b>RRC</b>	Resource Recovery Centre
<b>MGNREGA</b>	Mahatma Gandhi National Rural Employment Guarantee Act	<b>RUIDP</b>	Rajasthan Urban Infrastructure Development Project
<b>MHH</b>	Menstrual Health and Hygiene	<b>RWPF</b>	Rural WASH Partners' Forum
<b>MHM</b>	Menstrual Hygiene Management	<b>SAP</b>	Super Absorbent Polymer
<b>MLD</b>	Million Litres Per Day	<b>SBM</b>	Swachh Bharat Mission
<b>MMCC</b>	Mini Micro Composting Centre	<b>SBM-G</b>	Swachh Bharat Mission – Grameen
<b>MNRE</b>	Ministry of New and Renewable Energy	<b>SDG</b>	Sustainable Development Goal
<b>MoU</b>	Memorandum of Understanding	<b>SHG</b>	Self-Help Group
<b>MPDO</b>	Mandal Parishad Development Officer	<b>SLRM</b>	Solid and Liquid Resource Management
<b>MPTC</b>	Mandal Parishad Territorial Constituency	<b>SLWM</b>	Solid and Liquid Waste Management
<b>MRF</b>	Material Recovery Facility	<b>SSG</b>	Swachh Survekshan Grameen
<b>MT</b>	Master Trainer	<b>STP</b>	Sewage Treatment Plant
<b>NDDB</b>	National Dairy Development Board	<b>SUP</b>	Single-Use Plastics
<b>NNBOMP</b>	New National Biogas and Organic Manure Programme	<b>ToT</b>	Training of Trainers
<b>NSS</b>	National Service Scheme	<b>TPD</b>	Tonne Per Day
<b>O&amp;M</b>	Operation and Maintenance	<b>TREDA</b>	Tripura Renewable Energy Development Agency
<b>ODF</b>	Open Defecation Free	<b>UASB</b>	Upflow Anaerobic Sludge Blanket
<b>OSSS</b>	One-Stop Shop and Services	<b>ULB</b>	Urban Local Body
<b>OWSSB</b>	Odisha Water Supply and Sewerage Board	<b>UMC</b>	Urban Management Centre
<b>PAU</b>	Punjab Agriculture University	<b>UT</b>	Union Territory
<b>PDB</b>	Planted Drying Bed	<b>VAP</b>	Village Action Plan
<b>PEF</b>	Pratham Education Foundation	<b>VWSC</b>	Village Water and Sanitation Committee
<b>PHED</b>	Public Health Engineering Department	<b>WASH</b>	Water, Sanitation and Hygiene
<b>PIA</b>	Project Implementing Agency	<b>WHO</b>	World Health Organization
<b>PLF</b>	Panchayat Level Federation	<b>WPU</b>	Waste Processing Unit
<b>PPE</b>	Personal Protective Equipment	<b>WSP</b>	Waste Stabilization Pond
<b>PR&amp;RD</b>	Panchayat Raj and Rural Development	<b>YE</b>	Youth Entrepreneur
<b>PRD</b>	Panchayati Raj Department	<b>YWE</b>	Young WASH Entrepreneur
<b>PRI</b>	Panchayati Raj Institution	<b>ZP</b>	Zilla Panchayat

## PREFACE

After the transformative change brought about by the Swachh Bharat Mission – Grameen (SBM-G) Phase-I, when all villages across the country had declared themselves as Open Defecation Free (ODF), the Government of India, in February 2020, approved SBM-G Phase-II with a total outlay of Rs. 1.4 lakh crores. The objective was to transform villages into ODF Plus Model villages that sustain their ODF status, have arrangements for Solid and Liquid Waste Management (SLWM), and are visually clean.

SBM-G Phase-II is being implemented in a mission mode across rural India from 2020–2021 to 2024–2025.

Given that all States may not fulfill all criteria under different verticals before declaring a village as ODF Plus, the Department of Drinking Water and Sanitation (DDWS) reviewed the criteria and introduced intermediate stages in the process of declaring a village as ODF Plus. In an ODF Plus Aspiring village, all households and establishments have access to functional toilets, separate for men and women, and arrangements are in place either for Solid Waste Management (SWM) or Liquid Waste Management (LWM). In an ODF Rising village, all households and establishments have access to functional toilets, and the village has arrangements for SLWM. An ODF Plus Model village is one that sustains its ODF status; has arrangements for SLWM; is visually clean with minimal litter, minimal stagnant wastewater, and no plastic waste dump in public places; and displays Information, Education and Communication (IEC) messages on safe sanitation practices.

As on 15<sup>th</sup> July 2023, of the total 5,91,779 villages across the country, 3,74,085 villages (more than 60 per cent) have achieved ODF Plus status. Among these, 2,58,227 are ODF Plus Aspiring; 43,242 are ODF Plus Rising; and 72,616 villages are ODF Plus Model.

This translates into 2,02,202 villages having arrangements for SWM; 3,04,830 villages having arrangements for LWM; 643 Galvanizing Organic Bio-Agro Resources Dhan (GOBARdhan) plants; and 1,832 Plastic Waste Management Units (PWMUs) across the country.

To further create an enabling environment, the Government has allocated Rs. 52,137 crores for the year 2023–2024. In addition to SBM-G funds, 15<sup>th</sup> Finance Commission (FC) funds are allocated for sanitation, which can be utilized to build sanitation assets, promote behaviour change, and implement SLWM systems.

With less than two years left to achieve the objectives, the Rural WASH Partners' Forum (RWPF) has stepped in to support the campaign by way of provision of technical support, skilling and awareness generation. Their support would accelerate SBM-G activities and enable villages to achieve ODF Plus Model status at the earliest.

This booklet contains 75 best practices of States in various ODF Plus activities that showcase their innovations, measures taken to overcome barriers and raise awareness, special campaigns launched and other endeavours in order to meet the goals of SBM-G Phase-II.





# INTRODUCTION TO ODF PLUS COMPONENTS

## Solid Waste Management (SWM)

The quantity of waste generated in rural areas has been increasing over the years as a result of increased population, consumerism and commercial activities. There are many options in rural areas for the reuse of biodegradable waste, such as composting kitchen waste material, which can be used in home gardens and agricultural fields. However, solid waste needs to be segregated at source by households, and systems should be organized for regular collection. Thereafter biodegradable waste can be converted into organic manure while non-biodegradable waste should be recycled, thereby reducing the amount of waste going to landfills.

Under the DDWS funding norms, villages having a population less than or equal to 5,000 are entitled to Rs. 60 per capita, and villages having a population greater than 5,000 can avail Rs. 45 per capita for SWM.

## Plastic Waste Management (PWM)

Plastic products have become an integral part of our daily lives, resulting in increased plastic consumption even in rural areas. But it has detrimental effects on the environment and human health, which needs to be addressed on priority through effective management of plastic waste.

SBM-G Phase-II strives to improve rural cleanliness through SLWM activities. As PWM is a critical criterion for declaring villages as ODF Plus, actions need to be taken at the District, Block and village levels using the principle of the **4Rs** – **R**educe, **R**efuse, **R**euse and **R**ecycle.

According to the DDWS funding norms, an amount of Rs. 16 lakhs per Block can be availed for PWM.

## Faecal Sludge Management (FSM)

FSM is one of the key components to be implemented under SBM-G Phase-II for delivering safe sanitation in rural areas. Villages have a considerable number of toilets linked to on-site sanitation, such as septic tanks and single pits. The overflow from filled-up septic tanks and indiscriminate disposal of emptied faecal sludge into open areas, water bodies, irrigation fields, open drains, areas outside the village, etc. have a negative impact on public health and the environment.

The twin-pit toilet system provides the best form of FSM as it provides in-situ treatment, thus avoiding the need for the collection-transport-treatment method of waste management. It is therefore recommended that the conversion of single pits to twin pits be prioritized, where possible, in all Districts. Where twin-pit systems are not feasible, other similar options, such as toilet-linked biogas plants and vermicomposting toilets, can be adopted.

Under the ODF Sustainability initiative, DDWS promotes retrofitting of existing single-pit toilets into twin-pit toilets and connection of septic tank toilets to air vents and soak pits. It also aims to generate awareness about the safe disposal of faecal sludge in rural households.

As per the DDWS funding norms, each District can avail Rs. 230 per capita (in rural population) for FSM.

## **Greywater Management (GWM)**

Wastewater from water collection points and households overflowing on the village paths or stagnating in low-lying areas is common in villages, particularly during the monsoons. The adverse effects of unsafe disposal of wastewater on human health are quite serious and pervasive. Stagnant ponds of wastewater or improper drains in villages can lead to increased risks of exposure to diseases such as malaria, dengue and filariasis. The increasing amount of wastewater generated, if not treated properly, can also lead to contamination of groundwater through natural percolation.

Therefore, the SBM-G Phase-II guidelines propose that GWM interventions be undertaken in convergence with the implementation of the Jal Jeevan Mission (JJM) in villages, as envisaged in the Village Action Plan (VAP). The amount of greywater and its flow and discharge arrangements should be taken into consideration while designing GWM interventions.

DDWS has allocated adequate funds for GWM. Under its funding norms, villages having a population less than or equal to 5,000 are entitled to Rs. 280 per capita, and villages having a population greater than 5,000 can avail Rs. 660 per capita.

## **Capacity Building**

Capacity strengthening is vital for ensuring the sustainability of ODF status of villages and taking up the ODF Plus agenda. The success of such initiatives is directly linked to motivated and capacitated District and Block officials as well as Gram Panchayat (GP) level functionaries such as Sarpanches, village secretaries, and Swachhagrahis. It is critical to strengthen the capacities of the village functionaries regarding their role in transforming their villages into model ODF Plus villages and equip them with the relevant subject knowledge and technical know-how to achieve the desired results.

In order to reach out to all GPs in the country, a large pool of field trainers is required. The DDWS proposes to create a pool of competent human resources to cater to the capacity building needs of GPs in a cascading mode. As part of this initiative, four field trainers will be identified from each District to be trained through 5-day Training of Trainers (ToTs). The trained Master Trainers (MTs) will in turn train Sarpanches, village secretaries and Swachhagrahis through 3-day training programmes.

SBM-G Phase-II focuses on community-led planning, implementation, and Operation And Maintenance (O&M) of sanitation infrastructure. Hence, communities are expected to take the lead its implementation. DDWS has allocated 3 per cent of the total funding for programmatic components for these activities.

## **GOBARdhan**

Rural India generates enormous quantities of bio-waste including animal waste, kitchen leftovers, crop residue, market waste and faecal sludge. Reports indicate that at least 5,257 tonnes of waste per day are estimated to be generated from livestock alone.

GOBARdhan was launched to ensure cleanliness in villages and to generate wealth and energy by converting bio-waste including cattle waste into clean fuel and organic manure. This will provide economic and resource benefits to farmers and households.

DDWS is working with concerned Departments/ Ministries/ State Governments, public and private sector institutions and village communities to instill a spirit of 'Jan Andolan' and achieve community collective action on GOBARdhan.

GOBARdhan will benefit rural people in general and women in particular with the use of clean fuel, improved cleanliness in villages, and improvement in health. This initiative will support biodegradable waste recovery and conversion of waste into resources, reduction in Greenhouse Gas (GHG) emissions, and reduction in import of crude oil. It will also give a boost to entrepreneurship and promote organic farming.

DDWS has made a funding provision of up to Rs. 50 lakhs per District for GOBARdhan plants.

## **Menstrual Hygiene Management (MHM)**

Although menstruation is a natural biological process affecting half of the world's population at reproductive age (12–49 years), it continues to remain a cause of embarrassment and shame. The deep-seated stigma of menstrual impurity creates a barrier to gender equality. In India, an alarming number of girls drop out of school every year when they start menstruating and, owing to improper menstrual hygiene, face severe health issues. Further, archaic practices observed for generations in families forbid girls from participating in normal activities.

In the wake of such challenges faced by women, particularly the girl child, MHM is more than just sanitation. It is a vital step towards achieving a gender-balanced world by protecting the girl child while safeguarding her dignity and giving her a life of opportunities to pursue her dreams.

To address this aspect, MHM has been included as an important component in the Government's flagship programme, SBM-G. In addition to improving the overall sanitation coverage in rural areas of India, it aims at promoting the dignity of women and children and maintaining sustainable health and hygiene benefits. It underlines the need for the construction of toilets in households and schools, which is integral to menstrual hygiene and encourages safe menstrual hygiene practices. It further calls for skill development and the setting up of sanitary napkin dispensers and incinerators in schools and public toilets.

## ODF Plus

The key objective of SBM-G Phase-II is to sustain the ODF status of villages and further make them ODF Plus. This can be achieved by improving the level of cleanliness in rural areas through SLWM activities and by ensuring continued Behaviour Change Communication (BCC) and capacity strengthening at all levels.

An ODF Plus village is defined as a village that sustains its ODF status, ensures SLWM, and is visually clean.

The criteria for declaring a village as ODF Plus depends on interventions on the various verticals of SLWM. Given that all States may not fulfill all criteria under different verticals before declaring a village as ODF Plus, DDWS has reviewed the criteria and introduced intermediate stages in the process of declaring a village as ODF Plus:

**ODF Plus – Aspiring:** A village in which all households have access to a functional toilet facility; all schools/Anganwadi Centres (AWCs)/panchayat ghars have access to a functional toilet with separate toilets for men and women; and the village has arrangements for SWM or LWM.

**ODF Plus – Rising:** A village in which all households have access to a functional toilet facility; all schools/AWCs/panchayat ghars have access to a functional toilet with separate toilets for men and women; and the village has arrangements for SWM and LWM.

**ODF Plus – Model:** A village in which all households have access to a functional toilet facility; all schools/AWCs/panchayat ghars have access to a functional toilet with separate toilets for men and women; all public spaces in the village have minimal litter, minimal stagnant wastewater and no plastic waste dump in public places; the village has arrangements for SWM and LWM; and the village has ODF Plus IEC messages prominently displayed through wall paintings and billboards.

## Information, Education Communication (IEC)

India's Swachh Bharat Mission (SBM) has been recognized as the largest behaviour change programme in the world. Innovative strategies were employed at multiple levels to foster an enabling environment for effective and informed community engagement and achieve Swachhata. One of the key strategies to achieving the goals of SBM was nudging behaviour change towards toilet construction and regular use through a participatory, community-led approach.

The long-term objective of this intervention was to change the social norms around open defecation and to promote the 4R principle of waste management including segregation of waste at source. To prioritize planning and implementation of IEC for SBM, States were provided flexibility to plan, design and implement IEC strategies, taking due account of local culture, practices and sensibilities.

IEC aims to increase awareness, change attitudes and bring about a change in specific behaviours. Towards this, DDWS has provided detailed guidelines for engagement, capacity building and incentivization of sanitation motivators to kick-start IEC at the grassroots level.

States can avail 2 per cent of the total funding for programmatic components for IEC activities.



# SOLID WASTE MANAGEMENT

---



सूखे कचरे का डिब्बा

Dry  
Waste  
सूखे  
कचरे



## ▶▶▶▶ EAST CHAMPARAN INAUGURATES 40 WPU<sub>s</sub> SIMULTANEOUSLY



**T**he land of Bapu's Satyagraha has once again shown the way – as a lighthouse to achieve ODF Plus goals. Under SBM-G, 40 Waste Processing Units (WPUs) were simultaneously inaugurated in the East Champaran District of Bihar on 14<sup>th</sup> June 2023.

Shri Rahul Kumar, Mission Director, SBM-G Bihar, inaugurated the WPUs at a special ceremony organized in Ghorasahan Block of East Champaran. All other WPUs were connected online to the ceremony and inaugurated at the same time. Mukhiyas, Panchayati Raj Institution (PRI) members,

officers and other community members participated in the event virtually.

Speaking on the occasion, Shri Rahul Kumar congratulated the Mukhiyas and community members of all the 40 GPs. He encouraged them to utilize the WPUs in managing their waste and bringing visual cleanliness to their villages.

He emphasized the need to maintain the ODF Plus assets and ensure sustainability through effective service delivery for waste management including user



charge collection. He reminded them that quality door-to-door collection of waste, transportation and disposal would prompt people to pay the utility charges.

Thereafter, he visited the WPU in Ghorasahan North Panchayat and examined the mechanism that was put in place for waste management. Others present on the occasion were Shri Saurabh Jorwal, District Magistrate; Shri Sameer Saurabh, Deputy Development Commissioner (DDC);

Ms. Megha Kashyap, Director, District Rural Development Agency (DRDA); Shri Gautam Kumar, District Coordinator; local officials; and community members.

East Champaran, which has 396 GPs, has been a frontrunner in the implementation of SBM-G Phase-II and ODF Plus interventions. SLWM interventions began in 51 GPs in 2021–2022, 110 GPs in 2022–2023, and 234 GPs in 2023–2024.

## Outcome

Considerable progress has been seen in all villages on all ODF Plus fronts. According to Shri Gautam Kumar, District Coordinator, WPUs are now operational in 81 GPs. Door-to-door waste collection and transportation are being implemented in 62 GPs. One GOBARdhan plant (a power generation unit) has been constructed and is currently functional, which is capable of producing 18 Kilo Volt Amperes (kVA) of electricity to power street lights and farming work.

# PERI-URBAN PANCHAYATS OF MADURAI GET CLEANED THROUGH COMMUNITY PARTICIPATION



In a show of solidarity, over 300 individuals comprising college students, rag pickers, sanitary workers, and volunteers from the Red Cross and the National Service Scheme (NSS) came together and cleaned up the streets of Othakaddai village in Madurai.

To tackle the significant challenge in solid waste management in peri-urban panchayats of Madurai, the innovative mass

cleaning initiative was conducted as part of the Namma Ooru Superu campaign, which was held across Tamil Nadu from 1<sup>st</sup> May to 15<sup>th</sup> June 2023.

The DRDA team mobilized the volunteers who were allocated streets and given four key responsibilities: (i) coordinating waste processing and disposal; (ii) collecting single-use plastic (SUP) waste wherever

visible; (iii) creating awareness; and (iv) monitoring the use of SUPs in shops and markets.

A selfie campaign was introduced where officials from the Department shared selfies with segregated waste in their households.

## Outcome

As a result of this initiative, 78 streets and all 30 garbage hotspots in the village were cleaned. A total of 1,486 kgs of waste was collected, segregated and sent for further processing. Further, 10 areas with stagnant greywater were also cleared.

The success of this initiative has led to the formulation of plans to carry out similar activities across all peri-urban panchayats in Madurai.

# MELENAJUGANAHALLI TEMPLE WASTE IS MANAGED, FARMERS BENEFIT



**T**he SS Ghati Subramanya Temple in Melinajuganahalli GP, Bangalore Rural District, Karnataka, generates enormous waste from flowers, food, leaves and other items used for deity worship. The temple authorities along with the District administration have now set up a facility that would enable them to convert all organic waste into vermicompost.

Melinajuganahalli GP, also known as SS Ghati, falls under the Dodballapur Taluk and is situated 15 kms from Dodballapur city and 45 kms from the city of Bengaluru. It

consists of 9 villages and a population of 8,540 individuals from 1,688 households. Every January, lakhs of devotees throng the GP to witness the Swami's Chariot Festival.

During the festival and also at other times, garbage management was a huge challenge in the GP. More often than not, the waste generated was left to rot, leading to bad odour and an unhygienic atmosphere that caused discomfort to devotees and others in the area. This also led to the menace of mosquitoes, birds and stray animals that were attracted to the garbage.

The management board of the temple flagged the issue of raw garbage with the village panchayat, which was discussed at length during a Gram Sabha meeting. In turn, the GP took the issue of wet garbage to the Rural Division of Zilla Panchayat (ZP) that was implementing the SBM-G programme.

The District administration encouraged the construction of vermi pits for composting. Under the SBM-G, a Swachh Sankirna Complex (waste management unit) was constructed across one acre of land at Sarva No. 38, next to the temple complex. The unit had four vermicompost tanks to manage all wet waste from the temple.

Wet waste is converted into nutrient fertilizer in the vermicompost tanks and the manure is sold to local farmers at Rs. 5 per kg. Around 500–600 kgs of manure is generated every three months, and the proceeds from the sale of manure to farmers are used for GP development work.

The District administration also organized various IEC activities to create awareness among devotees and the general public regarding wet and dry waste and the importance of segregation at source – not just in temples but in all public places.

## Outcome

The SS Ghati Subramaniam Swamy Temple is now free from the problem of wet waste and maintains a clean premise. Temple devotees enjoy the hygienic atmosphere that enhances their worship, and farmers are happy with the increased income as a result of increased yield through the use of the fertilizer produced from the wet waste of the temple. Most households and farmers in the GP store their wet waste in small tanks or pits and are able to produce vermicompost or organic fertilizer in their homes for use in kitchen gardens or fields.

## WEST BENGAL'S SINDRANI GP REUSES WASTE CREATIVELY



**W**omen of the Astha Self-Help Group (SHG) in Sindrani GP of North 24 Parganas District in West Bengal have come up with creative ideas for reusing waste materials. In the process, they upcycle unwanted materials to create crafts and products with artistic value.

Waste collection and recycling are a challenge for any solid waste management unit. While wet or biodegradable waste is converted into nutrient-rich compost for use in kitchen gardens or agriculture, non-biodegradable waste including plastics has posed challenges in Sindrani GP.

Eight women from the Astha SHG have been appointed to work in the solid waste management unit of Sindrani GP, which was set up as a part of SBM-G Phase-II. Presently, they collect waste from 2,800 households.

On the occasion of Dol Utsav, a festival of colours that marks the onset of the spring season, the women made organic gulal or powdered colours from dry flowers. They also made earrings with PET bottle caps, baskets from milk pouches, eco-bricks to be used in constructing a boundary wall for the SWM unit, wall hangings, etc.

After Shivratri, the unit started the process of collection, segregation, blending, drying and mixing of dry flowers with other ingredients such as neem leaves and arrowroot. They collected flowers from local temples and produced around 50 kgs of powdered colour, which was sold out within 2-3 days. Initially, the gual was sold at

Rs. 300 per kg to the local community, SHG members, and officials of the Block office. With the success of the experiment, the SHG is now planning to repeat the process on a larger scale next year. The initiative has demonstrated that there is much interest among the community in gual made from flowers.

## Outcome

Sindrani Naba Diganta Nirmal Udyan waste management unit has earned Rs. 1,14,140 in the last month from waste collection, selling of compost, and recycling of non-biodegradable items, and earned a profit of Rs. 24,120. The District administration is now considering other such activities towards improving the marketing of such products made from waste.

# ▶▶▶▶ SOUND WASTE MANAGEMENT PRACTICES MAKE THIMMAPUR AN ODF PLUS GP



**T**himmapur GP in Karimnagar District of Telangana has established sound waste management practices that have helped generate revenue. Such measures have improved visual cleanliness and contributed to making it an ODF Plus GP.

Home to a population of 3,689 individuals from 1,235 households, the GP constructed a dump yard for waste management. With the distribution of two bins to each household, waste is segregated at

source into biodegradable (wet) and non-biodegradable (dry) waste.

The GP also made a route plan for multipurpose workers to follow during the collection of household waste. The tractor trolley has separate segments for different kinds of waste, ensuring that wet and dry waste is not mixed up. Dry waste is further segregated into plastic, paper, glass, iron, hazardous and other items separately and arranged in the allocated chambers before being taken to the segregation shed.



It takes 45–60 days for wet waste to be converted into vermicompost. So far, 7,804 kg of vermicompost has been prepared from the wet waste collected from households in the village. Out of this, 4,314 kg of vermicompost was used for the nursery which is maintained by the GP, and some of the manure was used for plantations created under Haritha Haram, the Government flagship programme for increasing green cover in the village. The remaining 3,490 kg of compost was sold under the brand name Thimmapur Vermi Compost, earning an income of Rs. 34,898.

An income of Rs. 19,850 was earned from all types of dry waste sold to Kanakadurga

Scrap Agency. A vermicompost stall has been set up in the GP office premises for sale of vermicompost. Having established a steel bank as an alternative to plastics, the GP encourages the usage of steel utensils instead of plastic and disposable items. SUPs have been banned and awareness activities have been conducted in the village to make people aware of plastic pollution.

Regarding GWM, some households have constructed individual soak pits while others have started kitchen gardens to reuse greywater. In public spaces, cleanliness is maintained by multipurpose workers.

## Outcome

With such arrangements made for SLWM, care is taken to ensure they are operated and maintained properly. These efforts have made the Thimmapur GP visually clean, inviting appreciation from officials and making the GP a role model for other villages.

# MEGHALAYA IMPLEMENTS DECENTRALIZED WASTE MANAGEMENT



**T**he northeastern State of Meghalaya is implementing various ODF Plus activities in a bid to transform the entire State into a model ODF Plus State. Based on the advisories of DDWS, Ministry of Jal Shakti, SLWM activities have been organized.

One of the interventions is the decentralized management of liquid and biodegradable waste at source. In this, indigenous methods that are both user-friendly and eco-friendly

have been adopted by the people of Meghalaya, and include:

- » Channelling domestic wastewater to household backyards for irrigating kitchen gardens
- » Utilizing household biodegradable waste as feed for livestock such as pigs and poultry
- » Converting household biodegradable waste into nutrient compost for use in kitchen gardens

## Outcome

As on 13<sup>th</sup> June 2023, of the total 5,758 villages in Meghalaya, 689 have been transformed into ODF Plus villages. Of these, 95 are in the Aspiring category, 329 are in the Rising category, and 265 are in the Model category.

The State also has 933 waste collection and segregation sheds, 231 community soak pits, 699 community compost pits, 2 PWM units, 1 FSM plant, and 894 Community Sanitary Complexes (CSCs).

According to DDWS Integrated Information Management System (IMIS), 746 villages in Meghalaya have arrangements for SWM and 654 villages have arrangements for LWM.

The State has firmed up its plans to make the rest of the villages ODF Plus by December 2023.

## WEST BENGAL CONDUCTS BEACH CLEANING DRIVE IN DIGHA BEACH



**T**he District administration of Purba Medinipur organized a massive half-day beach cleaning drive in the coastal area of Digha on 21<sup>st</sup> May 2023.

The District is situated along the coast of the Bay of Bengal and has many beaches. These are recreational areas that attract many local and international visitors who are seen sunbathing, swimming, walking, or engaged in surfing activities.

The cleaning drive was successful in generating all-around participation from the three-tier PRI bodies and the local people. Officials from the Block and District administration and PRI bodies, health workers, NGOs, local volunteers, Accredited Social Health Activists (ASHAs) and Integrated Child Development Scheme (ICDS) workers, hotelier associations, etc. also participated in the drive. They collected trash like plastic bottles and packets, and cleaned the entire area.

Awareness was also raised on the need for cleanliness in general and in the coastal areas in particular. Leaflets and pamphlets

promoting hygiene and safe sanitation practices were distributed among tourists. The event was followed by a short marathon.

## Outcome

By removing solid litter, dense chemicals, and organic debris deposited on the beach or coastline by the tide, the area has now achieved visual cleanliness.

## VILLAGE PANCHAYATS OF GOA ORGANIZE CLEANUP DRIVES



**U**nder the guidance of the State Coordinator, Shri Pasidh Naik, the Directorate of Village Panchayats conducted cleanliness drives at two locations covering 33 village panchayats across the Union Territory (UT) of Goa.

All village panchayats responded positively, and many individuals volunteered for the cleanup drives. School students, SHGs, and other members were also invited to participate.

Around 200 kgs of dry waste was collected during the drives and handed over to the Material Recovery Facility (MRF) of the respective village panchayat for further treatment and process.

With the support of YIMBY Waste Management Company, Goa also organized beach cleanup drives in the village panchayats of Amona, Anjuna Caisua, Arambol, Benaulim, Bethora, Camorlim, Chicalim, Chicolna Bogmalo, Sangolda,

Cola, Colvale, Cortalim, Cotigao, Curdi  
Ponda, Dramapur, Goandongrem, Guirim,  
Harvalem, Honda, Kalay, Keri, Loilem

Polem, Mercedes, Raia, Rumdamol Davorlim,  
Sancoale, Sangolda, Shristhal, Taliegao,  
Tuem, Varca, Veling, Priol, and Cuncolim.

## Outcome

There was enthusiastic participation from village communities, panchayat leaders and District administrations who have been made aware of the importance of keeping their beaches clean.

# ▶▶▶▶ KASGANJ, HARDOI AND RAEBARELI DISTRICTS OF UTTAR PRADESH ORGANIZE CLEAN GANGA GRAM ABHIYAN



**U**nder the SBM-G campaign, the Panchayati Raj Department (PRD) of the Government of Uttar Pradesh organized the Clean Ganga Gram Abhiyan from 1<sup>st</sup> to 15<sup>th</sup> May 2023 in all GPs situated along the stretch of the river Ganga. These included the Kasganj, Hardoi, and Raebareli Districts.

The objective of the campaign was to build awareness on the importance of keeping the river Ganga clean and free of pollution. This is in alignment with the twin objectives of the Namami Gange programme:

(i) effective abatement of pollution, and  
(ii) conservation and rejuvenation of the national River Ganga. The Namami Gange programme is an Integrated Conservation Mission approved as a flagship programme by the Union Government in June 2014, with a budget outlay of Rs. 20,000 crores.

Although the Ganga River is considered to be holy with cultural and spiritual significance, the river has been facing extreme pollution from industries and habitations residing on its banks, posing a threat to its biodiversity and environmental sustainability.



With the support of UNICEF which developed communication materials, the campaign was implemented in Kasganj, Hardoi, and Raebareli. Visits were made to these Districts to support the District team in planning and implementing the campaign. More than 2,000 stakeholders participated in the District-level orientation.

Devotees were addressed by religious leaders and a pledge was administered to keep the Ganga clean. Students too took the Swachhata pledge and participated in rallies and essay and drawing competitions. Those who performed exceedingly well were felicitated.

## Outcome

A large number of people including SHG members and youth participated in the legacy waste removal campaign and pledged to keep their villages clean.



## SAHIBGANJ OBSERVES LEGACY WASTE REMOVAL CAMPAIGN



**T**he District administration of Sahibganj in Jharkhand has embarked on a legacy waste removal campaign from 5<sup>th</sup> May 2023 onwards to free the 78 Namami Gange villages of waste that has been accumulated at dump sites for several months and years.

Legacy waste is that which has been collected and kept for years at some barren land or a place dedicated to a landfill or an area to dump solid waste. Under SBM-G

Phase-II, it is essential to clear such sites to make a village achieve ODF Plus status. An ODF Plus village is one that effectively manages its solid and liquid waste and is visually clean.

In preparation for the Legacy Waste Removal Campaign, Shri Prabhat Kumar Bardiya, DDC of Sahibganj organized a meeting of all GP Mukhiyas, SBM-G Division officials, Sahibganj District and Block team members to discuss the implementation strategy

for the campaign. He recommended the inclusion of activities such as Shramdaan, cleanliness drives, Swachhata rallies, oaths and competitions, including clearing of legacy waste at different community spaces/dumps.

Adhering to the directives of the DDC, GP Mukhiyas and Member Secretaries of all 33 GPs (78 villages) covered in the Namami Gange Project of Sahibganj conducted various activities. They involved a large number of people who took the sanitation

oath, thereby achieving favourable results for the ongoing project.

The success of the campaign could be attributed to the involvement of Mr. Govind Kachhap, Executive Engineer-cum-Member Secretary, Drinking Water and Sanitation Committee, Sahibganj; Mr. Ashish Kumar Yadav, District Coordinator, SLWM; Mr Rahul Kumar, District Coordinator, M&E-cum-IMIS; Ms. Zeenat Taman, District Coordinator, IEC & HRD of SBM-G, Drinking Water and Sanitation Division, Sahibganj; among many others.

## Outcome

More than 5,000 individuals including SHG members, youth from Nehru Yuvak Kendras, and Ganga Praharies participated in various activities. They cleaned 198 public spaces and collected waste amounting to about 2,800 kgs.

# PLASTIC WASTE MANAGEMENT





1. Cleaning of Plastic waste

2. Shredding of Plastic

3. Mini Hot Mix Plant



8. Road Layering

7. Aggregate – Plastic – Bitumin Mix

6. Addition of Bitumin

## ▶▶▶▶ NADIA BUILDS A GREAT GREEN WALL WITH PLASTIC WASTE



In an effort to address PWM, the Sreema Mahila Samity (Sreema Women's Committee) from Sreerampur village in Nadia District, West Bengal, undertook a remarkable initiative – the construction of a green boundary wall made from discarded SUPs and other plastic waste. The five-foot-high and 80-metre-long wall was constructed with the financial support of Bharat Petroleum Corporation Limited (BPCL).

At the outset, the women's committee and BPCL organized awareness generation programmes to educate people about the environmental harm caused by plastics. Participants were informed that SUPs are not only difficult and expensive to recycle but also end up in landfills where they take years to decompose. Moreover, research has shown that plastics can break down into tiny toxic particles that contaminate the soil and water bodies, and even enter the food chain when animals and fish consume them.

Significant emphasis was placed on the 4R principle of PWM – Refuse, Reduce, Reuse, and Recycle plastics as much as possible.

Following the awareness programmes, people from the villages of Duttapulia, Barbaria and Kushaberia in Ranaghat-II Block were encouraged to actively participate in the plastic collection drive, with a particular focus on SUPs.

Over a span of four days, with the involvement of 30 dedicated volunteers, more than 10,800 pieces of plastic were

collected, amounting to a total weight of 300 kg.

To promote the secondary use of SUPs while reducing the consumption of bricks, the women and volunteers constructed a boundary wall using the collected plastics.

Plastic bottles were filled with plastic material and sand to increase their sturdiness, and a cement binder was used to form the wall, effectively utilizing the plastic waste.

## Outcome

During the collection drive, Team A collected 2,500 food packets, 1,900 personal care product packets, and 300 household product packets, while Team B collected 3,400 food packets, 2,300 personal care product packets, and 400 household product packets. Branded products accounted for 58.13 per cent of the food packets, 68 per cent of the personal care product packets, and 75.66 per cent of the household product packets among the total plastic waste collected.

## ▶▶▶▶ PUNJAB IMPLEMENTS THE 'BRING PLASTIC AND TAKE JAGGERY' CAMPAIGN



In a commendable effort to raise awareness about the detrimental effects of plastics, especially SUPs, and to combat plastic pollution in rural communities, Bhaini Mehraj village in Barnala District, Punjab initiated a campaign called Bring Plastic and Take Jaggery.

Launched on 1<sup>st</sup> July 2023, the campaign aimed to transform the village into a plastic-free community. The tagline, 'Join the campaign and let the sweetness of jaggery replace the detrimental impact of plastic in our lives', highlighted the objective of

embracing a healthier and eco-friendly lifestyle while addressing the issue of plastic pollution.

The initiative was the brainchild of Panchayat Secretary, Shri Paramjeet Singh, who was assigned to oversee the campaign District-wide. It successfully instilled among the village communities the habit of collecting and storing plastics. Instead of discarding plastics in open spaces, which often leads to clogged drains and water pollution, the villages now store them for later disposal.



Bhaini Mehraj village exhibited great enthusiasm to kickstart the campaign within their community. A Gram Sabha was conducted, during which the hazardous effects of single-use and other plastic products on health and the environment were extensively discussed, and the community was briefed about the initiative. Villagers were encouraged to store plastic products separately in their homes and bring them to a designated collection point decided by the GP. The collected plastic was weighed, and an equal amount of jaggery was given in exchange. Furthermore, a resolution was passed during the Gram

Sabha to declare the village as plastic-free, followed by announcements made through the village gurudwaras to motivate community participation in the campaign.

The Sarpanch, Smt. Sarbjeet Kaur, expressed the village's eagerness to be the first to launch this unique plastic-jaggery exchange campaign, as it promotes sustainable practices. The village leader also aimed to encourage the use of reusable bags, bottles, and other eco-friendly alternatives to SUPs. This approach not only encouraged plastic waste collection but also promoted the consumption of jaggery as a healthier alternative to sugar.

## Outcome

The campaign is expected to yield several positive outcomes, including a reduction in plastic waste, increased community engagement and empowerment, sustainable behaviour change, and environmental preservation.

## ▶▶▶▶ SIDDIPET INITIATES PLOGGING DRIVE TO PROMOTE WASTE SEGREGATION



**T**o generate awareness about the significance of waste segregation at the household level and address waste management, including the prevention of plastic pollution, for keeping villages visually clean, a plogging drive was initiated in the GPs of Siddipet District, Telangana.

The plogging drive was launched in Chinna Kodur GP and Mandal headquarters, with the active participation of the Minister for Finance and Health, Shri Harish Rao; District Collector, Shri Prashant Jeevan Patil; Additional Collector (Local Bodies),

Shri Muzamil Khan; District Panchayat Officer (DPO), Smt. Devaki Devi; District Rural Development Organization (DRDO) Representative, Shri Chandramohan; and Mandal and GP-level public representatives and functionaries.

A plogging drive is a combination of jogging and litter picking, and serves as a powerful tool to raise awareness about the importance of segregating wet and dry waste, and reducing plastic consumption. With the help of active community participation, the initiative aimed to instill

a sense of responsibility and promote sustainable waste management practices at the household level.

Prior to the plogging drive, extensive awareness meetings were conducted through various media channels, including public meetings and social media platforms, to inform the village community about the environmental impacts of improper waste disposal and plastic pollution. Special emphasis was placed on explaining the distinction between biodegradable and non-biodegradable waste, as well as the benefits of recycling.

To ensure the long-term effectiveness of waste management practices, collaboration

with local authorities was established, seeking their support in providing necessary resources and guidance. Clearly-labelled bins or bags were distributed to collect each type of waste, and proper disposal or recycling methods were followed in accordance with local waste management guidelines to ensure appropriate handling of the collected waste.

Participants of the plogging drive were equipped with gloves, garbage bags and other necessary equipment for collecting litter. Safety precautions, such as wearing suitable clothing and footwear, were taken to avoid potential hazards.

## Outcome

The plogging drive was a one-time event but part of a broader effort to bring about lasting change. It served as a catalyst for change while generating awareness. The initiative empowered the village community to actively participate in waste management and environmental conservation through education, engagement, and collaborative efforts. With the promotion of sustainable practices, the drive laid the foundation for a cleaner and greener future, where communities collectively take responsibility for their surroundings.

## SAWAI MADHOPUR RAISES ENVIRONMENTAL AWARENESS THROUGH INNOVATION



**M**r. Chandramohan Pareek, a resident of Bhedola GP in Sawai Madhopur District, Rajasthan took a proactive step towards promoting environmental awareness by utilizing wasted plastic bottles to provide shade for his shop.

Mr. Pareek was well-informed about the detrimental impact of plastics on the environment and the contribution of plastic bottles to the daily generation of plastic

waste. He was also aware that disposable SUP water bottles often end up in landfills or water bodies, posing a threat to various species and polluting the ecosystem.

To raise awareness on the importance of PWM and promote its 4R principle – Reduce, Refuse, Reuse and Recycle – Mr. Pareek first collected all the empty plastic bottles in his neighbourhood. He then creatively repurposed them to create a protective

cover or sun shade across his shop. This colourful and innovative installation not only brought joy to shoppers and passers-by, but

also served as a reminder that such plastic bottles are not reusable. It emphasized the need to reduce waste by refraining from using SUPs.

## Outcome

Mr. Chandramohan Pareek's initiative conveyed a powerful message to his community, encouraging them to play an active role in curbing the use of plastics and protecting the environment.

## ▶▶▶▶▶ 'GIVE POLYTHENE GET GOLD' CAMPAIGN MAKES SADIWARA PLASTIC-FREE



First gold coin given under 'Give Polythene Take Gold' initiative at Sadiwara GP, Hiller Shahabad Block, Anantnag

Plastic pollution is one of the greatest environmental challenges of the 21<sup>st</sup> century. Overconsumption of plastic and mismanagement of plastic waste are a growing menace, leading to the overflow of landfills, choking of rivers, and threat to local aquatic ecosystems. Plastic waste also negatively impacts sectors that are critical to the rural economy, including tourism and fisheries.

To urgently address this, Mr. Farooq Ahmad Ganaie, Sarpanch of Sadiwara-A GP in Hiller Shahabad Block of Anantnag District of Jammu and Kashmir decided

to launch the 'Give Polythene Get Gold' campaign in January 2023. With community participation, the campaign aimed to help the village phase out of plastic usage.

Geographically, Sadiwara is sandwiched between Municipal Committee Dooru and Verinag, with the latter being known for the historic Vitasta river. The ODF Plus Aspiring GP lies adjacent to the Jawahar Tunnel that has been constructed on the national highway. With its visually clean and green surroundings, the GP is striving towards achieving ODF Plus Model status.

A survey was previously conducted in the GP to understand the mechanisms of waste disposal in rural panchayats, which revealed that two-thirds of the waste generated at the household level was harmful plastic.

To eliminate plastic waste and encourage the community to act plastic-smart with a sense of responsibility, the novel idea of 'Give Polythene Get Gold' was suggested by the Sarpanch. Youth and women supported the initiative and, within a few days, the local irrigation land and market areas were made polythene-free.

The Sarpanch's spouse, Shabnum Farooq, aged 48 years, donated two 10-gram gold coins for the campaign. Each gold coin was to be given in exchange for 20 quintals of plastic waste. She commented on her contribution, "Whatever gold I have, I received it from my husband, and I am happy to donate towards saving the environment and the well-being of my village." She added

that she would do more if it could make her village completely free of polythene and plastic waste.

The Sarpanch, who is also an advocate by profession, announced that he would provide three cloth bags to each household for replacing polythene. On seeing polythene bags, sanitary pads, diapers, hazardous waste everywhere – on the roads, in the drains and near Masjids – he was motivated to take measures against rampant plastic litter. Along with irrigation employees and the Jammu and Kashmir Police led by DO Tunnel, the Sarpanch conducted awareness camps, urging people to say no to plastics and to refrain from throwing garbage in water bodies or vacant land.

Three community shramdaan drives were conducted in a fortnight, during which five spots and a half kilometre stretch were cleaned. People were motivated to collect as much plastic as they could for this campaign.



*Panchayat Halqa Hiller was awarded by Hon'ble Lieutenant General (LG), Jammu and Kashmir, for being among the best performing panchayats in the State. Sarpanch Halqa Sadiwara received the award during the National Panchayat Raj Day held at Palli Samba Jammu.*

## Outcome

The initiative demonstrated that small incentives can be the right nudge for involving people in a process and creating a sense of ownership toward moral duties. Rewarding volunteers and sensitizing people were instrumental in ensuring clean surroundings.

## TAMIL NADU RAISES AWARENESS ON SUP BAN AND ALTERNATIVES



As part of Tamil Nadu's *Namma Ooru Superu* (My Village is the Best) campaign, the dates 25<sup>th</sup> May to 3<sup>rd</sup> June 2023 were dedicated to promoting awareness on the ban of SUPs and encouraging the use of alternative materials to protect the environment.

A remarkable total number of 2,27,184 individuals participated in various activities across all panchayats in the State. These activities included rallies and awareness programmes conducted in colleges, shops

and other commercial establishments. The *Meendum Manjappai* (Yellow Bag Again) initiative was also launched to promote the use of cloth bags as an alternative to plastic.

During the week, 2,442 village-level meetings were organized to reinforce the SUP ban and encourage residents to use eco-friendly alternatives. The goal was to ensure safe sanitation practices and cleanliness in rural areas throughout Tamil Nadu.



The campaign was held across the State from 1<sup>st</sup> May to 15<sup>th</sup> June 2023, with the aim to strengthen the State's progress toward ensuring environmentally sustainable and clean villages. It emphasized on the effective management of legacy waste, the achievement of the State's retrofitting target, and the provision of health and welfare measures for sanitation workers.

The campaign involved a range of activities, including mass cleaning of public institutions and spaces, awareness programmes on water, sanitation, and waste management in schools and colleges; promotion of Water, Sanitation and Hygiene (WASH) practices and waste management at households and institutions by SHG members; promotion of the ban on SUPs and the use of alternatives; and plantation activities to enhance the cleanliness and greenery of villages.

## Outcome

A total of 2,27,184 individuals actively participated in activities from all the panchayats across the State. They were engaged in rallies and awareness activities at colleges, shops and other commercial establishments.

## ▶▶▶▶▶ RATNAGIRI MARKS WORLD ENVIRONMENT DAY WITH PLASTIC WASTE COLLECTION DRIVES



**O**n 5<sup>th</sup> June 2023, in commemoration of World Environment Day, Ratnagiri District in Maharashtra organized simultaneous plastic waste collection drives across 846 GPs. The initiatives were led by Sarpanches and garnered enthusiastic participation from GP members, village officials, students, women groups and NGOs.

The 'Plastic Mukt Ratnagiri' campaign, organized by the District Water and Sanitation Cell, emphasized the crucial role

of cleanliness in maintaining a healthy life. It highlighted the importance of cleanliness in disease prevention, environmental preservation, and conservation of natural resources.

**Campaign preparation:** District coordinators conducted a thorough survey to identify locations where garbage was being improperly disposed of. With the help of a mobile application, the survey facilitated community participation, reporting, documentation and monitoring.

Users could also capture and upload photographs of the dumping sites.

To raise public awareness on proper waste disposal and cleanliness in public spaces, signboards that warned individuals of penalties for littering were prominently displayed. These signs aimed to discourage people from improper waste disposal practices.

**Capacity strengthening:** Individuals involved in the survey were provided with guidance on using the mobile application to capture and upload photos of the dumped garbage, ensuring accurate geotagging of the locations. Block officials played a crucial role in disseminating this information and ensuring widespread understanding of the process.

A workshop was organized for Sarpanches and Gram Sevaks to foster a sense of responsibility for proper plastic waste disposal. They were encouraged to organize group meetings and engage in IEC activities such as stakeholder meetings, Swachhata Shapath, and the use of jingles and banners. These tools effectively communicated the benefits of the campaign and encouraged active participation.

On 5<sup>th</sup> June, the collaborative efforts of volunteers resulted in the collection of around 5–12 kgs of plastic waste per GP, amounting to a total of 8,692 kgs in the entire District. The collected waste included plastic bags, bottles, containers, wrappers, packaging materials and other commonly used in daily-life products.

## Outcome

The community members actively participated in the campaign by raising slogans, such as ‘Let us go green to keep our planet clean’; ‘Ban plastic bags’; and ‘Don’t litter, it makes the world bitter’, etc. Participants committed to adopting eco-friendly practices and reducing the use of plastic bags. The campaign served as a catalyst, motivating people to take action and make a positive difference. Additionally, youngsters and students actively contributed by sweeping the roads, picking up plastic waste, and segregating it into degradable and non-degradable categories.

## ▶▶▶▶▶ PURBA MEDINIPUR'S PWMU ESTABLISHES FORWARD LINKAGES



In the Patashpur Block of Purba Medinipur District, West Bengal, a new PWMU was set up in Pratap Dighi GP. The unit not only ensured the systematic cleaning and processing of plastic waste but also established forward linkages for effective waste management.

The PWMU serves 398 villages across three Blocks in Purba Medinipur District. On an average, each village generates approximately 2 kgs of plastic waste per day, resulting in a total of 240 kgs of waste received by the unit daily.

Operated by a Farmers Producer Organization (FPO) Company with 520 members, the PWMU was established in March 2023, and it will be tagged to the adjoining Blocks of Patashpur-I and Egra-II. The District administration will provide a mini truck to the FPO for transporting plastic waste from the villages to the PWMU.

The unit does not directly handle household-level waste collection. It purchases waste from local waste collectors, rag pickers and outsourced waste collectors such as *Kabadiwalas*.

## Outcome

The plastic waste collected is systematically gathered and segregated before it is cleaned. The waste is then compacted into specific sizes using hydraulic pressure from a baler machine. A shredder machine is used to cut the waste into strips and particles of a certain dimension, before it is sold to recyclers.



## BALRAMPUR SETS UP BARTAN BANKS TO BEAT PLASTIC POLLUTION



In an effort to combat plastic pollution, five GPs in Balrampur District, Chhattisgarh, implemented a ban on SUPs and established Bartan Banks. These banks were operated by the SHGs of the GPs – namely, Santhoshi SHG in Bhanora GP; Meera SHG in Tatapani GP; Swachhata SHG in Purandih GP; Sheetal SHG in Mitgai GP; and Rajshakti SHG in Dakva GP.

The initiative was undertaken with the support of the District administration, led

by the Collector, Mr. R. Ekka and CEO-ZP, Ms. Reena Zamil. The ultimate goal is to make the entire Balrampur District 100 per cent free of SUPs. With the implementation of the initiative, the District administration aims to minimize the use and disposal of plastic plates, bowls and spoons at the village level.

Women SHGs operate the Bartan Banks and earn additional income. During village events such as birthdays, weddings and

other festivities where feasts are prepared, the Bartan Banks provide clean utensils for a small fee. As a result, the amount of waste generated after these events was significantly reduced since disposables were not used. This model has already generated an income of approximately Rs. 19,260.

The five GPs in the District purchased steel *bartans* for approximately Rs. 1,09,000, and assigned cleaning groups to maintain them. Resolutions were passed by the

GPs, stating that plastic utensils should not be used during village events. Instead, villagers can borrow steel utensils from the Bartan Bank for a small fee, which will help in keeping the villages clean and reducing the consumption of SUPs.

Slogans and wall writings promoting the Bartan Banks can be seen in public spaces and intersections within the villages, providing contact information for those in need of steel utensils for their functions.

## Outcome

Currently, families in the GPs borrow utensils from the Bartan Banks based on their requirements and return them in a clean condition, paying the prescribed fee. Proper records are maintained, including a count of the lent utensils and deposit slips to ensure accountability.

# ▶▶▶▶ SIDDIPET OFFERS SILVER COINS IN EXCHANGE FOR PLASTIC WASTE



In Ksheerasagar GP, located in Mulugu Mandal of Siddipet District, Telangana, an initiative was launched with the tagline ‘Bring plastic waste and collect silver coins’. The week-long campaign that began on 20<sup>th</sup> April 2023 was inspired by the successful campaign of Shri Farooq Ahmad, Sarpanch of Sadivara village in Anantnag District, Jammu and Kashmir, who offered gold coins for plastic waste in February 2023. News of the Jammu and Kashmir Sarpanch’s campaign to curb the use of SUPs had garnered widespread

attention through print, electronic, and social media. Upon hearing about it, the village leaders, including the Sarpanch, Panchayat Secretary, and representatives of Mandal Parishad Territorial Constituency (MPTC), were motivated to adopt a similar approach in their GP.

During the National Panchayat Awards Programme held at the District and mandal levels, the Minister for Health and Finance, Shri T. Harish Rao, encouraged all public representatives to make their villages “Swachha-Arogya” (clean and healthy)



by adopting sustainable practices and reducing plastic usage.

This, coupled with the District-wide sanitation drives promoting steel banks and plastic-waste-free villages, led by the District Collector, Shri Prashant Jeevan Patil and the Additional District Collector, Shri Muzamil Khan, further fuelled the community's enthusiasm.

To ensure the smooth execution of the plastic waste collection drives and promote alternatives to plastic, Smt. Devaki Devi, DPO, conducted several review-cum-orientation meetings. During one such meeting, the news of the Jammu and Kashmir Sarpanch's

innovative idea was shared with all Sarpanch groups, encouraging them to adopt similar practices in the District.

It was in this spirit that the Panchayat Secretary, Sony, approached Sarpanch Kaithi Yadamma, Shri Narsingarao and MPTC representative, Smt. Mamatha Balreddy who had been actively involved in welfare programmes through the Konyala Ball Reddy (KBR) Trust across the Mandal.

In response, the KBR Trust member and MPTC, Smt. Konyala Mamatha Balreddy, agreed to provide 500 grams of silver (in the form of 10-gram silver coins), with the decision to offer one silver coin for every 10 kgs of plastic waste collected.

## Outcome

The campaign successfully attracted people and encouraged them to collect plastic waste in exchange for a silver coin.

# FAECAL SLUDGE MANAGEMENT





## ▶▶▶▶ FSTP PROVIDES LIVELIHOOD OPPORTUNITIES FOR TRANSGENDERS IN ODISHA



In a unique collaboration, the Government of Odisha engaged a transgender SHG for O&M of the FSTP in Basuaghai village of Bhubaneswar District in Odisha. The 12-member transgender SWIKRUTI SHG has been operating the plant since 1<sup>st</sup> July 2022. It also hired a technical resource person to run the testing laboratory, keep the trip register, and give technical support to the SHG for O&M.

The Basuaghai FSTP is a stand-alone low-tech and low-cost model of nature-

based Decentralized Wastewater Treatment System (DEWATS) technology, commissioned in 2018 under Atal Mission for Rejuvenation and Urban Transformation (AMRUT) by Odisha Water Supply and Sewerage Board (OWSSB).

Meghna Sahoo, President of SWIKRUTI SHG, informed that the SWIKRUTI SHG was founded in 2018 with 17 members. Prior to being involved with the FSTP, a majority of the members had no stable means of income. They mostly had to beg for food and

money, and faced the risk of exploitation. The SHG members are now a happy and proud lot as they have a steady source of money to live with dignity.

“We wanted to be involved in work that was safe, dignified and stable. When we heard that the Government was involving transgender persons in sanitation duties, we decided to have a meeting with the Government wherein we requested the Bhubaneswar Municipal Corporation (BMC) Commissioner and the Department to involve our SHG in sanitation efforts. Following consistent interaction with the Government, our SHG was chosen and hired to run and operate the Basuaghai Plant,” she said.

The SHG President further informed that they were given training on O&M of FSTP, including in-house, field and technical training by the Housing and Urban Development (H&UD) Department, Government of Odisha, and Odisha Water Academy.

A toll-free number, the ULB Helpdesk number, and the current online platform, Sustainable Urban Services in a Jiffy by Odisha Government – Faecal Sludge and Septage Management (SUJOG-FSSM), were piloted to register service requests for desludging services and grievance redressal to improve service delivery.

## Outcome

Till July 2023, 13 members, which comprises 1 technical resource person and 12 transgender SHG members, are working in this plant and are well trained for the day-to-day O&M of the FSTP.

# FSM IN KARNATAKA'S 80 BADAGABETTU GP IS A SOURCE OF INCOME



Situated about 9 km from the main town of Udupi in Karnataka, 80 Badagabettu GP is home to about 1,500 families and 185 commercial centres. However, all households in the villages in and around the GP had single-pit toilets. When the toilet pit was filled, there was no system for scientific disposal of faecal matter.

To address the issue, an FSTP was constructed under SBM-G in the GP in 2022.

This construction was the first of its kind in the District, and would benefit 16 GPs in the Udupi Taluk.

The project is managed in partnership with Amma Mahila Swasaha Sangh. Its objective is to scientifically manage faecal sludge collected from households, institutions and commercial centres, and convert it into organic manure without harming the environment. The manure is to be provided to farmers.

With a collection of 92 loads of faecal waste in 75 days during May and June 2023, the FSMU has earned a revenue of around Rs. 3.25 lakhs. Further, about 1,200 kg of fertilizer is being prepared for sale to farmers, which is expected to generate additional income.

**Construction and collection costs:** Around Rs. 74.78 lakhs availed from SBM-G and other grants was used for the construction of the facility, and Rs.24.78 lakhs was further spent on a 3,000-litre capacity tank for sewage collection. The collection fee has been fixed for individual households at Rs. 3,000 for the first trip and Rs. 2,500 from the second trip onwards; the fee for an

apartment complex or a commercial centre is Rs. 5,000 for the first trip and Rs. 4,500 from the second trip onwards; and Rs. 35 per km for travel outside Badagabettu GP.

It has been seen that there is a good demand for this service, with households having to book in advance and wait in queue for their turn. Arrangements have also been made for online payment of fees.

Rs. 50.3 lakhs from SBM-G was spent for the construction of a Sewage Treatment Plant (STP), and Rs. 24.78 lakhs from the Taluk Panchayat grant for the purchase of a waste collection vehicle.

## Outcome

The success of this project led to more proposals being prepared for the construction of similar units. While one unit has already been constructed in Karkala taluk and operations are scheduled to begin soon, the location for two other units has been identified in two taluks.

## RAJASTHAN'S URBAN FSTPs SERVE NEIGHBOURING GPs



In a unique convergence of Urban Local Bodies (ULBs) and GPs, the FSTPs in urban areas of Rajasthan that are not functioning to their full capacity will henceforth serve the GPs that do not have an FSM plant within a 15 km radius. The move that will provide co-treatment of faecal sludge from single pit and septic tank toilets will undoubtedly help these villages to transform into ODF Plus villages.

**Background:** Although all households in rural Rajasthan were provided toilets and access to sanitation facilities, there were no adequate arrangements for the management of faecal sludge generated in single pit and septic tank toilets. In the absence of such arrangements, truck operators would dump faecal matter into drains, water bodies or open areas, causing a high level of environmental pollution and posing serious health risks.

The State had been frantically searching for an FSM solution that was sustainable and would protect the environment and human health, and also boost the economy.

**DDWS Advisory:** FSM is a major component under SBM-G Phase-II. On 14<sup>th</sup> September 2021, DDWS, Ministry of Jal Shakti, Government of India, issued a joint advisory that stated, "If any urban FSM facility (STP/ FSTP) is not working to its full capacity and there is no FSM facility in the rural areas falling within 15 km radius of that existing urban FSM facility, then in those rural areas rather than constructing a new FSM facility, the existing urban facility may be used for co-treatment of faecal sludge through the convergence of ULB and GP."



**Steps taken for co-treatment:** In compliance with the directive from DDWS, the following steps were taken by the State Government of Rajasthan for co-treatment of faecal sludge at the existing urban FSM facilities:

- » Identification of existing urban FSM facilities, i.e., 20 Kilo Litres Per Day (KLD) FSTP plant at Lalsot (Dausa), 20 KLD FSTP plant at Phulera (Jaipur) and 10 KLD FSTP plant at Khandela (Sikar)
- » Analysis of available spare capacity in the identified urban FSM facilities for convergence
- » Mapping of villages falling within a 15 km radius of the existing urban FSM facility
- » Formulation of FSM Technical Committee under the chairmanship of Chief Engineer, Rajasthan Urban Infrastructure Development Project (RUIDP), and approval of the same by Secretary, PRD, and Secretary, Local Self Government (LSG)
- » Preparation of Memorandum of Understanding (MoU) for co-treatment of faecal sludge from villages falling within 15 km radius of the existing urban FSM facility through convergence between ULB and GP

- » Issuance of a joint advisory letter dated 21.12.2022 by Secretary, PRD, and Secretary, LSG, for co-treatment of faecal sludge
- » Issuance of directions to formulate a District-level Technical and Execution Committee under the chairmanship of the concerned District Collectors to finalize transportation/ user charges on the basis of the distance between the urban FSM facility and the on-site rural facility
- » Finalization of transportation/user charges for desludging services as per the recommendations of the District Technical and Execution Committee
- » Issuance of MoU between Block Development Officer (BDO) (for its concerned GP) and Executive Officers of (concerned ULB) as per the recommendations of the District Technical and Execution Committee

With the issuance of the joint advisory by the Secretary, PRD, and Secretary, LSG, a total of 312 villages (198 villages through Lalsot FSTP, 69 villages through Khandela FSTP, and 45 villages through Phulera FSTPs) now have access to a Faecal Sludge Co-treatment facility.

## Outcome

Rajasthan has become the second State to have an MoU between ULBs and GPs regarding the use of an urban FSM facility for co-treatment of faecal sludge of villages falling within a 15 km radius of the existing urban FSM facility. Similarly, the new proposed STP/ FSTPs will be constructed with such extended capacity so that they can be utilized for any further possible convergence for co-treatment of faecal sludge generated in rural areas.

## ▶▶▶▶ FSTP IN BENIPUR SERVICES 11 GPs



**A**n FSTP of 3 KLD capacity was constructed across an area of 1.92 acres in Benipur GP of Amethi District in Uttar Pradesh under the SBM-G campaign. The plant, which services a cluster of 11 GPs and one Nagar Panchayat and caters to a population of 6,30,503 individuals, has been operational since 2021.

The 11 GPs in the cluster are Jangal Ramnagar, Jangal Tikri, Tikariya, Saraikhema, Mehmudpur, Parsawa, Kharauna, Thaura, Sarwanpur, Raibha and Benipur. Until now, 7,52,500 litres of faecal sludge have been brought to the facility for treatment by desludging tankers 156 times.

An MoU was signed on 13<sup>th</sup> October 2022 between the main stakeholders of Benipur FSTP – District PRD and 11 GPs. From the date of signing of the MoU, the responsibility of O&M has been taken over by the respective panchayats.

**The need:** FSM has been rapidly evolving and gaining importance as a non-sewered sanitation alternative. It is one of the economical and sustainable solutions to the sanitation problems in rural and sub-urban areas. One of its key elements is the establishment of FSTPs, most of which take into account the ease of construction, capital cost, and reuse of infrastructure.

FSTPs are important for rural and sub-urban areas that do not have sewerage systems and where toilets are of single pit or septic tank type. When single pits or septic tanks get full, households need to hire desludging operators for mechanized desludging, transportation and treatment of faecal sludge at FSTPs.

In the absence of such facilities earlier, tankers would collect the sludge but dump it into open drains, canals, ponds and other open spaces. This greatly affected the environment, polluting both land and water sources and posing threats to human health. As per the SBM-G guidelines, effective FSM

can sustain the ODF status of villages and keep the environment clean and healthy.

**Implementation of FSTP:** WaterAid India is a development partner that has been providing support to DDWS, Ministry of Jal Shakti through pilot projects in Chhattisgarh, Uttar Pradesh and Madhya Pradesh. Through a collaboration with the District administration of Amethi, an FSTP was constructed in Amethi in February 2020. For this, 1.92 acres of land were made available in Benipur GP, around which a cluster of 11 GPs and one Nagar Panchayat was formed. The intervention is in keeping with the SBM-G Phase-II guidelines and the ODF Plus initiatives being promoted.

## Outcome

Following a survey of households in the intervention area and awareness building, the construction of the FSTP was completed in September 2021 and the Planted Drying Bed (PDB) model of FSTP was operational from October 2021.

## ▶▶▶▶ PATORA FSTP HANDED OVER TO GP FOR O&M



**T**he FSTP in Patora GP of Durg District in Chhattisgarh was officially handed over to the GP on 29<sup>th</sup> March 2023 in the presence of local political representatives, officials from SBM-G and ZP, PRI members, Frontline Workers (FLWs), and community members. The GP will henceforth take care of O&M of the FSTP.

The handover document for the FSTP that was set up in 2020 was signed by the

Sarpanch of Patora, Smt. Anjita Gopesh Sahu, and Shri Manas Kumar Biswal, State Programme Director, WaterAid.

While the GP will take care of O&M expenses of the FSTP, the District SBM-G team has pledged all possible support for the smooth operation of the plant, as per the MoU. The District team from WaterAid will continue to provide support through lab testing and other technical know-hows.

Over the past three years, the development partner has been involved in meeting operation costs, creating a database on truck loads, and conducting regular repairs. It has also supported the GP in the process of composting and selling the manure. Meanwhile, the ICICI Foundation [Corporate Social Responsibility (CSR) partner] provided the GP with a vehicle for desludging.

The GP will now be able to earn revenue through provision of desludging services in Patora and other nearby villages.

Speaking of the reason for handover, State Coordinator, WaterAid, said, “The FSTP is now fully functional and the GP is able to manage the O&M efficiently. At the request of the GP, we have also completed the construction of a shed in the plant.”

“We believe this is a significant achievement for the community and a testament to the joint efforts of all stakeholders,” Mr. Manas Kumar Biswal said, adding that the District and State SBM-G teams were part and parcel of all activities including planning and vendor selection for the construction. The SBM-G team has also been monitoring the programme and anchoring awareness drives in the GP for ODF Plus activities from time to time.

On its part, the State SBM-G has provided the GP with a suction vehicle through CSR funds and supported IEC activities to generate awareness about the FSTP. It has also recommended that other Districts in the State visit the facility in Patora to learn about the process for replication of the initiative in their respective areas.

## Outcome

Patora leads the State in setting up a rural FSTP that is effectively managing faecal matter generated in households.

## ▶▶▶▶ RETROFIT TO TWIN PIT ABHIYAN LEADS TO RETROFITTING OF OVER 1 MILLION TOILETS



In a brilliant accomplishment, as many as 10,60,817 toilets were retrofitted under the Retrofit to Twin Pit Abhiyan as per the IMIS of SBM-G on 30<sup>th</sup> June 2023. The campaign, held from 2<sup>nd</sup> October 2022 to 30<sup>th</sup> June 2023, was intended to promote the safe disposal of faecal sludge through a simple on-site methodology. It was also a celebration of Azadi Ka Amrit Mahotsav (AKAM), an initiative of the Government of India to celebrate and commemorate 75 years of independence and the glorious history of its people, culture and achievements.

In **retrofitting of single pit toilets to twin pit toilets**, the top-performing States were Andhra Pradesh (3,28,648 lakhs), Maharashtra (2,55,112 lakhs) and Madhya Pradesh (79,220). Telangana has achieved the milestone of 100 per cent retrofitted single pit toilets (60,249 lakhs).

States across the country would need to prioritize retrofitting of single pits wherever feasible. They should ensure BCC and IEC for retrofitting of single pits that are not yet filled/emptied and/or construction

of an additional pit before the first one fills up.

In **retrofitting of septic tank toilets**, Tamil Nadu (99.7 per cent), Maharashtra (99.5 per cent), Punjab (82.2 per cent), Bihar (55.9 per cent), Madhya Pradesh (87 per cent) and Kerala (65.8 per cent) reported the maximum number of septic tanks with soak pits; while States such as Goa, Telangana, Jharkhand, Gujarat and Manipur declared/retrofitted all identified septic tanks with soak pits.

All villages having septic tanks would need to prioritize FSM planning with urban-rural convergence and ensure the following: (i) mapping of existing or under construction STPs/FSTPs; (ii) tagging of villages for co-treatment at STP/disposal at the existing FSTPs; (iii) mapping of existing STPs/FSTPs for linkage; (iv) assessment of spare capacity at STPs/FSTPs; (v) mapping of villages requiring new FSTPs; and (vi) mapping/registration of desludging operators to ensure mechanized desludging.

## Outcome

Of the total retrofitted toilets, 8,58,296 single pit toilets were retrofitted into twin pit toilets; 2,02,521 septic tanks were attached to soak pits; and 1,24,81,413 septic tanks reported as existing with soak pits.

# GREYWATER MANAGEMENT







## ▶▶▶▶ MATAULI ADOPTS SEECHEWAL MODEL FOR GWM



**M**atauli village, located in Patran Block of Patiala District, Punjab, adopted the Seechewal Model for GWM to renovate its traditional water body through the MGNREGA Scheme. This model, introduced by Sant Baba Balbir Singh Seechewal and previously implemented in Seechewal, Punjab, utilizes a pipe-and-pump formula to remove heavy solid particles, oil and other materials from water.

Matauli, an agricultural village with a population of 2,300 individuals from 326 households, achieved ODF status in 2017 under SBM-G Phase-I. The village

constructed 48 individual household toilets to make safe sanitation accessible for everyone. The community ensured the sustainable usage and maintenance of these facilities and remained ODF.

The village's water body, a pond spanning 2.5 acres, had become severely polluted due to wastewater drainage. The proactive Sarpanch visited neighbouring villages and Districts to study their successful GWM projects, including the Seechewal Model. Based on this research, a study was conducted in Matauli to assess its water usage, availability and patterns,

determining the feasibility of implementing a GWM system.

The community was educated about GWM, its benefits, and the importance of water conservation, seeking their support and active participation. Subsequently, a comprehensive GWM plan was developed, adopting the Seechewal Model tailored to the village's specific needs, for the renovation of traditional water bodies.

The Seechewal Model consists of one screening chamber and three wells. Sewer water from all households is collected in the screening chamber, where floating

materials are separated. The water then passes through the three wells of varying depths and widths.

In the first well (11.5 feet deep and 14.5 feet wide), water revolves and solid material settles to the base. The liquid then moves into the second well (10.5 feet deep and 14.5 feet wide), where grease and other impurities are removed. The water that goes into the third well (10.5 feet deep and 14.5 feet wide) is almost clean. Finally, the water is transferred to the pond and used for irrigation purposes.

## Outcome

The pond, renovated under the MGNREGA scheme, has transformed into a beautiful lake with increased capacity and cleanliness, and is now free of foul odours. The initiative generated employment opportunities and will continue to contribute to the overall health and well-being of the community. The treated water used for irrigation also helps reduce dependence of bore wells.

## ▶▶▶▶ JAMMU AND KASHMIR IMPLEMENTS SOAK PITS FOR GWM



**J**ammu and Kashmir took up the construction of soak pits as a means to effectively treat greywater and raise the groundwater table in rural areas.

This initiative is a crucial component of SBM-G Phase-II, aimed at sustainable sanitation, environmental pollution prevention and maintenance of clean villages.

The Directorate of Rural Sanitation Jammu and Kashmir was committed to ensuring effective GWM in all panchayats. Sahar

village in Kathua Block, with 357 households, witnessed the construction of over 150 model soak pits, with an additional 100 soak pits currently being built in accordance with the guidelines provided by DDWS.

Initially, the village faced challenges in convincing residents about the benefits and process of constructing soak pits. The community had been misguided to believe that constructing soak pit would take massive efforts at a large scale. However, through various IEC activities, including awareness campaigns conducted by the

Sarpanch at the household and ward levels, the community eventually agreed to the setting up of soak pits.

To ensure successful implementation, all PRI members and public representatives were trained and given individual targets for constructing soak pits in their respective areas. These efforts were further supported by TOT sessions organized at the Block level, where resource persons from the Districts trained PRI members and other individuals who subsequently conducted multiple training programmes in villages. These programmes provided technical

guidance on constructing individual soak pits and emphasized the proper dimensions required.

The Department of Rural Sanitation in Jammu and Kashmir successfully implemented GWM works in 7,163 villages across 20 Districts simultaneously. This effort resulted in the construction of a total of 2,30,244 individual soak pits each designed to suit the terrains of Jammu and Kashmir. As a result, 41 villages were declared ODF Plus model villages, and 373 villages achieved the ODF Plus Aspiring status.

## Outcome

These initiatives enabled the treatment of 80 per cent of the water supplied, used, and discharged as greywater from households and institutions through soak pits, leading to sustainable management of greywater.

## ▶▶▶▶ PAPPANKUZH I EFFICIENTLY MANAGES GREYWATER



Through collaborative efforts between community members and government officials, Pappankuzhi village panchayat in Kanchipuram District, Tamil Nadu, successfully implemented a GWM system. This system included individual household soak pits and community soak pits with horizontal or vertical type filters, effectively treating about 42,000 litres of greywater generated daily in the village.

**Community leadership:** Ms. A. Sarla Devi, a *Swachhagrahi*, played a crucial role in raising awareness about SLWM, emphasizing

the need for effective GWM in the village. People were made aware of what greywater constituted and the possible hazards of its improper management.

The President of the village, Mr. Ganesan, and the Panchayat Secretary also played crucial roles in advocating for GWM and allocating funds for the establishment of the system in November 2021. While the panchayat oversaw the O&M of the system, the community followed certain precautions to ensure its proper management. These precautions included refraining from

dumping waste into drainage channels; regular desilting to prevent water stagnation; and routine cleaning of stormwater drains.

**Background of the village:** Situated in the Sriperumbudur Block, Pappankuzhi comprises two habitations – Pappankuzhi village and Pappankuzhi colony – and houses a total population of 1,016 from 474 households. The village has two overhead tanks with a capacity of 30,000 litres each. Households consume approximately 60,000 litres of water daily, of which 70 per cent becomes greywater, amounting to around 42,000 litres of greywater per day.

Previously, the absence of a GWM system led to the discharge of greywater onto roads, causing pollution and stagnant water, which became breeding grounds for mosquitoes, microbes, and parasites, resulting in diseases such as dengue, malaria, and

cholera. Additionally, open dumping and discharge into water bodies contaminated both surface and groundwater, especially in high-water table areas. The community was also unaware that treated greywater could provide relief from acute water stress.

To address these challenges, 93 individual household soak pits were constructed at a cost of Rs. 9,300 each. Furthermore, two community soak pits with horizontal-type filters were built at drainage disposal points at a cost of Rs. 1,33,000 each. These soak pits were suitable for clusters with a high groundwater table, and the treated water could be used for agricultural purposes. Additionally, one community soak pit with a vertical-type filter, suitable for clusters with a low water table, was constructed at a drainage disposal point at a cost of Rs. 1,27,000.

## Outcome

The GWM initiative effectively managed regular greywater generated in households and establishments, resulting in cleaner paths and community areas.

## ▶▶▶▶ BHIWANI ADOPTS NEHVEEN MODEL FOR COMMUNITY-LEVEL GWM



**J**itanwas GP in Kairu Block of Bhiwani District, Haryana, adopted an innovative Nehveen model for community-level GWM, to augment the groundwater table, which is generally low in the region.

The intervention cost Rs. 1.49 lakhs, and catered to approximately 200 households, with successful increase in the groundwater level by 2 feet. Based on this result, the District administration has selected 84 more villages where similar Nehveen Model treatment plants will be set up under SBM-G Phase-II.

The **Nehveen Model** is a combination of a soak pit and a leach pit. A soak pit is a dug-out pit filled with graded stones and gravels, recommended for installation near hand pumps, stand posts, etc. at community level to manage greywater and replenish the groundwater table. On the other hand, the leach pit consists of either honeycomb brick masonry with cavities in alternate layers or stacking of concrete rings with 5–6 holes in each ring. Treated water is allowed to percolate into the ground and raise the groundwater table.



**How the Nehveen Model works:** The model follows a specific process – the first chamber is a tank equipped with an iron grill, measures 7X7 feet and traps all solid waste particles floating into the drain, to facilitate their collection and segregation. The second chamber, measuring 5x5 feet, contains a band pipe that traps dust, smaller particles and oily substances for subsequent collection. Once solid and floating particles are removed, the wastewater is channelled

into honeycomb pits measuring 10×10 feet. One half of the pits is filled with stones, which filter small solid particles, while the other half allows water to penetrate the ground. This five-step filtration process ensures the safe disposal of wastewater.

To maintain the system, sludge from both chamber tanks need to be removed every 7-14 days, depending on the quantity of solid waste particles present in the greywater.

## Outcome

The Nehveen Model effectively manages regular greywater generated by households, while provisions have been made for rainwater to flow into the wastewater pond directly without affecting the system's functionality in any way.

## ▶▶▶▶ KARNATAKA CONSTRUCTS A GWM UNIT IN SHIRUR GP



**A** greywater treatment unit consisting of an adopted settler and a Constructed Wetland (CW) was constructed in Bedavatti village of Shirur GP in Kuknoor taluk of Koppal District, Karnataka.

Constructed at an estimated cost of Rs.10.05 lakhs (Rs. 6.60 lakhs from SBM-G; Rs. 3 lakhs from MGNREGA; and Rs. 0.45 lakhs from the 15<sup>th</sup> FC Grant), the GWM unit located at the outfall point is expected to cater to 214 households in the village.

The previous practice of greywater joining the river Hirehalla at two places and

contaminating the water body has been replaced by a system that treats channels the greywater into a canal for agricultural use, etc.

Before GWM work began in Bedavatti, a survey was carried out to ascertain the quantity of greywater generated by a total population of 1,071 individuals in the village. After the survey was completed, the greywater treatment plant was constructed at one of the points where the greywater joined the river. The construction of another treatment plant at a second outfall point is currently in progress.

**How the settler and CW work:** The settler and CW systems follow a multi-stage treatment process before it enters the main channel. In the first stage, the greywater undergoes a three-step screening system that features floating traps of large, medium and small sizes to trap particles. The treated water then passes through a silt trap that was constructed based on the size of the population and the water discharged, and

45 mg/litre Biochemical Oxygen Demand (BOD), which will be reduced to 20 per cent. In the second stage the treated water passes through a settler with two chambers and finally enters a CW with baffled walls (consisting of aggregates 40mm and 20mm) placed at an interval of every 10 metres, and canna indica plants. In the third and final stage, the BOD is reduced to 8 mg/litre, which is within the permissible limit.

## Outcome

The implementation of the GWM unit will ensure that greywater is properly treated and utilized for agricultural purposes.

## ▶▶▶▶ NORTH 24 PARGANAS SETS UP GWM ASSETS IN 86 VILLAGES



**T**he District administration of North 24 Parganas District in West Bengal was keen to implement GWM in all its villages. It initiated the process in October 2022. So far, GWM assets have been constructed in 86 villages out of the 613 villages in the District.

According to District Coordinator, Mr. Suman Sarkar, the District faced the common problems of greywater stagnation in low-lying areas and overflowing onto village paths, leading to pollution and health risks like vector borne diseases.

The District administration conducted a survey to identify areas that needed soak pits and leach pits. The findings from the survey identified 8,446 community water source points prone to greywater stagnation.

The local SHG and the PRI members were provided with training to motivate households to construct household-level soak pits and leach pits. In these training sessions, the advantages of having soak pits and leach pits were discussed at length.

Additionally, training sessions were organized for functionaries of Rural Sanitary Marts to construct community-level soak pits and leach pits.

Out of the required 8,446 soak pits and leach pits, 5,427 were successfully constructed using funds from SBM-G. Furthermore, 321 drains were constructed using the 15<sup>th</sup> FC Grants.

## Outcome

The District was successful in covering all 613 villages by 15<sup>th</sup> February. The remaining villages will be covered during this financial year.

# ▶▶▶▶ BHARASAR VILLAGE UTILIZES DEWATS FOR SUSTAINABLE GWM



In a remarkable example of public-private partnership towards achieving ODF Plus status, under SBM-G Phase-II, Bharasar village in Kutch District, Gujarat, is successfully managing greywater sustainably using the DEWATS technology.

**Background:** Under JJM, Bharasar had been providing tap water connections and a minimum supply of 55 litres per capita to its 624 households, with the total population being 4,026. However, the village faced a significant challenge as around 70 per cent of the water supplied to households was being converted into greywater, which was either flowing into the open spaces or contaminating water bodies. This led to environmental and health risks, including vector-borne diseases.

The absence of a greywater treatment system at the village level was a pressing issue. Although wastewater from 150 households was connected to a drainage

line, the greywater was discharged into the open. Additionally, the greywater from the remaining 474 households was discharged into a stream outside the village, polluting the water body.

**Issue:** The Sarpanch and PRI members identified the need to manage solid and liquid waste at village level while preparing the VSP for SBM-G Phase-II implementation. Bharasar made efforts to repair and construct the drainage system to manage greywater. However, it was not a permanent solution. In search of an appropriate technology to address the village's GWM needs, the Sarpanch requested technical assistance of SBM-G initiative in the District.

**Strategy:** At that time, UNICEF and PriMove provided handholding and capacity building support to PRIs and community leaders on SLWM according to SBM-G Phase-II guidelines, to bring about visual cleanliness to villages.

The development partners assisted Bharasar in revising their VSP based on a comprehensive assessment of the LWM situation in the village. The assessment revealed that approximately 200 KLD of wastewater, consisting of both black and grey water, was being generated.

Further technical assistance was provided, including the preparation of a Detailed Project Report (DPR), capacity building activities, community mobilization, and resource mobilization. Discussions and strategic meetings were held among the PRI, SBM-G District team, and UNICEF to identify a robust LWM system for the village. Among the available options, the PRI members finalized the DEWATS technology, which was approved by the DRDA.

**Donor funding for LWM:** The project received a donation of Rs. 86,22,361 from an NRI resident of the village, which expedited the construction of the wastewater treatment plant. Subsequently, the PRI members were oriented on the technology's O&M. A handover meeting was conducted on 6<sup>th</sup> June 2022 with PRI members, the Sarpanch and community members, and the plant was handed over to the GP for

connecting all households to the treatment plant. The GP played a significant role in allocating land and generating revenue for the construction and installation of the treatment plant.

**DEWATS wastewater treatment technology:** DEWATS technology is easy to integrate into built environments and adaptable to various organic wastewater characteristics. The system includes primary, secondary, and tertiary treatment processes, and their combinations can be customized based on the required treatment efficiency, costs, land availability, etc. Thus, the technology is effective, efficient and affordable as a wastewater treatment solution for small- and medium-sized enterprises.

To treat the wastewater, natural bacteria and plants are used and gravity plays a crucial role in the planning process. DEWATS technology is particularly suitable for treating high organic loading, including wastewater from small-bore sewer systems or mixed with supernatant from septic tanks.

## Outcome

Greywater generated in Bharasar was effectively treated, and this eliminated stagnant water and prevented overflow of wastewater onto village paths.

# ▶▶▶▶ SULTANPUR IMPROVES CLEANLINESS AND HEALTH THROUGH GWM



**G**WM plays a vital role in sustainable wastewater management practices, especially in rural areas. Sultanpur village in Malerkotla District, Punjab, took a significant step towards GWM that contributed to its beautification, improved health for its residents, and enhanced pond capacity.

The construction of a Waste Stabilization Pond (WSP) funded with Rs. 11.95 lakhs under SBM-G was completed in 2020.

Sultanpur village spans 261 hectares and has a population of 1,141 individuals residing in 230 households, primary engaged in agriculture and agricultural labour. After being declared ODF in 2017, the village successfully maintained its ODF status and wanted to shift its focus to SLWM in alignment with SBM-G Phase-II.

One of the main challenges of the village was a two-acre polluted pond that emitted foul odour and posed health risks to



the community. Since Sarpanch Karam Singh was elected in 2018, his priority has been to rejuvenate the village pond. PRI members even contacted the local MLA and conducted numerous community meetings to address the issue. They also reached out to the Executive Engineer of the Department of Water Supply and Sanitation, Malerkotla to inquire about the availability of funds under SBM-G.

With the support of the District administration, a comprehensive action plan was developed. Officials from the Department of Water Supply and Sanitation in Malerkotla introduced WSP technology

to the GP. Community mobilization activities were conducted to raise about the technology's benefits including the utilization of treated water for irrigation and cleaning of the village.

**WSP technology:** Also known as Oxidation Pond technology, WSP is a natural wastewater treatment system that involves the use of a series of ponds. WSP ponds consist of a series of three or more ponds that are designed to work in sequence including a screen chamber, a grit chamber, an anaerobic pond, a facultative pond, and a maturation pond.

## Outcome

The pond's renovation has transformed Sultanpur village, making it clean and free of foul smells. It has attracted many visitors to the pond area, increased the water capacity, and contributed to the overall improvement of community health.

# HAVERI BUILDS INLINE TREATMENT SYSTEM FOR GWM



**H**averi District in Karnataka has successfully set up a unique inline treatment system to manage greywater from households and establishments. This nature-based and cost-effective technology ensures that all greywater is treated, before it enters the river, and mitigates pollution risks.

Located on the banks of the Tungabhadra River, Kodiyal GP has a population of approximately 8,500 with sufficient water supply for their needs. However, the wastewater generated in the GP used to contaminate the adjacent river. To address

this critical issue, the ‘Nirmal Haveri’ campaign was launched.

The pilot project implemented a two-stage sedimentation pond followed by a CW as an inline treatment system and a bypass drain to manage wet weather flow.

**Inline treatment:** The system involves a horizontal subsurface flow CW designed based on treatment targets, influent quantity, and quality. The wetland’s removal efficiency and maximum flow capacity are determined by its surface area and cross-sectional area. Generally, a surface area of

about 3 sqm per cum of pre and secondary treated effluent is required. Settler/settler and Anaerobic Baffle Reactor (ABR)/sedimentation tanks/sedimentation drains/sedimentation ponds, etc., can be used as primary treatment modules.

Typically, angular graded gravel is used as the bed material, with a depth of 0.5 m. To limit clogging, the gravel should be clean and free of fines. The water level in the wetland is maintained at 5 to 15 cm below the gravel surface to ensure subsurface flow. Any native plant with deep, wide roots that can grow in the wet, nutrient-rich environment is appropriate. Phragmites australis (reed) is a common choice because it forms horizontal rhizomes that penetrate the entire filter depth.

The water level in the module is controlled using a swivel pipe or baffle wall. During the maintenance of the module, the swivel pipe can be turned down completely in order to drain out the water or if the wastewater inflow has to be diverted.

**Interventions by Rural Drinking Water and Sanitation Department (RDW&SD):**

RDW&SD Karnataka took up initiatives to address GWM under SBM-G Phase-II and ODF Plus initiatives. It gave in-principle approval and released grants of Rs. 205 crores to 4,464 GPs across the State, which

is 25 per cent of the total amount approved for GWM implementation under SBM-G Phase-II.

The local administration and the engineers collected the necessary data, and conceptualized the project based on the quantum of greywater generated, and identified a suitable land. They prepared designs and drawings, and obtained the necessary approvals from the ZP of Haveri before the pilot project was commissioned.

These initiatives also aided the works under JJM, by ensuring the sustainability of water sources and wastewater management.

RDW&SD conducted a special campaign called 'Swachha Grama, Swachha Parisara' in June 2020, focusing on IEC and HRD activities, to educate rural communities about greywater usage in kitchen gardens. The campaign emphasized the advantages of water reclamation of water and reducing dependence on freshwater for non-potable purposes.

The department is working towards the prevention of water pollution and has commissioned nature-based and cost-effective engineered technologies such as WSP, CWs, and sedimentation tanks to reduce the pollution load on natural water bodies.

 **Outcome**

The treatment system is currently functional and effectively manages the greywater generated in households and establishments.

# ▶▶▶▶ AAMWALA SAINWALA RESOLVES GREYWATER ISSUES THROUGH WSP TECHNOLOGY



**A**amwala Sainwala GP, located in the Sirmaur District of Himachal Pradesh, has successfully addressed the challenges of stagnant water and overflowing wastewater by constructing a WSP and a drainage channel spanning 300 m.

This initiative was led by Pradhan Shri Sandeepak Tomar, and was a part of SBM-G Phase-II, undertaken to ensure effective wastewater treatment and sustainability of the GP's ODF status.

Previously, the village faced issues of greywater overflowing onto paths and mixing with other waste materials, resulting in dirty roads and breeding grounds for flies and mosquitoes.

To address this problem, the Pradhan, with the support of the District administration, launched an IEC campaign across all seven wards of the GP, raising awareness about the SBM-G Phase-II campaign and the importance of visual cleanliness.

The construction of drains and the WSP was funded through MGNREGA and SBM-G funds. Greywater from households is now channelled into the drains, which are

connected to the WSP. Additionally, some households have constructed individual soak pits to utilize the treated water for their kitchen gardens.

## Outcome

Aamwala Sainwala GP is now clean, and the wastewater is being effectively treated.

## ▶▶▶▶ SUJLAM 3.0 CAMPAIGN CONSTRUCTS OVER 28.6 LAKH SOAK PITS



**T**he Sujlam 3.0 campaign, held from 5<sup>th</sup> May to 5<sup>th</sup> June 2023, witnessed the remarkable construction of 28,61,040 soak pits, as recorded in the IMIS of DDWS. This campaign aimed to manage greywater across all levels so that States and UTs could achieve ODF Plus Model status.

Among the total GWM assets created by the campaign as of 6<sup>th</sup> June 2023, 21,64,867 were soak pits; 1,91,048 were leach pits; 3,65,683 were magic pits; and 1,39,442 were community soak pits.

SBM-G Phase-II prioritized the management of greywater, by using simple, sustainable, and cost-effective techniques near the source itself.

States and UTs could avail SBM-G funds for the implementation of the campaign and setting up of LWM assets in convergence with 15<sup>th</sup> FC Grants and MGNREGA funds.

During the month-long campaign, States/ UTs undertook various activities, including promoting household-level GWM assets such as soak pits, leach pits, and magic

pits. They also focused on constructing community soak pits to manage greywater at drainage discharge points and ensuring that GWM systems were set up in all community places and public buildings.

Soak pits play a crucial role in treating greywater from kitchens and bathrooms, preventing the contamination of freshwater sources. They prevent waterlogging or stagnation of used water.

Kitchen gardens are also an environment-friendly method of handling greywater,

suitable for all terrains and soil types, particularly for high-water table areas. The nutrients contained in greywater provide nourishment to growing plants. Many kitchen gardens were set up during the Sujlam 3.0 campaign.

SBM-G Phase-II has actively fostered community participation and behaviour change, harnessing the capacities of individuals and communities in rural India to sustain ODF status promote safe sanitation practices, and improve cleanliness through SLWM arrangements.

## Outcome

The construction of 28,61,040 soak pits during the Sujlam 3.0 campaign has provided effective treatment of wastewater generated in households and establishments, and has helped keep the villages clean.

# CAPACITY BUILDING







Latitude: 15.75715  
Longitude: 75.115218  
Elevation: 668.88±14 m  
Accuracy: 12.5 m  
Time: 09-03-2022 14:19

Latitude: 15.75774  
Longitude: 75.1152  
Elevation: 668.88±15 m  
Accuracy: 35.4 m  
Time: 09-03-2022 14:21

## ODISHA ORGANIZES EXPOSURE VISITS TO FSTPs FOR PRIs



**W**ith a view to acquainting Panchayat Raj Institution (PRI) members with the use of Faecal Sludge Management Plants (FSTPs) in rural areas, Odisha organized exposure visits for Sarpanches and ward members to FSTPs that are tagged to their GPs.

The objective of the exercise was to help GP-level PRI members – understand the entire value chain of Faecal Sludge Management

(FSM); comprehend the technical aspects of secure faecal sludge disposal in FSTPs; and plan the desludging of single-pit and septic tank toilets in their respective GPs.

The initiative was based on the joint letter of 28<sup>th</sup> May 2021, issued by the Principal Secretaries of the Panchayat Raj and Drinking Water Department and the H&UD Department, Government of Odisha, that called for all GPs within a 20

km radius to be tagged to FSTPs of the respective ULBs for better desludging service utilization. The directive also said that to strengthen and streamline FSM facilities in rural areas, exposure visits to the tagged FSTPs should be organized for PRI members.

The letter further stated that the respective personnel from the ULBs and FSTPs would facilitate the exposure visit, and the visit would include the Sarpanches and ward members of the tagged GPs.

During the visit, a concise introduction to the FSM and urban–rural convergence was given by ULB officials and SHG members. Participants were also briefed on the entire desludging procedure and how households can acquire their services. They were also given a demonstration of the FSTP treatment procedure. The mechanisms for O&M, desludging, cesspool vehicle movement, and record-keeping were explained in detail. The visit concluded with a question-and-answer session as well as sharing of participants' experiences.

## Outcome

There were five-fold outcomes. Under urban–rural convergence, over 7,000 PRI members were expected to be made aware of FSM services. With increased awareness, tagged GPs would increase utilization of FSM services from the 115 FSTPs. Sensitized PRI members would further spread the message of the availability of FSM services among the public. After the visit, GPs would be able to ensure safe desludging in rural areas through urban FSTPs only; and participants would be able to formulate an effective strategy for desludging in their respective GPs.

# ANDHRA PRADESH CONDUCTS WORKSHOP ON SLRM FOR WASTE PREVENTION AND MANAGEMENT



**S**olid and Liquid Resource Management (SLRM) is a sustainable solution that goes beyond waste management to include waste prevention. To be considered a resource, biodegradable waste should be collected within 12 hours for processing and conversion into nutrient-rich compost.

To raise awareness among various stakeholders at the State, District, and GP levels, the Department of Panchayat Raj and

Rural Development (PR&RD), Government of Andhra Pradesh, organized a workshop on SLRM from 3<sup>rd</sup> to 4<sup>th</sup> June 2023 in Bapatla District, Andhra Pradesh.

The Chief Guest at the event was Sri. B. Rajasekhar, Special Chief Secretary to the Government, PR&RD. On Day 1, 151 individuals participated, including 84 officials, DPOs, Mandal Parishad Development Officers (MPDOs), District Coordinators,

and 67 SHG members. On Day 2, there were 118 participants, including 62 officials and 56 SHG members.

Prior to the launch of the SLRM project, awareness programmes were conducted within the communities covering the following topics:

- » **Role of SHGs in SLRM:** SHGs, primarily comprised of women, play a crucial role in communicating with other women who are often responsible for waste disposal. SLRM projects supplemented their family income, and the government provided loans and subsidies to these groups. SHGs followed a code of conduct – no team members could leave as they please. They were encouraged to be actively involved and take ownership of such projects as they possessed local knowledge and are readily accepted by the community.
- » **Waste:** Waste, also referred to as garbage, trash, rubbish, or *kachara*, is any material that is discarded as unwanted. The perception of waste varies across societies, but for effective SLRM, garbage must be collected within a 12-hour timeframe to prevent unpleasant odours and attraction of flies.
- » **Biodegradable and non-biodegradable waste:** Participants were educated about the distinction between biodegradable waste (such as food and garden waste) and non-biodegradable waste (including paper, plastic, leather, wood, and metal).
- » **Household responsibility in waste segregation at the source:** Households were encouraged to segregate waste at the source and keep it ready for collection at specified times. They were also advised against burning or discarding waste in open spaces and were instructed to separately pack menstrual and medical waste.

## Outcome

Participants gained knowledge about waste management processes, the differentiation of biodegradable and non-biodegradable waste and the importance of waste segregation at the source.

## ▶▶▶▶ PUNJAB ENHANCES EFFORTS TO TRAIN SLRPs IN GWM



**G**WM plays a vital role in achieving public health outcomes in rural areas. Properly managed greywater can contribute to a reduction in vector-borne diseases and minimize exposure to water-borne and water-washed diseases. Additionally, effective GWM can alleviate the burden on freshwater demands significantly.

To train State Level Resource Persons (SLRP) on GWM, a 4-day ToT was conducted at the Mahatma Gandhi State Institute of Public

Administration in Chandigarh from 30<sup>th</sup> May to 2<sup>nd</sup> June 2023, with the support of the WASH Institute.

The primary objective of the workshop was to train a select group of trainers (SLRPs) who would subsequently disseminate this knowledge in a cascading manner, from the District level to the GP level. The workshop aimed to equip participants with the necessary knowledge and skills to address critical issues related to GWM and to develop effective Village Sanitation Plans.

Throughout the four-day programme, participants actively engaged in interactive sessions, practical demonstrations, and case studies focusing on the following key areas:

- » Understanding the concept and significance of GWM
- » Exploring sustainable techniques for greywater treatment, as well as faecal sludge treatment and reuse
- » Assessing village sanitation needs and formulating comprehensive plans
- » Addressing challenges and ensuring community participation
- » Gaining hands-on experience in the village-level planning processes and developing skills in field-level data collection using relevant tools

## Outcome

During the capacity building training sessions, participants were introduced to the concept of ODF Plus and the strategies employed in SBM-G Phase-II. The workshop emphasized the importance of GWM in rural areas of Punjab, discussed various technologies for GWM, and provided detailed insights into the phase-wise implementation of LWM and preparation of VAPs. The training also included practical sessions and field visits. Furthermore, the roles and responsibilities of MTs were emphasized, along with the importance of monitoring progress.

# OSSS WASH MITRAS ENSURE TIMELY REPAIR AND MAINTENANCE OF WASH FACILITIES

## ONE-STOP SHOP AND SERVICES

BRINGING 21<sup>st</sup> CENTURY SKILLS TO RURAL MAHARASHTRA



In order to ensure the sustainability of ODF Plus assets, the 'One-Stop Shop and Services (OSSS) WASH Mitra' initiative in Maharashtra provides comprehensive skill training to young individuals in the field of WASH facility repair and maintenance.

Sanitation and hygiene in schools are crucial for enhancing student learning, reducing dropout rates (especially among girls), improving children's health, and preventing diseases. However, educational institutions lacking adequate WASH facilities along with faulty electrical fittings, broken furniture, blocked drains, and leaking pipes, as well as poor O&M practices, cannot effectively achieve their goals.

To address the challenges related to WASH infrastructure upkeep in schools, Pratham Education Foundation (PEF), Centre for

Youth Development and Activities (CYDA), and UNICEF Maharashtra collaborated to launch the OSSS WASH Mitra initiative. This initiative aimed to address the demand for O&M services in government schools through Young WASH Entrepreneurs (YWEs) who serve as service providers in schools, institutions and GPs across 14 Districts of Maharashtra.

OSSS WASH Mitra played a vital role in ensuring the functionality of WASH facilities in schools, enabling students to stay in school, build lifelong hygiene habits, and maintain good health. By doing so, the OSSS initiative also supported SBM-G and JJM by building a workforce of young individuals who could enhance WASH services and contribute to ongoing efforts aimed at improving hygiene and facility maintenance.



The OSSS project catered to the service needs of repair and maintenance, including schools. In addition to providing these services, OSSS offered employment opportunities by training young individuals from rural and urban areas.

**Conceptualization of OSSS:** A UNICEF survey on 'WASH in Schools' conducted in 2018–19 highlighted technical gaps, lack of skilled human resources, and insufficient services for seamless O&M of WASH facilities in schools.

To ensure functional and sustainable WASH facilities, there was a need to develop a cost-effective, locally adaptable, and sustainable WASH entrepreneurship model, leading to the conception of OSSS. Through the innovative partnership between Pratham, CYDA (implementation partner), and UNICEF Maharashtra (funding partner), OSSS addressed not only the pressing issue of poor operation and management standards in schools but also in other public

infrastructure such as hospitals, offices, and residential areas.

**Young Entrepreneurs:** The initiative aimed to create a group of skilled youth who, through OSSS, would become a professional workforce with promising futures. The OSSS project engaged in multi-sector skill development, transforming young individuals into Youth Entrepreneurs (YEs) with multiple skills.

During the 21-day residential training programme, individuals from local, rural, or urban areas who were interested in working as entrepreneurs were selected and trained in six essential trades: **plumbing, masonry, electrical work**, painting, housekeeping, and entrepreneurial skills, including business knowledge, marketing strategies, and successful entrepreneurship. The WASH Mitras extended their services to schools, anganwadis, health facilities, and other establishments in GPs.

## Outcome

- » Over the past 12 months, more than 183 WASH Mitras and around 70 service providers reached out to 40,000 families, 3,100 schools, 1,152 anganwadis, 432 health facilities, and 1,100 GPs for WASH O&M and construction services, generating a total income of Rs. 17 millions with a profit of Rs. 6 millions.
- » 40 per cent of the entrepreneurs and service providers were female and 70 per cent fell within the age group of 18–29 years, with 90 per cent falling within the age range of 18–35 years. This not only promoted gender transformation but also addresses the 21<sup>st</sup> century skills of rural youth.
- » The average investment for each entrepreneur is around Rs. 40,000 which covered residential training, seed money, personal protective equipment (PPE) kits, and tool kits. Currently, the recorded return on investment is three times the initial investment, with a break-even point achieved within 10 months of total income.

## ▶▶▶▶ TAMIL NADU TRAINS WOMEN MASONS AND SHG MEMBERS IN TOILET AND SOAK PIT CONSTRUCTION



**A**s part of Tamil Nadu's ongoing Namma Ooru Superu (Our village is the best) campaign, which is currently being implemented across the State, women masons and members of SHG underwent training in the construction of toilets and soak pits during the third week of the campaign.

The campaign, held from 1<sup>st</sup> May to 15<sup>th</sup> June 2023, aimed to promote safe sanitation practices and cleanliness in rural areas.

During the third and fourth weeks of the campaign, the focus was on engaging SHG members to raise awareness about sanitation and hygiene in households and institutions. One key activity during the preceding two weeks was the training of SHG members in the construction of toilets and soak pits.

An exemplary model in this regard was the litikkal Agaram Panchayat in Krishnagiri District has demonstrated. Thirteen SHG

members from the panchayat were trained during those weeks in the construction of toilets and soak pits.

The training specifically covered the materials required for these assets, such as rings and lids for soak pits, concrete inspection chambers, and hollow bricks.

The initiative is expected to empower women to sell these materials and improve their livelihoods. Notably, this activity also resulted in more SHG members volunteering to receive similar training. The Panchayat Level Federation (PLF) and the local SHG group called Prarthana Mahalir Sangam would be providing support for this activity.

This year's Namma Ooru Superu campaign aimed to strengthen the State's progress towards environmentally sustainable and clean villages. It placed emphasis on effective management of legacy waste and achieving the State's retrofitting target. Additionally, it also included health and welfare measures for workers involved in sanitation-related works.

Various Districts formed village-level committees to oversee the campaign, and the State called upon all its departments to support the campaign and ensure its success.

## Outcome

Women gained new livelihood opportunities to explore. Several Districts conducted awareness programmes on source segregation, encouraging people to take the sanitation pledge and keep their villages clean.

# ▶▶▶▶ PUNJAB DELEGATION STUDIES BHARWARA STP AND AMETHI FSTP



In a cross-learning exposure visit, a delegation from Punjab recently visited Bharwara, Gomti Nagar, Lucknow, home to Asia's largest STP, and the Faecal Sludge Treatment Plant (FSTP) in Benipur GP in Amethi District, Uttar Pradesh.

The visit served as a catalyst to accelerate the SBM-G campaign in Punjab. It provided the visiting group with an opportunity to observe the facilities firsthand and engage in meaningful discussions about the implementation, which is considered an important training methodology. The delegation returned to

their State with confidence, intending to replicate similar assets.

Led by Shri DK Tiwari, Principal Secretary of Water Supply and Sanitation, Government of Punjab, the three-member delegation visited the Bharwara STP. This STP has a capacity of 345 Million Litres Per Day (MLD) and includes a 100 KLD co-treatment plant specifically designed to treat faecal sludge from septic tanks.

**Bharwara STP:** The FSTP facility is equipped with a screw press machine for separating biosolids from liquid and sludge drying

beds. The GPS-equipped septic tankers are monitored through IT-enabled systems. The Upflow Anaerobic Sludge Blanket (UASB) technology-based STP features additional facilities such as Geographical Information System (GIS) monitoring, solar power energy cost reduction, strict HR monitoring through mobile-based application and geofencing, and a live dashboard at the State Headquarters.

During the visit, the Principal Secretary engaged in discussions and meetings with representatives from UP Jal Nigam (Rural and Urban) and the Namami Gange programme for river rejuvenation. This exchange of ideas and views provided valuable inputs and feedback on various aspects, resulting in a fruitful cross-learning experience that benefited both States.

**Benipur FSTP:** The Punjab delegation also visited the FSTP in Benipur GP, Amethi, which has a capacity of 3 KLD. The visit aimed to familiarize the team with the technical operations, processes, and associated benefits of such treatment facilities.

During the facility tour, the WaterAid and the District SBM-G teams provided comprehensive guidance, with technical experts explaining the treatment processes involved, including pre-treatment, anaerobic digestion, sludge drying, and the conversion of faecal sludge into useful biosolids.

The visit highlighted the importance of community involvement and awareness. In Benipur, the team actively engaged with the local community, educating them about the benefits of proper FSM and encouraging their participation in timely emptying of septic tanks.

The Benipur FSTP comprises units such as a Screen Chamber with an Anaerobic Stabilization Reactor, PDBs, an Integrated Anaerobic Stabilization Reactor, Planted Gravel Filter, a collection tank, and a sludge storage unit. The exposure visit provided valuable insights into planning, designing, and implementing a faecal sludge treatment facility.

## Outcome

The Punjab team was grateful to the UP Jal Nigam, PRD for their hospitality and valuable inputs during the visit. They are now making plans to establish their own FSTPs.

# UNICEF CONDUCTS TRAINING OF TRAINERS ON SAFETY AND DIGNITY OF SANITATION WORKERS



Achieving *Sampoorna swachhata* is an important goal under SBM-G Phase-II. The role of sanitation workers is crucial in this endeavour and they require increased focus and support. As part of the RWPF work allocation, UNICEF has been entrusted with the task of capacity building. In line with this objective, UNICEF, together with the Urban Management Centre (UMC), initiated interventions in 2023 to strengthen the capacities and work environment of rural sanitation workers.

## Objectives of the campaign:

- » Enhance understanding and empathy towards the socio-economic and occupational hazards faced by sanitation workers based on their job roles
- » Improve the work environment of sanitation workers
- » Promote the safety and dignity of sanitation workers

- » Provide technical and safety knowledge to sanitation workers
- » Build awareness among sanitation workers about their rights and entitlements
- » Sensitize employers to the employment of sanitation workers, including contractual modalities, and professionalization of the sanitation sector
- » Conduct a communication campaign highlighting the role and importance of sanitation workers in the community

As part of a joint initiative between UNICEF India and UMC, a detailed toolkit titled ‘Strengthening the work environment of rural sanitation workers focusing on their safety and dignity’ was developed. This toolkit was disseminated through a training programme held in Ahmedabad from 4<sup>th</sup> to 7<sup>th</sup> April 2023, which involved 51 State-level resource persons from 16 States. To facilitate cross-learning and gain insights into field reality, participants also visited three villages in Ahmedabad, Gujarat. The

toolkit is designed to be suggestive and can be adapted and contextualized according to the requirements of each State.

**Preparation:** A field-testing of the module, along with IEC materials prepared as part of the partnership, was conducted in two pilot States, Bihar and Gujarat, in February and March 2023. The feedback received from these pilots was incorporated into the final toolkit, which was then disseminated to the participants. This toolkit includes a module on the safety and dignity of sanitation workers, a Handbook for sanitation workers, and IEC materials comprising four posters, five GIFs, and one short film.

The campaign aims to create 2,000 MTs who will further train 16,000 sanitation workers in 16 States during 2023. The States include Assam, West Bengal, Odisha, Bihar, Jharkhand, Chhattisgarh, Madhya Pradesh, Uttar Pradesh, Rajasthan, Gujarat, Maharashtra, Andhra Pradesh, Telangana, Karnataka, Tamil Nadu, and Kerala.

## Outcome

The trainings sessions emphasized the use of PPE and the sensitization of sanitation workers regarding their rights and entitlements. Resource persons and MTs will also advocate for and strengthen linkages to ensure the safety and dignity of sanitation workers.

## BIHAR STRENGTHENS CAPACITIES OF STAKEHOLDERS TO ACHIEVE ODF PLUS GOALS



In order to consolidate the achievements made during SBM-G Phase-I and emphasize the importance of implementing the ODF Plus components, Bihar conducted comprehensive training programmes for the State, District, and village functionaries. The objective was to sustain the progress and work done towards achieving ODF Plus status. So far, a total of 1.47 lakh individuals have been trained under SBM-G Phase-II.

Bihar initiated a master plan and implemented ToTs on the implementation of ODF Plus components in a cascading manner, starting from January 2022. These training are still ongoing currently. Additionally, communities were mobilized to adopt SLWM practices with a specific emphasis on the technical aspects.

UNICEF provided support by organizing multiple ToT exercises for MTs and grassroots-level workers.



Over 600 State and District-level SBM-G officials, including State-level consultants, District coordinators, District consultants and Block coordinators participated in the State-level training and graduated as SLWM MTs. Orientation sessions on the implementation of SLWM were also conducted for the District Development Commissioners (DDCs), Directors of DRDAs, and BDOs of 533 Blocks across all 38 Districts, as well as approximately 600 officials from the MGNREGA in each Block.

Since the PRI members, such as *Mukhiyas* and Ward members, play influential roles in the community, trainings were provided to *Mukhiyas* from 4,295 GPs in the Financial Years (FYs) 2021–22 and 2022–23, and all members from 56,800 Wards where SLWM work is underway.

Furthermore, over 3,200 sanitation supervisors, responsible for managing and monitoring SLWM implementation at the GP level, were trained.

## Outcome

Under SBM-G, one or two sanitation workers were deployed in each GP for door-to-door waste collection and disposal at WPU. Currently, approximately 81,000 sanitation workers are actively engaged in waste collection and its management across 56,800 wards where SLWM initiatives are being implemented. These workers have been trained to understand the core components of ODF Plus.

In addition to the aforementioned stakeholders, concerned officials from the departments of MGNREGA and Agriculture, teachers, *Swachhagrahis*, Anganwadi Workers (AWWs), FLWs, etc., were also trained. Overall, the capacities of 1.47 lakh stakeholders were significantly strengthened through these efforts.

# ▶▶▶▶ JAL SAHIYAS DRIVE CHANGE IN JHARKHAND'S RURAL WASH SECTOR



**T**he Jal Sahiyas of Jharkhand are the go-to persons in the WASH sector. From ensuring toilet usage and sustaining the ODF status of villages to creating awareness of safe sanitation practices and water quality testing, these women with versatile roles have been trained in all aspects of water and sanitation.

The concept of Jal Sahiya is unique to Jharkhand and has been active under the State's Drinking Water and Sanitation Department since 2011. There are 29,614 active Jal Sahiyas today. Every village has a

Jal Sahiya who has been appointed during a Gram Sabha.

In SBM-G Phase-II, the women were provided training on technical issues of SLWM, capacity building and triggering. They also often supervised the construction and O&M of ODF Plus assets.

Jal Sahiyas are a vital part of a Village Water and Sanitation Committee (VWSC). The Committee is a body of the Government comprising 12 members, of which the GP Pradhan/Mukhiya is the president and the Jal

Sahiya is the treasurer. It has equal gender representation with 6 of the 12 members being women who represent either the GP or Ward.



One such Jal Sahiya is Smt. Menka Das from Shreedhar Diara village in Sridhar Diyara GP (Udhwa Block) of Sahibganj District. Shreedhar Diara is one of the main Namami Gange villages that faced many challenges pertaining to sanitation. Menka was selected as a Jal Sahiya on 10<sup>th</sup> March 2016 and has since then earned the respect of her community through her devotion and hard work. Keen to bring positive change to the sanitation sector and having taken the sanitation oath, the proactive village leader starts her day early, meeting mainly the household women

and generating awareness on hygiene and sanitation.

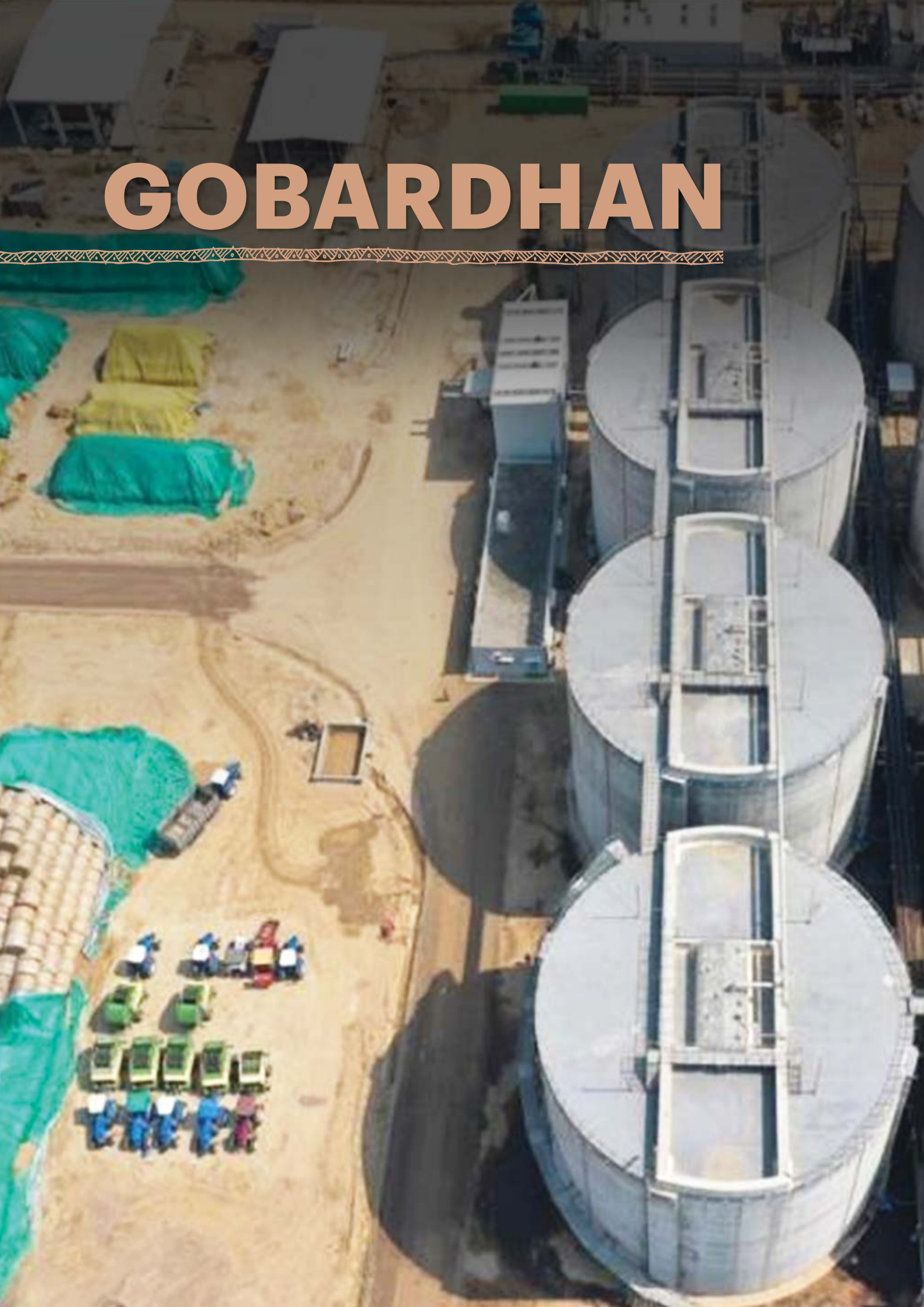
During SBM-G Phase-I, she motivated people to stop open defecation and construct toilets. At her behest, 346 toilets were constructed. In addition to creating five groups of Roko Toko Dal to prevent open defecation, she organized several rallies, meetings and training programmes. Her efforts led to 100 per cent Individual Household Latrine (IHHL) coverage in her village.

Menka's training on SLWM at both District and State levels facilitated the creation of a women's group to raise awareness on the importance of waste management. As an expert in water quality testing, she has checked many water resources of the villages and made people aware of water quality. This earned her the fond nickname of 'water doctor'. For her contribution, Menka Das has been awarded at the Block and District levels.

## Outcome

Under Menka's leadership, the village has constructed 9 community compost pits, 6 institutional compost pits, 109 community leach pits, 2 waste management sheds, 83 soak/leach/magic pits, 214 individual compost pits, 124 individual leach pits, and 118 NADEP compost pits.

# GOBARDHAN





## GOBARDHAN INITIATIVE GETS A MAJOR BOOST



**T**he Government of India is making efforts to create an enabling environment for the generation of wealth from waste, one initiative being the GOBARDhan. The initiative is coordinated by DDWS and promotes the conversion of organic waste like cattle dung and agricultural waste into biogas or Compressed Natural Gas (CNG), which are eco-friendly fuels.

Biogas is generated through an effective waste management process that promotes a circular economy while protecting health and the environment. It reduces GHG emissions, provides alternate sources of employment, saves foreign exchange, generates organic manure, and improves savings. Currently, there are as many as 717 completed and functional biogas plants from 240 Districts across the country, of which 642 are under SBM-G.

In a unique package for farmers, the Cabinet Committee on Economic Affairs (CCEA) chaired by the Prime Minister of India, on 28<sup>th</sup> June 2023, approved Rs. 1,451 crores for Market Development Assistance (MDA) scheme to exemplify the model of wealth from waste. The move demonstrates the Government's support for GOBARdhan and for green and clean energy.

Further, organic manure from GOBARdhan plants is to be used to enrich the soil and

keep the environment safe and clean, a press notification from CCEA said.

MDA scheme will grant an amount of Rs. 1,500 per metric tons for marketing organic fertilizers, viz., Fermented Organic Manure (FOM)/Liquid FOM/Phosphate Rich Organic Manure (PROM) produced as by-products from biogas/Compressed Biogas (CBG) plants that are set up under the umbrella of GOBARdhan initiative.

## Outcome

This initiative will increase the viability of biogas/CBG plants, thereby facilitating the implementation of the Budget announcement to establish 500 new waste-to-wealth plants under the GOBARdhan scheme.

# ▶▶▶▶ TRANSITION FROM WASTE TO WEALTH: STORY OF COMMUNITY BIOGAS PLANTS IN NARTAP GP, KAMRUP METRO



In a bid to create wealth from waste, the Public Health Engineering Department (PHED) of Assam has constructed three community biogas plants under the GOBARdhan scheme in the villages of Moupur and Luri in Nartap GP of Kamrup Metro District in Assam.

Situated 35 kms from Guwahati in Dimoria Block, this agricultural GP has a large cattle population. Firewood is the main cooking fuel, which affects the health of women who are primarily involved in preparing food for their families. Additionally, improper handling of waste in the absence of disposal facilities or treatment systems for SLWM has

resulted in many health and hygiene-related problems in the villages.

The initiative is a blessing to people of this area as it aims to support villages in the effective management of cattle dung and other biodegradable waste, thus fulfilling the objectives of the SBM-G Phase-II campaign.

Earlier, in association with the State-empanelled technical agency, the District Water and Sanitation Committee (DWSC) and PHED surveyed Nartap GP and identified three sites for setting up GOBARdhan plants.



**Moupur village:** A 25 cum community biogas plant manages around 600–650 kg of cow dung and other biomass generated each day in the village. The gas produced is supplied to six households and two community centres. A total of 1,200 litres of liquid fertilizer is generated on a daily basis. Another 4 cum community biogas plant manages 100–125 kgs of cow dung generated on a daily basis. The gas produced is supplied to three households. A total of 200 litres of liquid fertilizer is generated on a daily basis.

**Luri village:** A 10 cum community biogas plant manages around 250–275 kgs of cow dung generated each day at the village level. The gas produced is supplied to five households. A total of 500 litres of liquid fertilizer is generated each day.

The liquid fertilizer is converted into vermicompost and used as manure in agriculture. Management of cow dung and other organic matter has helped Nartap GP achieve visual cleanliness – an integral component of ODF Plus.

## Outcome

The initiative has not only promoted hygiene and cleanliness but also improved the general quality of life in the villages. People have learned the value of waste, which has enabled them to earn an income from it. The biogas produced has offered them a cost-effective and conducive technological option for safe and sustainable disposal and management of biodegradable waste.

## ▶▶▶▶ BIOGAS PLANT IN KANPUR NAGAR DISTRICT (UTTAR PRADESH) MEETS FUEL NEEDS OF HOUSEHOLDS



**A**s an important component of SBM-G Phase-II, a community biogas plant is one of the best ways to manage solid waste such as animal waste, crop residue, kitchen leftovers, etc. It can also generate biogas that can be used as fuel, and slurry which is a nutrient-rich manure for use in agriculture.

Understanding these benefits, Itarra GP started a community biogas plant in 2022–2023 under the GOBARdhan initiative of SBM-G campaign. The GP is situated in Patara Block of Kanpur Nagar District in

Uttar Pradesh and has a population of 7,026 individuals.

The 45 cum biogas plant is spread across an area of 10x15 metres, featuring a floating dome and is estimated to cost Rs. 24.51 lakhs. It became functional soon after the construction was completed in 2023–2024. Cow dung required for operation of the plant is sourced from the nearby gaushala, which houses around 105 cattle. Additionally, around 10 families of the village have consented to provide cow dung on a daily basis in return for slurry.

Two caretakers have been trained by the implementation agency to conduct O&M activities of the plant.

The plant now supplies cooking gas to 25 vulnerable families in the village. It was earlier agreed that during the first three

months, gas will be supplied to families for free, and thereafter a fee of Rs. 250 would be charged per household per month. The amount collected would be used to pay the wages of the two caretakers and for meeting the maintenance expenses of the plant.

## Outcome

The biogas plant in Itarra provides two-fold benefits for the community – converting cattle and organic waste into wealth, and making the village environmentally clean and the village energy secure.

## ▶▶▶▶ PATNA GETS A GOBARDHAN PLANT UNDER SBM-G



**U**nder the GOBARDhan scheme of SBM-G Phase-II, a 60 cum biogas plant with a capacity of 2,000 kg has been made functional with effect from 27<sup>th</sup> May 2023 in Udiyara GP (Dhanrua Block) of Patna District in Bihar.

The plant was constructed by the Project Implementing Agency (PIA) – M/s Anand Engineers, who will operate and maintain it for the next three years. The GP will monitor and support the project.

Cow dung is procured by the PIA from local villagers at the rate of Rs. 1–1.5 per kg. Users of the supplied biogas are charged as per their consumption of gas, which is measured using the metres installed. The slurry is sold to local farmers at a nominal cost.

GOBARDhan is being implemented in partnership with State Governments and the private sector including entrepreneurs, societies, etc. Its objective is to generate

wealth and energy by converting cattle dung, agriculture residue and other organic waste into biogas, CBG and biofertilizers.

Any project producing CBG/biogas and bio-slurry as the principal output is eligible to fall within the ambit of GOBARdhan.

## Outcome

Around 25–30 families residing in the GP are now being supplied biogas daily for three hours in the morning and evening and for one hour in the afternoon.

## ▶▶▶▶ PUDUCHERRY GETS TWO BIOGAS PLANTS



**A**s part of the GOBARdhan initiative of SBM-G, the Puducherry UT now has two 25 cum biogas plants to convert food waste into biogas – one in Bahour Commune Panchayat of Pondicherry District and the other in Kottucherry Commune Panchayat of Karaikal District. Renewable Energy Agency Puducherry (REAP) is the implementing agency of both projects.

The Ministry of Jal Shakti, Government of India launched the GOBARdhan initiative to ensure cleanliness in villages by converting bio-waste including cattle waste, kitchen leftovers, crop residue and market waste to

improve the lives of village communities. The initiative will provide economic and resource benefits to farmers and households.

With the use of clean fuel, the initiative will significantly benefit rural people in general and women in particular, and lead to improved cleanliness in villages and improvement in health. It will also support biodegradable waste recovery and conversion of waste into resources, reduction of GHG emissions, reduction in import of crude oil, boost to entrepreneurship, and promotion of organic farming.

**Bahour Commune Panchayat:** One biogas unit, which is currently operational, has been set up in Bahour Commune Panchayat at a cost of Rs. 23 lakhs, behind the Rajiv Gandhi Government Community Marriage Hall in Kuruvintham village. Food waste from the community hall, hotels and markets is fed into the plant to produce clean cooking fuel.

**Kottucherry Commune Panchayat:** Another 25 cum biogas plant to convert organic food waste into biogas has been set up at Thiru S Singaravelu Pillai Community Hall in Kottucherry of Karaikal District, which utilizes organic food waste from the Singaravelar Government Community Marriage Hall and hotel to produce biogas. The panchayat is entrusted with O&M of this plant.

## Outcome

In each plant, about 125 kgs of food waste is collected daily from the community hall, hotels and markets and fed into the biogas plant along with cow dung and agricultural waste amounting to a total of about 250 kgs. This generates around 14 kgs of biogas (equivalent to one LPG cylinder), which can be used to sufficiently cook food for 200–300 people for a function at the community hall, thus saving about Rs. 1,000 per day.

## ▶▶▶▶ TRIPURA SETS UP GOBARDHAN PROJECTS IN ALL ITS 8 DISTRICTS



In a remarkable achievement which is in keeping with SBM-G Phase-II, the northeastern State of Tripura has taken up 16 cluster-based model GOBARDhan projects, two per District, in all its eight Districts using funds from the SBM-G.

The State has selected Tripura Renewable Energy Development Agency (TREDA), a constituent organization of the Department of Power, Government of Tripura, as its technical agency that would implement and execute the project.

**GOBARDhan projects have been set up in the following villages:**

- » **Dhalai District:** Dhanchandra GP in Durgachowmuhani Block and Avanga GP in Salema Block
- » **Gomati District:** Purba Malbasa GP in Amarpur Block and Barabiya GP in Tepani Block
- » **Khowai District:** Purba Kalyanpur GP in Kalyanpur Block and Purba Ramchandra Ghat GP in Khowai Block



- » **North District:** Huplong GP in Jubarajnar Block and Baghan GP in Kadamtala Block
- » **Sepahijala District:** Raghunathpur GP in Bishalgarh Block and Kamalnagar GP in Boxanagar Block
- » **South District:** Kanchannagar GP in Bagafa Block and Thaibung GP in Satchand Block
- » **Unakoti District:** Ujandudpur GP in Kumarghat Block and Nalkata GP in Pecharthal Block
- » **West Tripura District:** Meghlipara and Tulakona GPs in Old Agartala Block

The cost of each project is Rs. 20 lakhs, and a total of Rs. 320 lakhs has been made available for all 16 projects.

## Outcome

The initiative will provide economic and resource benefits to farmers and households, and also contribute to improved cleanliness in the villages.

## ▶▶▶▶ NASHIK GETS A NEW GOBARDHAN PLANT



**T**he District administration of Nashik has set up a community biogas plant under GOBARDhan Yojana in Andarsul GP of Yeola Tehsil in Maharashtra. The facility, which has been functional since the first week of February 2023, uses biotechnology to convert waste into clean energy and organic manure.

In accordance with SBM-G Phase-II, the GOBARDhan initiative supports villages in safely managing their cattle, agricultural and other organic waste. It also helps village communities to convert their waste into wealth, and improve environmental sanitation while curbing vector-borne diseases. The Government of India provides

technical assistance and financial support of up to Rs. 50 lakhs per District to achieve safe disposal of cattle and organic waste.

**Technology used:** Bio-methanation is an approved technology under the Solid Waste Management Rules of 2016. It is a sustainable process that uses bio-inoculums or microbes to work on organic waste and produce clean energy and organic manure. The energy-producing technology used in the plug-and-play plant is an eco-friendly solution that traps harmful GHGs. The fully fabricated plant requires less space and is simple to operate with relatively less O&M cost. As the plant is completely water-jacketed and compact, there is no foul

odour. The size of the plant can be increased or decreased based on future requirements and can be easily shifted if necessary.

**Waste availability in Andarsul GP:** A survey carried out in the GP revealed that 14,190 kgs of organic waste is generated per day from dung of large animals (6,920 kgs), dung of small animal (6,745 kgs), kitchen waste of households (275 kgs), and wet waste from hotels and restaurants (250 kgs).

#### **Project overview:**

- » **Location:** Self-owned land near GP office
- » **Total available waste:** 14,000 kgs per day
- » **Capacity of biogas plant:** 2 metric tons per day
- » **Technology used:** Pre-fabricated Continuous Stirred Tank Reactor (CSTR) bio-methanation plant
- » **Area required:** 6,000 square feet
- » **Output biogas:** 80 cum per day
- » **Output manure:** 400 kgs of dry manure and 3,600 litres of liquid manure per day
- » **Pipelined gas connection:** Nearly 20 hotels, anganwadi and school

» **Electricity generation:** All street lights with 5.0 kVA generator

» **Employment generation:** 4-5 persons directly

» **Total project cost:** Rs. 50 lakhs, including 5 years of monitoring

» **Completion time:** 3 months

» **Type of plant:** Community type

» **CMC production unit:** 1,500 litres per day

**Monthly revenue:** The plant generates a total of Rs. 1,53,000 as monthly revenue, which includes earning from the replacement of LPG (Rs. 27,000), electricity generation (Rs. 12,000), sale of dry manure (Rs. 60,000), and sale of liquid manure (Rs. 54,000).

**Operational costs:** The monthly operational cost of the plant is Rs. 1,09,200, which covers the cost of manpower, electricity, water, consumables, waste collection, maintenance and insurance, cost of raw materials, and expenses for sales activities.

## Outcome

The initiative ensures that the GP sustains its ODF status, generates energy, income and employment, keeps the villages clean, and improves the lifestyle of communities.

# ▶▶▶▶ PUNJAB LAUNCHES GOBARDHAN PROJECTS IN 19 GAUSHALAS

## Sukhemajra Village, Rupnagar District – Construction pictures



Laying of foundation



Construction of digester



Installation of inlet pipe



Construction of dome



Construction of smaller portion of outlet chamber



Construction of dome & bigger portion of outlet chamber



Completion of dome



Completion of bigger portion of outlet chamber

**P**unjab will have 19 off-grid biogas power generation projects that are being set up in gaushalas across the State. The 19 projects will be launched in four phases with a capital expenditure of Rs. 31.17 lakhs and 5-year O&M cost of Rs. 16.20 lakhs, and each biogas plant will have a capacity of 100 cum.

**The projects lined up for each of the four phases are:**

**Phase-I** consists of five projects in the gaushalas of Sukhemajra in Rupnagar District, Garolian in Fatehgarh Sahib, Janeri in Sangrur, Gajipur in Patiala, and Lalru in

SAS Nagar. The projects will be functional by March 2023.

**Phase-II** consists of five projects in the gaushalas of Pholahi in Hoshiarpur District, Dehriwal in Pathankot), Kamalpur in Kapurthala, Dilawarpur in SBS Nagar, and Kalanaur in Gurdaspur. The projects will be functional by April 2023.

**Phase-III** consists of five projects in the gaushalas of Golewala in Faridkot District, Harraipur in Bathinda, Kishanpura in Moga, Salemshah in Fazilka, and Ratta Tibba in Muktsar Sahib. The projects will be functional by May 2023.

**Phase-IV** consists of four projects in the gaushalas of Manal in Barnala District, Kaniya Kalan in Jalandhar, Khokhar Kalan in Mansa, and Dubli in Tarn Taran. The projects will be functional by June 2023.

While four projects funded under GOBARdhan have been completed in Phase-I, work is underway in Garolian village (Fatehgarh Sahib). Under Phase-II, construction work has begun in Kamalpur village in Kapurthala) and one project has been completed at Burj Pawat village in Ludhiana by Punjab State Council for Science and Technology (PSCST).

**Components of Off-Grid Biogas Power Generation Project:** Each of the projects will have a bio digester unit, flow metres, a biogas purification system, a power generation unit, and a manure handling system.

**O&M and business model:** Each project will have a Mahila Mandal, comprising of 3-4 active SGH members, self-employed individuals, homemakers and self-employed workers under the Ministry of New and Renewable Energy (MNRE). They will be trained in O&M of the plant, production of solid manure, its marketing and sale to generate income. With the support of Punjab Agriculture University (PAU), Ludhiana, they will also take care of the promotion and sale of bio-slurry and manure among farmers through Krishi Vigyan Kendras (KVKs). Training will be provided by the Biogas Development and Training Centre under MNRE-PAU Ludhiana. The 15<sup>th</sup> FC grants at the GP and Block level will also be utilized for O&M. In case of a shortfall of funds, the panchayat's own funds will be dovetailed.

## Outcome

It is expected that these GOBARdhan projects will provide an uninterrupted supply of cattle waste and ensure economic benefits to farmers and households.

# ▶▶▶▶ JAMMU AND KASHMIR'S DIRECTORATE OF RURAL SANITATION SETS UP GOBARDHAN PROJECTS FOR RESIDENTS LIVING NEAR THE INTERNATIONAL BORDER



**T**he Directorate of Rural Sanitation, UT of Jammu and Kashmir, is in the process of setting up two GOBARDhan plants in Jeora village of Suchetgarh Block that will cater to the rural communities, helping them curb the burning of wood and preventing air pollution. The initiative will also help create high-value organic manure for use in their farming.

GOBARDhan is a flagship programme being implemented under SBM-G to harness bio-energy from cattle and organic waste with view to generating income and positively impacting village cleanliness. The main focus of GOBARDhan is to keep villages clean, increase the income of rural households, and generate energy and organic manure from cattle waste.

The Directorate of Rural Sanitation under the Department of Rural Development and Panchayati Raj, Jammu and Kashmir, has undertaken the implementation of the GOBARdhan Project in the UT. The intervention is likely to have a significant social and environmental impact on the rural community.

Of the two biogas plants being set up by the implementation agency, one has a capacity of 45 cum biogas, capable of processing 1,125 kgs of cow dung per day to generate 15 kgs of biogas and meet the cooking needs of around 90 people each day. The second 80 cum plant can process 2,000 kgs of cattle dung and generate 32 kgs of biogas, sufficient for the cooking needs of around 160 persons per day.

## Outcome

The biogas plants will lead to several benefits such as smoke-free cooking, reduction in GHG emissions and deforestation, protection of health, saving of money, and increase in food security.

## ▶▶▶▶ MIGRANTS CONTRIBUTE TO A BIOGAS PLANT IN GOA'S NAGOYA PANCHAYAT



**T**o address the issue of untreated garbage in their locality, migrants residing in Nagoa Village Panchayat in the UT of Goa contributed their registration fees to set up a 1 Tonne Per Day (TPD) biogas plant. The project adopts a model that can be replicated in other panchayats, Government-run markets and educational institutions.

Situated in Salcete of South Goa District, Nagoa village is spread across 518 hectares and has a population of around 3,873 from

995 households (as per census data of 2011). Nagoa Panchayat has about 30,000–40,000 migrant residents who work at the Verna Industrial Estate, which houses over 400 industries and firms.

According to Mr. Gabriel Fernandes, Sarpanch of Nagoa, the panchayat was keen to address the issues pertaining to wet garbage by setting up a biogas plant. They conducted a survey to assess the garbage generated each day and estimated that they would require around Rs. 20 lakhs to procure



the machinery. With the decision to mobilize funds internally, they used Rs. 6 lakhs from the migrants' registration fund towards the construction of the biogas project.

The biogas plant was inaugurated and became functional on 2<sup>nd</sup> October 2022. It was installed using the contribution from the migrants' registration fees and the State grants given on the occasion of the 60<sup>th</sup> Liberation of Goa State, while other machines were purchased under 14<sup>th</sup> and 15<sup>th</sup> FC grants. The village panchayat and its Garbage Management Committee operate and maintain the plant, with technical

support provided by Inovativa Waste Management Company.

Each day, the facility processes around 600 kgs of wet garbage generated mainly at the Verna Industrial Estate where the migrant workers are engaged. Waste is collected by the appointed waste collectors who bring it to the plant for further segregation before treating the biodegradable waste scientifically.

Biogas produced is converted into electricity and used to run the plant, for lighting, and to operate other machinery on site.

## Outcome

Since operations at the biogas plant began, the burden of garbage has reduced. The plant is able to tackle all biodegradable waste in a systematic manner and has contributed to the visual cleanliness of the village. The community no longer faces the problem of waste dumped in public spaces, which used to attract stray animals and emit bad odour. Manure generated is distributed to the village community to be used in kitchen gardens. This has motivated other establishments in the area to replicate the system.

# MOJS LAUNCHES UNIFIED REGISTRATION PORTAL FOR GOBARDHAN PLANTS



**S**hri Gajendra Singh Shekhawat, Union Minister of Jal Shakti, launched the Unified Registration Portal for GOBARDHAN plants on 1<sup>st</sup> June 2023. It is open to the general public for knowledge and research purpose. Any government or private entity operating or intending to set up a biogas, CBG, or bio CNG plant in India can register on the portal to obtain a registration number, which is required to avail of a multitude of benefits or support from other Ministries and Departments.

Among the dignitaries present at the event were Smt. Vini Mahajan, Secretary DDWS; Secretaries of the Ministry of New and Renewable Energy, Ministry of Petroleum and Natural Gas, Ministry of Housing and Urban Affairs, Department of Fertilizers, Department of Agriculture and Farmers Welfare; Secretary, Department of Agricultural Research and Education (DARE); and Director General, Indian Council of Agricultural Research (ICAR).

The virtual event was also attended by Additional Chief Secretaries (ACS)/Principal Secretaries/Mission Directors (In charge of rural sanitation) of all States/UTs.

States have been advised to register their CBG/biogas plant operators on the portal on priority to avail benefits/support from other Ministries/ Departments. The portal will act as a platform/one-stop repository to assess investment or participation in the biogas/CBG sector at the pan-India level and to streamline the

process of setting up CBG/biogas plants in India.

GOBARdhan initiative is envisioned to contribute significantly towards reaching India's climate action goals. It can play a crucial role in India's energy transition, ensuring energy security and affordability, enhancing entrepreneurship, providing rural employment, and boosting local economies. It will lead to job creation for semi-skilled and skilled labour in the areas of waste collection, operations, construction, etc.

## Outcome

The initiative will benefit rural people in general and women in particular from the use of clean fuel, improved cleanliness in villages, and consequent improvement in health outcomes. Furthermore, it will also augment the nation's efforts toward the attainment of Sustainable Development Goals (SDGs) such as SDG 3: Good Health and Well-being, SDG 6: Clean Water and Sanitation, SDG 7: Affordable and Clean Energy, and SDG 13: Climate Action.

# GUJARAT BOASTS OF 38 CLUSTER MODEL GOBARDHAN PLANTS



In alignment with the objectives of SBM-G Phase-II, the western State of Gujarat is setting up 38 cluster model GOBARDhan projects that will benefit 7,600 beneficiaries and support villages in achieving ODF Plus status. Launched in 2018 by the Government of India, GOBARDhan aims to promote cleanliness, increase rural household income, and generate energy and organic manure from cattle and agricultural waste.

A significant proportion of the rural population in Gujarat is dependent on livestock farming. With 26.9 million livestock population in the State (as per the 20<sup>th</sup> Livestock Census, 2019), the abundance of cattle leads to the generation of significant amount of organic waste, primarily in the form of cow dung.

**Cluster model:** Gujarat has adopted the cluster model of implementation of biogas plants under the GOBARDhan component of SBM-G. This approach involves establishing 200–250 individual biogas plants at the household level, and collecting and processing the slurry formed within a cluster. The aim is to achieve efficient resource utilization, economies of scale, and improved waste management.

**Implementation:** Under this model, a cluster of households will be identified by the GPs in association with cooperatives, milk unions, FPOs, SHGs, private entrepreneurs, Community Based Organizations (CBOs) developed under Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM), etc. These households should

have a minimum of 3–4 cattle. Individual household-level biogas plants of 2 cum capacity will be installed in each of the identified households at a cost of Rs. 30,000 each. The biogas generated will be used as clean cooking fuel by the households, and the slurry is converted into nutrient organic fertilizer.

**Flexi-biogas plants under cluster model:**

The flexi-biogas plants being set up in each household consist of a plastic or rubber digester bag, in the upper part of which the gas is stored. The inlet and outlet are attached directly to the skin of the balloon. The fermentation slurry is agitated slightly by the movement of the balloon skin, which is favourable to the digestion process. The balloon is made of UV-resistant material. The flexi plant's design capacity of 2 m<sup>3</sup> has been approved by MNRE for installation.

**Funding:** The funding for individual household biogas plants is as per the norms of the New National Biogas and Organic Manure Programme (NNBOMP) of MNRE. Under the cluster model, each District can

avail of Rs. 50 lakhs and also utilize funds from the 15<sup>th</sup> FC, CSR and other sources.

**Implementing agencies:** The Gujarat Government has appointed three implementing agencies for the implementation of cluster-based biogas projects:

- » National Dairy Development Board (NDDB) with a total of 5,000 beneficiaries in 25 Districts
- » Dairies (Amul, Banas, Sabar, Dudhsagar) with a total of 1,600 in 8 Districts
- » Bharat Biogas Energy Limited (BBEL) with a total of 1000 beneficiaries in 5 Districts

**Training activities under cluster-based biogas project:**

Hands-on training for GOBARdhan projects was organized by Rural Development Department in coordination with NDDB. In July 2023, 1,113 beneficiaries from 25 Districts were taken on an exposure visit to Zakariyapura and Muzkuva villages. Workshops were also organized at NDDB to create awareness on the benefits of biogas.

## Outcome

With the implementation of this initiative, villages have become visibly clean. The use of clean cooking fuel has improved the health of women in particular. There has been considerable saving in the cost of cooking fuel and also time, which can be used for other social and economic activities. Farmers have been utilizing the slurry obtained from their biogas plants in agriculture, leading to promotion of organic farming. The excess of biogas can also be shared with neighbours. The promotion of Khad Mandali has given women a new source of livelihood, operations of which are entirely handled by women.

# MENSTRUAL HYGIENE MANAGEMENT





## ▶▶▶▶ JHABUA BECOMES A PERIOD-FRIENDLY DISTRICT



**T**he District administration of Jhabua District in Madhya Pradesh initiated the Mission Mahima programme on 28<sup>th</sup> May 2022 to strengthen the MHM service value chain and provide benefits to 6,50,000 tribal women and adolescent girls in the District.

The programme was launched in collaboration with UNICEF and other sector partners, to commemorate World Menstrual Hygiene Management Day. It aims to eliminate period-puberty situation

among tribal adolescent girls and women by strengthening the District's MHM service value chain and demonstrating a model for achieving a period-friendly environment through gender transformative approaches.

**MHM action plan:** To achieve these objectives, the District administration developed a comprehensive MHM action plan that promotes convergence and coordination across key departments and schemes.



### **Key components of MHM action plan:**

- » Establishment of an institutionalized District MHM cell with representation from women members of key stakeholder departments and communities
- » Creation of a pool of 72 MTs to disseminate skills, with plans to increase this number to 100 in 2023
- » Training sessions for 400 (320 women and 80 men) FLWs to upskill in safe menstrual hygiene practices
- » Mobilization of resources for MHM through departmental convergence, amounting to Rs. 5 millions
- » Upgradation of toilets in government departments and institutions to include period-friendly facilities
- » Outreach to 4,000 adolescents (boys and girls) for MHM awareness through various platforms

- » Direct and indirect outreach to 17,800 individuals, primarily women and adolescent girls, through social behaviour communication campaigns

Another noteworthy initiative was the Menstropreneurship (Entrepreneurship for Menstruation) programme, led by the Gram Jyoti Mahila Sangh, a women's SHG based in Thandla village. The SHG undertook the initiative to produce affordable and safe menstrual solutions for women and adolescent girls in nearby rural areas while generating livelihood opportunities for its members. The centre had a production capacity of 18,000 sanitary pads per day that primarily catered to the demands of AWCs. The SHG also disseminated products for safe MHM practices to its prospective members.

## Outcome

Building upon the progress made in its first year of implementation, Mission Mahima continues to advance with identified key approaches that focus on scaling up proven initiatives and integrating sustainability into the programming.

# ▶▶▶▶ BANGALORE RURAL INSTALLS INCINERATORS IN ALL GPs, HIGH SCHOOLS AND HOSTELS



One of the priorities of SBM-G is to ensure proper MHM for creating a safe and enabling environment for adolescent girls and women. The District administration of Bangalore Rural in Karnataka took significant steps to address this by providing incinerators to all GPs, high schools and hostels in the District.

Efforts were made across the District to raise awareness about the menstrual cycle,

the use of safe absorbents, and the proper disposal of menstrual waste across the District.

Different waste management solutions are available depending on the type of menstrual products being used. Reusable products like menstrual cups and cloth-based sanitary pads, as well as disposable products such as sanitary pads with or without super absorbent polymers

(SAPs). As per SBM-G, the preferred waste management solutions applicable to rural India are small-scale incinerators, deep burial, and composting.

DDWS of Karnataka supplied incinerators to all 101 GPs in Bangalore Rural District. Used sanitary pads are carefully wrapped in paper and disposed of during waste collection rounds.

Notably, Majrahosalli GP in Doddaballapur taluk, which is surrounded by approximately 70 garment factories employing over 80 per cent female workforce, constructed a community toilet near the Factory Circle

Bus Stand. The GP utilized funds of Rs. 1.8 lakhs from SBM-G and supplemented it with its own funds of Rs. 2.20 lakhs to build a CSC, complete with a garden and water fountain.

The GP also installed an electric sanitary pad vending machine from SEIKO, costing Rs. 9,000. The machine, located in the women's toilet, holds 50 new pads at a time and can be accessed by inserting a 5-rupee coin. Around 30 napkins are purchased from the machine every day. The facility also includes an incinerator for the safe disposal of used pads.

## Outcome

The community toilet facility has been highly appreciated by the female workforce in the surrounding garment factories. It not only provides access to sanitary pads and facilitates the proper disposal of used pads, but also ensures cleanliness, hygiene, and environmental friendliness.

## BIHAR MAKES IMPACT THROUGH A WEEK-LONG MHM AWARENESS CAMPAIGN



In observance of World Menstrual Hygiene Day on 28<sup>th</sup> May, Bihar launched a week-long campaign to raise awareness about menstrual hygiene, the need to break the stigma surrounding menstruation, and the challenges faced by school girls and women regarding access to menstrual products across the State.

Menstrual Health and Hygiene (MHH) is essential for the well-being and empowerment of women and adolescent girls. However, due to insufficient

awareness, many women who take pride in motherhood avoid discussing menstruation. Adolescent girls and women often encounter various issues, including stigma, social exclusion, cultural taboos, poverty and lack of basic facilities such as toilets and sanitary products, which further add to the challenges surrounding MHH.

In Muzaffarpur, the District Development Commissioner and In-Charge District Magistrate, Mr. Ashutosh Dwivedi, inaugurated the Menstrual Health Hygiene

Awareness Signature campaign alongside the 'My Red Colour-My Pride' campaign. He encouraged girls and women to break the taboo and freely discuss menstrual hygiene.

As a result, thousands of girls and women signed the campaign banner, followed by an MHH awareness rally in the city that commenced from the collectorate and concluded at Khudi Ram Bose stadium. The rally featured slogans such as 'Red Dot My Pride', 'Break the silence and connect with menstrual health', and 'Proud to be

a mother, then why are you ashamed of menstruation?'

In East Champaran District, the District Magistrate and District Development Commissioner launched the Red Dot Challenge Rally as part of the MHH awareness campaign throughout the District. Similarly, Gopalganj District organized an awareness rally, signature campaign, group meetings, and various activities, while Bhagalpur District featured awareness talks, plays, rallies, and Red Dot Challenge events.

## Outcome

Girls and women actively participated in the Red Dot Challenge campaign by painting red dots on their hands and making a resolution to break the silence surrounding MHH. With the support of SHG members (Jeevika Didis), anganwadi members, ASHA workers, schoolgirls, the Health Department, ICDS, and other departments, the campaign made a significant impact in raising awareness and promoting MHH across Bihar.

# ▶▶▶▶ JAMMU AND KASHMIR IMPROVES SCHOOL ATTENDANCE THROUGH PINK TOILETS



**T**he Directorate of Rural Sanitation, Department of Rural Development and Panchayat Raj, Jammu and Kashmir, initiated the construction of Pink Toilets exclusively for girls and women in various Districts to make sanitation facilities accessible, and maintain school attendance of adolescent girls during menstruation.

Access to water and sanitation is a fundamental human right, essential for the health, dignity, and prosperity of all individuals. Women and girls, who are

often more vulnerable, face the brunt of unhygienic conditions, which can lead to infections and safety concerns.

The Pink Toilets are designed exclusively for girls and women, to prioritize their privacy, safety, and comfort. The walls and doors are painted pink, and the facilities are clean, well-maintained and equipped with sanitary pad dispenser machines and incinerators for the safe disposal of used sanitary pads and menstrual waste. They also provide running water, soap dispensers, and hand dryers.

**Construction of Pink Toilets:** The Department worked in consultation with local authorities and communities to identify suitable locations for Pink Toilets in rural areas. Land and necessary resources were secured, and each facility adhered to the standards prescribed by SBM-G Guidelines. Regular monitoring and evaluation were conducted to assess the effectiveness of the Pink Toilets, to ensure proper O&M.

**Improved attendance:** The Pink Toilets have had a significantly positive on girls and women in rural areas. Besides providing a safe, secure, and hygienic space that caters to their needs, they have also reduced the risk of contracting infections and diseases. By offering privacy and dignity, these toilets empower girls and women to effectively manage their menstrual hygiene, promoting gender equality. Importantly, the availability of these facilities has resulted in increased school attendance among adolescent girls.

## Outcome

The construction of Pink Toilets in rural areas of Jammu and Kashmir was a remarkable stride towards promoting gender equity. It acknowledged and addressed the specific sanitation needs of women and girls, and provided them with safe and secure spaces during menstruation. This initiative also emphasized the importance of involving women in community development projects, particularly those related to infrastructure. Moreover, the construction of Pink Toilets created employment opportunities for local women, empowering them to assume leadership roles and contribute to the development of their communities. This initiative fostered inclusivity and progress by ensuring the involvement of women and girls in decision-making processes.

# ▶▶▶▶ JHARKHAND PIONEERS INNOVATIVE MHM PRACTICES



**J**harkhand has emerged as a frontrunner in promoting innovative practices for MHM. The State has taken significant steps to prioritize women's health and sanitation needs, facilitating safe and hygienic practices through various initiatives.

Jharkhand has implemented a range of initiatives to address menstrual hygiene challenges and empower women. Some notable efforts include:

- » Sanitary Pad bank system in Kasturba Gandhi Balika Vidyalaya (KGBV) Tonto that caters to approximately 600 girls



- » Safe MHM and waste disposal practices in SS +2 High School, Chandil Block, Saraikella and Kharsawan
- » MHM Lobby in KGBV Jhikpani
- » Regular MHM sessions in KGBV Angada
- » MHM Lab in KGBV Gandey
- » Improved school attendance of adolescent girls
- » Dialogue and awareness generation
- » Gender-segregated toilets

## Outcome

The proactive initiatives of Jharkhand's Panchayats have created a comprehensive MHM ecosystem that consists of awareness generation, safe usage of menstrual products, and access to appropriate waste disposal facilities.

# ODF PLUS



Const. of Sanitary Complex

HELP US TO  
HELP YOU  
پہلے ہمیں مدد  
کریں تاکہ  
توہیلے کے لیے  
ایک صفائی  
کامیاب  
میں مدد  
کریں تاکہ  
توہیلے کے لیے  
ایک صفائی  
کامیاب

USE TOILET  
FOR A CLEAN  
ENVIRONMENT



(S.B.M) Drass 2017

صفائی کا انسان انسان ہے  
غلیظ اور کٹہر تو چھوڑنا ہے

WASH YOUR  
HANDS AFTER  
USING  
THE TOILET





# KERALA ACHIEVES ODF PLUS STATUS



**T**he coastal State of Kerala has crossed another milestone in the sanitation sector, having achieved the status of 100 per cent ODF Plus villages on 29<sup>th</sup> June 2023. Out of the total 1,509 villages, 970 have been declared as ODF Plus Model villages 46 are in the Rising category, and 485 are in the Aspiring category.

The State aims to further achieve its ultimate objective of attaining 100 per cent ODF Plus Model villages by December 2023.

In doing so, Kerala is ahead of schedule as the country has targeted to achieve this milestone by March 2025. The State has been one of the forerunners in the country in terms of sanitation since it was among the first few States to declare itself as ODF way back in 2016. Following this legacy, the State was keen to establish systems for SLWM as early as possible.

Compliance with the objectives of SBM-G and its parameters for solid waste management was not a very challenging task for the State as it already had such facilities in place in more than 90 per cent of its villages.

However, the State was lagging slightly behind in terms of LWM. High priority was therefore given to this by establishing linkages with urban LWM facilities.

## Outcome

Wayanad is considered the green paradise nestled among the mountains of the Western Ghats and deserves special mention. It was the first District in the State to become ODF Plus, thus motivating other Districts to achieve the target at the earliest.

## ODISHA'S JITIKAR SUANLO IS AN ODF PLUS VILLAGE



**H**aving met all criteria stipulated in SBM-G Phase-II guidelines, Jitkar Suanlo village in Bhingarapur GP of Khordha District in Odisha was declared an ODF Plus Model village on 3<sup>rd</sup> November 2022. The achievement of this village in Baliana Block can be attributed to community participation and leadership at the Block level.

With a population of more than 1,350 and all 407 households having access to functional individual household toilets, Jitkar Suanlo

has been able to sustain its ODF status. Encouraged by the success of SBM-G Phase-I, the team started working on the Phase-II activities.

In both phases, people's representatives and the village community were very cooperative in matters concerning the development of the village. The District officials played an active role with the Block Resource Centre (BRC) and regularly interacted with key stakeholders on various verticals of SBM-G Phase-II and ODF Plus.

Under the leadership of Ward Member Santosh Sahoo and Master Trainer (MT) Benudhar Parida, the SHG women initiated the activities in a mission mode.

The team encouraged all households to construct individual soak/leach pits and individual compost pits in their backyard. Till date, 279 households have completed constructing these pits.

A decision was taken at a village committee meeting to construct a community compost pit and community leach pit on the premises of the Maa Jageswari temple. An institutional compost pit was also built inside the campus of Jageswari UG UP school. Moreover, all students in the school have access to school

toilets, and the institution uses the leach pit and compost pit to manage their solid and liquid waste. An SHG has been tagged for waste management of the village.

To cater to the community and visitors, a CSC was constructed within the premises of the Kalyan Mandap. The facility is well-maintained and has become an additional asset for the community marriage hall. A segregation shed was constructed at Bhingarapur GP headquarters under the leadership of the Sarpanch and with the support of the Block administration. The GP also purchased a tricycle and appointed a person to collect waste from households and establishments twice a week.

## Outcome

With systems in place for SLWM, visual cleanliness has been achieved in Jitkar Suanlo village.

## UP SHOWCASES LIVE MODELS OF ODF PLUS ASSETS IN SHRAVASTI MAHOTSAV



In a remarkable initiative in collaboration with UNICEF, the SBM-G team of Shravasti District in Uttar Pradesh developed live models of ODF Plus assets that effectively manage solid and liquid waste. Such assets are vital to transforming GPs into ideal ODF Plus villages that are visually clean.

Shravasti Mahotsav in the State is a development festival celebrated with a cultural blend and much fanfare. It was organized from 22<sup>nd</sup> to 24<sup>th</sup> May 2023 by the District administration of Shravasti.

The 2023 edition of Mahotsav was orchestrated as an opportunity for Government Departments to showcase the strides made under their respective development schemes. To cater to the huge presence of diverse communities at the event, Ms. Neha Prakash, District Magistrate, and Mr. Anubhav Singh, Chief Development Officer, made sincere efforts to ensure that the demonstration stalls were innovative in idea and imaginative in presentation.



SBM-G team and UNICEF selected all schemes that were intrinsic to the notion of an ideal GP and thereafter planned and developed working models of each of them, complete with illustrations of standard design specifications that adhered to specific operational principles.

The models thus developed and exhibited at the Mahotsav included twin-pit

household toilet, NADEP composting, vermi composting, Resource Recovery Centre (RRC), soak pits near handpumps, filter chamber for LWM, and piped-water scheme.

The models that constitute an ideal GP were inaugurated by Shri Rakesh Kumar, State Minister for the Departments of Urban Development and Urban Employment and Poverty Eradication.

## Outcome

People from across the District visited the exhibition site. The live models that were constructed and set up at the site caught the attention of the visitors who could learn better about the various Government schemes, including SBM-G.

## ODISHA'S SASAN AMBAGAM GP BECOMES ODF PLUS



It took a herculean effort to transform Sasan Ambagam GP into an ODF Plus GP. The District administration of Ganjam took up the challenge of improving the age-old practices of hygiene and sanitation and installing proper infrastructure. With the help of community participation, their endeavours were successful. Sanitation and hygiene have now become a way of life in the GP.

Situated 8 kms from the Hinjilicut Block headquarters of Ganjam District in Odisha, the GP consists of two revenue villages, namely Sasan Ambagam and Badi

Ambagam. It is home to 1,207 households. Adhering to the guidelines of SBM-G Phase-II, the GP gradually set up systems in place for all components of ODF Plus.

### **Toilets for new households and retrofitting:**

Although the GP already became ODF, the status must be sustained by continuing the construction of new toilets as new households are established. Sasan Ambagam GP made a ruling that all new households needed to have functional toilets to be used by the entire family regularly. Further, to convert single pit toilets constructed during SBM-G Phase-I

into twin pit toilets, awareness drives were conducted until all those toilets were retrofitted, as they were the preferred toilets in rural areas.

#### **Rural mini micro composting unit and**

**MMF:** Under the tagline 'Mo Swabhimaan Swachh Ganjam', the District administration of Ganjam set up a Rural Mini Micro Composting Centre (MMCC) and an MRF in Sasan Ambagam GP to manage solid waste generated in rural areas.

The business model of this initiative is a self-sustainable sanitation model. SHGs are given control of the facility, who are able to generate revenue through the sale of Mo Gaon Khata (compost) and recyclable dry waste. Till date, the sale of recyclables to local kabadiwallahs generated a revenue of Rs. 16,000, and around 300 kgs of low-density plastic bags (non-recyclables) were

sent to Hinjilicut MRF for further processing under the convergence programme.

**LWM:** With the supply of drinking water to every household, the consumption of water at the household level has increased, resulting in higher generation of greywater at the household level. Similarly, community-level water points such as tube wells and wells generate a considerable amount of greywater. To address this, the GP has constructed individual household soak pits and community soak pits to manage the greywater generated.

**IEC and capacity building:** The focus of SBM-G has been on the construction of toilets as well as behaviour change. Sasan Ambagam GP has conducted various IEC programmes and capacity building activities on these SBM-G components to bring about the desired behaviour change.

## Outcome

All systems are in place for SLWM. To improve the aesthetics of the GP, regular cleanliness drives are undertaken with community participation. Ganjam is also known as the land of ponds, and Sasan Ambagam GP has several water bodies. Considerable attention is given to the cleaning of these water bodies during the cleanliness drives, as a result of which they are clean and well-maintained.

## ▶▶▶▶ MIZORAM'S LENG VILLAGE IS ON THE ROAD TO ODF PLUS MODEL STATUS



**W**ith efficient systems in place for waste management including the proper disposal of biodegradable and non-biodegradable waste, plastics and liquid waste, Leng village in Serchhip District of Mizoram is on the way to achieving ODF Plus Model status.

Leng village is a tiny hamlet situated in the eastern part of Mizoram. It falls within the

jurisdiction of East Lungdar RD Block under Serchhip District and has a total population of 942, with 194 families residing there.

Leng village has held a reputation for prioritizing sanitation and undertaking initiatives towards cleanliness and hygiene within the community since the establishment of the village, when Chiefs were the rulers and sole authority of the village.

These initiatives were further intensified by the inhabitants in 2017 when upgraded hygienic toilets were installed for 10 families through incentives provided under the SBM-G scheme. Under the same scheme, the toilets of 20 families were also repaired and upgraded in 2020.

**ODF sustainability:** Toilets and CSCs were installed in all educational establishments, schools, AWCs, and community hall, thus providing sanitation access to all.

**Community participation:** Community participation has been a vital element in making progress. Towards this, joint meetings were frequently convened with representatives of NGOs in the village under the aegis of the Village Council, wherein issues were discussed and plans

for cleanliness drives were made. Garbage bins were distributed to all households and community bins were strategically placed in all roads. People were also encouraged to participate in cleanliness drives.

**SWM:** All households constructed individual compost pits, and a waste disposal space was arranged for the dumping of non-biodegradable waste such as plastics, bottles, etc.

**LWM:** Around 60 per cent of the households in Leng village have a well-planned LWM system, with drainage pipe fittings made of bamboo or plastic and other materials. The liquid waste is effectively used for watering kitchen gardens.

## Outcome

All systems are in place for SLWM. Several initiatives have been conducted to raise awareness on the importance of hygiene and sanitation and to promote a healthy, clean and hygienic lifestyle among the village residents. These include wall paintings and graffiti, both in word and pictorial forms, that are drawn and displayed at several places within the village and wherever feasible.

# IEC

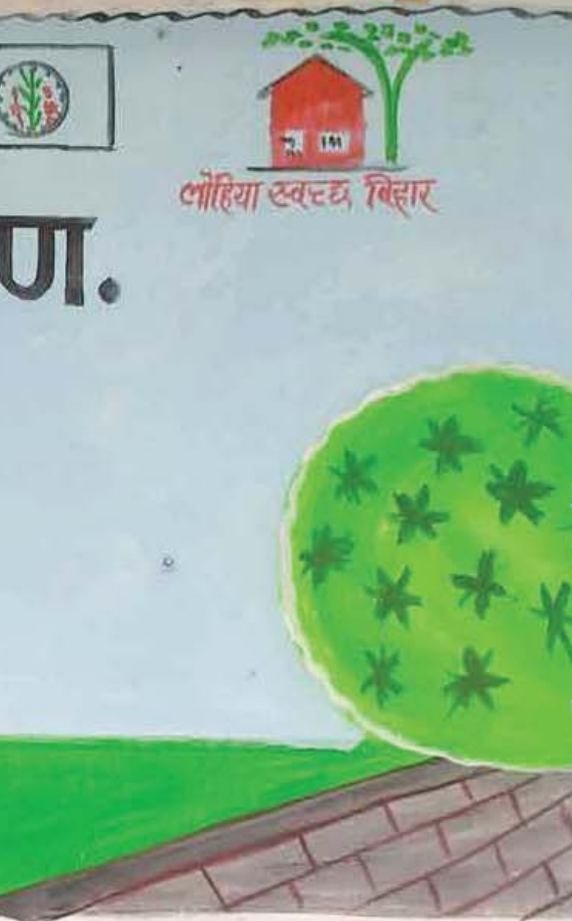


स्वच्छ व्यवहार - सुंदर बिहार

करें खाद गड़े का निर्माण  
होगा कूड़े का  
सुरक्षित निपटान



लोहिया स्वच्छ बिहार, अभियान, जिला जल एवं स्व  
प्रखण्ड परिषद पंचायत - मोरहे



ਓਹਿਆ ਟਕਦਕ ਕਿਸ਼ਾਰ

ਦ ਫੁਲਾਸਮਿਤਿ, ਗਯਾ  
 ਫਿਨਾਕ: - 18/07/2019/

ਬੱਚੇ, ਬਜ਼ੁਰਗ ਅਤੇ ਜਵਾਨ  
 ਪਖਾਨਾ ਵਰਤੇ ਹਰ ਇਨਸਾਨ  
 "ਮੇਰਾ ਪਖਾਨਾ ਮੇਰੀ ਸ਼ਾਨ"

ਜਲ ਸਪਲਾਈ ਅਤੇ ਸੈਨੀਟੇਸ਼ਨ ਡਿਵੀਜ਼ਨ  
 ਸਿਵਲਿਟਿਜ਼ ਡਿਵੀਜ਼ਨ ਟੈਲ ਫਰੀ ਨੰਬਰ 1800-180-2968  
 ਕੋਡ 01 (ਪਿੰਡ ਦਾ ਨਾਂ ਕੋਲਾ - ਲੜੀ ਨੰ. 01 - ਮਿਲੀ 11 & 2020)

# ਹੁਸ਼ਿਆਰਪੁਰ ਜਿਲੇ ਦਾ ਨੰ:1 ਸਮਾਰਟ ਪਿੰਡ ਦਬਰਜੀ ਵਿੱਚ ਤੁਹਾਡਾ ਸਵਾਗਤ ਹੈ।

ਆਪਣੀ ਧਰਤੀ ਆਪਣਾ ਕੱਲ  
 ਆਓ ਬਣਾਈਏ ਬੇਹਤਰ ਇਸਨੂੰ

ਖੁਰ ਵਰਤੋਂ ਪੈਗਾ ਕੂੜਾ  
 ਨਾ-ਖੁਰ ਵਰਤੋਂ ਪੈਗਾ ਕੂੜਾ

ਗਿੱਲਾ ਕੂੜਾ (ਜੀਵਕ ਕੂੜਾ)

ਕਰੋ ਖਾਦ ਖੰਡੇ ਦਾ ਠਿਰਮਾਫ  
 ਕੂੜੇ ਦਾ ਹੋਵੇਗਾ ਸੁਰੱਖਿਅਤ ਨਿਪਟਾਰਾ

ਜਲ ਸਪਲਾਈ ਅਤੇ ਸੈਨੀਟੇਸ਼ਨ ਡਿਵੀਜ਼ਨ, ਮੁਕੀ ਨੰ: 1  
 ਕੋਡ 01 ਪਿੰਡ ਦੁਲਜੀ (ਗਿੱਲਾ ਕੂੜਾ) ਮਿਲੀ 11 & 2020  
 ਸਿਵਲਿਟਿਜ਼ ਡਿਵੀਜ਼ਨ ਟੈਲ ਫਰੀ ਨੰਬਰ: 1800-180-2968

ਇੱਥੇ ਘੋਸਟਰ ਲਗਾਣਾ ਸਖਤ ਮਨ੍ਹਾ ਹੈ।

ਆਪਣੀ ਧਰਤੀ ਆਪਣਾ ਕੱਲ  
 ਆਓ ਬਣਾਈਏ ਬੇਹਤਰ ਇਸਨੂੰ

ਪਲਾਸਟਿਕ ਦੀ ਵਰਤੋਂ ਘਟਾਓ  
 ਪਲਾਸਟਿਕ ਦੀ ਮੁੜ ਵਰਤੋਂ ਕਰੋ

ਖੁਰ ਵਰਤੋਂ ਪੈਗਾ ਕੂੜਾ  
 ਨਾ-ਖੁਰ ਵਰਤੋਂ ਪੈਗਾ ਕੂੜਾ

ਗਿੱਲਾ ਕੂੜਾ (ਜੀਵਕ ਕੂੜਾ)

# ▶▶▶▶ FATEHPUR'S WASH VAANI PROMOTES WASH BEHAVIOUR



It was indeed a moment of pride for Anshik, Shrestha, Sakshi, Mahek, Arun and Prabha – students of classes VI, VII, and VIII from government rural composite and upper primary schools in Teliyani and Bhitaura Blocks of Fatehpur District – when their labour of love and collective creativity resulted in the **WASH Vaani**, the first edition of a magazine that was colourful, vibrant and informative.

Children from government schools in Fatehpur District of Uttar Pradesh have been using their creative energy to promote

positive WASH behaviour in rural areas through a magazine called the WASH Vaani.

The initiative demonstrates the importance of the theme of water and sanitation that has been recognized in rural India since the implementation of the Government's flagship SBM-G campaign. These topics are discussed and considered an integral aspect of healthy living.

In February 2023, about 30 students from 11 schools were selected by WaterAid for a vigorous creative writing workshop. The aim



was to develop a WASH Brigade and publish their own magazine as a tool to promote peer learning, sharing and behaviour change.

WASH Brigade is a forum of children promoted by WaterAid in 152 intervention schools across Fatehpur, Chitrakoot and Unnao Districts in Uttar Pradesh under its 'WASH in School' intervention. About 1,800 children are associated with WASH Brigade and office bearers with WASH-specific responsibilities. This includes educating other children, monitoring and informing school teachers and School

Management Committees about specific actions on campus cleanliness, safe drinking water, hand washing, personal hygiene, food hygiene during mid-day meal breaks, etc. Members of WASH Brigade are democratically elected every year.

During a 3-day writing workshop with 30 identified WASH Brigade members from different schools in February 2023, children learned about the basics of writing and creative expressions. Children and school teachers were actively involved in developing the layout and design of the magazine, selecting stories, and drafting the content.

## Outcome

The first issue was released by Shri Sanjay Kushwaha, District Basic Education Officer, Fatehpur, in the presence of WASH Brigade members, school teachers, and members of School Management Committees on 6<sup>th</sup> April 2023.

## WORLD HAND HYGIENE DAY IS OBSERVED ACROSS SCHOOLS IN PUNJAB



**O**n 5<sup>th</sup> May 2023, schools across Punjab celebrated World Hand Hygiene Day through various educational and awareness raising activities. The campaign emphasized on the need for regular handwashing to prevent the spread of infectious diseases.

Some schools conducted hand hygiene demonstrations and interactive sessions to teach proper handwashing techniques.

Others organized poster-making competitions and awareness drives to educate students about the benefits of good hand hygiene practices.

According to World Health Organization (WHO), hand hygiene saves millions of lives every year when performed at the right moments during health-care delivery. It is also a smart investment that offers exceptional returns on the money

invested. Clean care is a sign of respect to those who seek care, and it also protects the health workers and others who provide that care.

The campaign theme for World Hand Hygiene Day 2023 was: 'Together, we can

accelerate action to prevent infections and antimicrobial resistance in health care and build a culture of safety and quality in which hand hygiene improvement is given high priority'. The slogan was: 'Accelerate action together. SAVE LIVES – Clean Your Hands'.

## Outcome

Good hand hygiene habits instilled in children from an early age promote a healthy society. Students were encouraged to use hand sanitizers and soap regularly and make hand hygiene a part of their daily routine. Such small yet impactful efforts to raise awareness about hand hygiene will go a long way toward promoting health and hygiene in rural areas.

## ▶▶▶▶ JAMMU AND KASHMIR'S SWACHHATA KARWAAN COVERS 695 GPs



**B**esides constructing infrastructure for ODF Plus villages, SBM-G also aims to bring about behaviour change among the masses to adopt hygiene and safe sanitation practices. Planning of IEC strategies and their effective implementation are key to the success of the Mission.

IEC activities are not to be treated as standalone activities or as a component of the Mission. They are integral to the

programme, which is largely about implementing effective IEC to nudge communities into adopting safe and sustainable sanitation practices.

With a view to implementing IEC at the grassroots level across the entire Jammu and Kashmir UT, the Directorate of Rural Sanitation, Department of Rural Development and Panchayat Raj launched the Swachhata Karwaan.

The programme was the first of its kind in the UT. On 24<sup>th</sup> April 2023, eve of the National Panchayati Raj Day, the LG of the Jammu and Kashmir UT flagged off Swachhata Karwaan from Palli Panchayat in Samba District.

The Karwaan thereon commenced its tour of different villages of the District to create awareness with the help of a publicity van that was beautifully decorated with IEC messages, including audio and video visuals. Events were also organized in every District, which included nukkad nataks, drum beats, debates, quiz competitions, skits, painting, drawing, and other Swachhata activities.

The Swachhata Karwaan drew huge crowds as thousands of people from villages including PRIs took the Swachhata pledge and participated in the Swachhata march.

Students from rural schools also took a keen interest in the Swachhata activities and actively participated in all the contests. Their enthusiasm was infectious as it attracted others to join the cause for sanitation, which would contribute to the health and well-being of all communities.

## Outcome

The Swachhata Karwaan has completed its journey in the 14 Districts of Samba, Jammu, Reasi, Udhampur, Ramban, Anantnag, Kulgam, Shopian, Pulwama, Budgam, Srinagar, Ganderbal, Baramulla and Kupwara. It covered about 145 Blocks and 695 GPs, with a public outreach of more than 1.2 lakh and the numbers increasing day by day.

# ▶▶▶▶▶ TAMIL NADU LAUNCHES NAMMA OORU SUPERU CAMPAIGN



**F**ollowing the success of the previous year's sanitation campaign, Tamil Nadu once again launched the Namma Ooru Superu (Our village is the best) campaign from 1<sup>st</sup> May to 15<sup>th</sup> June 2023. The aim was to ensure safe sanitation practices and cleanliness in rural areas across the State.

The campaign intended to strengthen the State's progress toward ensuring environmentally sustainable and clean villages. Emphasis was also given to the effective management of legacy waste and achieving the State's retrofitting target.

It included health and welfare measures for workers undertaking sanitation-related works.

While the Districts formed village-level committees to oversee the campaign, the State called upon all Departments to support the campaign and ensure its success.

### **Among the activities that were implemented included:**

- » Mass cleaning of public institutions/ places

- » Awareness in schools and colleges on water, sanitation, and waste management
- » Awareness of water, sanitation, and waste management at households and institutions through SHG members
- » Ban on SUPs and use of alternatives
- » Plantation and other cleaning activities that would make villages clean and green

The previous year campaign was launched on 15<sup>th</sup> August 2022 in all village panchayats during Grama Sabhas. It aimed to bring about behavioural change among the rural community by creating awareness on sustaining practices related to sanitation and SLWM.

## Outcome

During the campaign period, with the active participation of communities, around 47,339 garbage hotspots, 16,829 public places, 21,775 schools, 22,695 anganwadis, 45,824 Government buildings/institutions, 47,949 water bodies, 10,011 CSC, and 15,69,348 metres of drainages were cleaned.

Awareness sessions were held in 13,659 schools and 343 colleges by active motivators and SHG/PLF members. In just a week's time during the campaign, around 4 lakh trees were planted. The achievements of the campaign were integral to advancing the State's efforts under SBM-G.

# CHILDREN'S SANITATION CLUBS SPROUT ACROSS MIZORAM



**S**anitation is essential to children's survival and development, who need to be provided hygienic facilities and services in a clean atmosphere. This will ensure that children develop safe sanitation behaviours that are needed to fight diseases and grow up healthy.

To facilitate this, Children's Sanitation Clubs were formed across the Districts of Mizoram. Far-reaching measures were taken through

the Clubs in Thazawl, a village in Lunglei District of Mizoram with a population of 418 individuals from 91 households. This has revolutionized the sanitation sector to achieve overall growth and development in their village.

With support from their Swachhagrahi, the Thazawl Children's Sanitation Club undertook various activities to ensure that their village meets the criteria of an ODF Plus



Model village. This included environment lessons and awareness sessions on water and sanitation.

As children are more likely to learn through practical lessons, shramdaans such as community cleanup activities, tree planting,

cleaning of water sources, and water and sanitation awareness rallies are taken up on a regular basis. All children from the village, with the youngest member being 5 years of age, are encouraged to take an active part in these activities.

## Outcome

Thaizawl village is contributing to achieving one of the SDGs established by the United Nations General Assembly in 2015, namely SDG 6: Ensure availability and sustainable management of water and sanitation for all. Sanitation is indeed more than just toilets; it is everyone's business.

# GUJARAT TAKES COMMENDABLE STEPS TOWARD COASTAL CLEANLINESS



Regardless of whether they are calm or turbulent, oceans have always drawn people wanting to enjoy the sea air and experience a sense of peace. Beaches help people connect with nature and are often the most popular destinations during school vacations and other holidays. However, such places that witness a large number of tourists also generate large volumes of garbage that are left behind.

In 2022, DDWS extended support to the Swachh Sagar, Surakshit Sagar (Clean Coast, Safe Sea) campaign launched by the Ministry of Earth Sciences from 5<sup>th</sup>

July to 17<sup>th</sup> September 2022 to promote the importance of a clean coast. The underlying objective of the campaign was to bring about behavioural change among the citizens of the nation and help them understand the importance of responsible consumption and disposal, segregation of waste at home, and curbing the use of SUPs.

**Gujarat undertook various coastal cleanliness activities as mentioned below.**

**Tithal GP, Valsad District:** Gujarat Tourism Board collaborated with the GP and engaged an agency to maintain cleanliness in the beach. They employed 12 SHG members

who receive a daily wage of Rs. 350 for daily cleaning activities at designated locations. The accumulated waste is collected and handed over to the municipality every fortnight for proper disposal.

**Dandi Village, Jalalpor Block, Navsari**

**District:** With a 2 km stretch of coastline, Dandi Beach is a tourist spot but has a significant amount of waste dumped by visitors. The panchayat employs one person for a daily wage of Rs. 250 to clean the site. Beach cleaning activities are carried out as per the requirements of the panchayat, particularly during events such as the Ganapati Visarjan (immersion) ceremony. The collected waste is handed over to the municipality for processing and safe disposal.

**Madhavpur Village, Porbandar District:**

The Madhavpur beach is renowned not only in Gujarat but also throughout India. The GP ensures the cleanliness of the beach on a regular basis by employing 18–20 sanitation workers who receive a daily wage of Rs. 350 each.

**Vadinar Village, Khambhadiya Block,**

**Devbhoomi Dwarka District:** Nayara Energy and the GP jointly carry out sanitation work

including door-to-door waste collection in Vadinar and the surrounding 14 villages. The GP oversees the administration and supervises these activities, while Nayara Energy employs 15 individuals for the sanitation work for a daily wage of Rs. 360 each. As many as 3 mini-trucks and 13 e-rickshaws have been dedicated to managing both solid and liquid wastes in the cluster. On a daily basis, the collected solid waste is segregated and the recyclable waste is handed over to local scrap dealers, while the non-recyclable waste is disposed of appropriately.

**Somnath, Veraval Block, Gir Somnath**

**District:** To maintain the cleanliness of the long coastline near the Somnath Temple and Veraval City, the District administration of Gir Somnath District organizes cleanliness drives under the NSS, involving senior citizens, youth volunteers, and various departmental staff of the District. The cleaning work is carried out through the joint efforts of the Veraval Patan Municipality and the Somnath Temple Trust. Daily cleaning activities involve segregating the collected waste and disposing of non-recyclable waste at the designated dumping site of the municipality every fortnight for further processing.

## Outcome

As a result of the campaign, many coastal States have initiated measures to clean their beaches on a regular basis and therefore protect the environment.

# JAMMU AND KASHMIR ENSURES A SWACHH SUSTAINABLE & ZERO LANDFILL SHRI AMARNATH YATRA 2023



Every year, Shree Amarnath devotees undertake the journey to the holy cave, which is situated at a height of 3,888 m and holds immense significance for millions of people in the country. To ensure a pure and pleasant journey for the pilgrims, the Directorate of Rural Sanitation, Jammu and Kashmir, has put in place a strong mechanism – from manpower to machinery – to ensure comprehensive hygiene and sanitation during the expedition.

Ahead of the spiritual journey to the Amarnath Cave, a meticulous strategy was devised to promote cleanliness and environmental responsibility. The Directorate ensured that all physical needs of the pilgrims and attendants were met,

and that a high standard of cleanliness was maintained.

A huge network of human resources (3,900 persons) including sanitation workers were equipped with sanitation kits and deployed to work in shifts. Facilities included 2,285 mobile toilets, 1,050 garbage bins, portable water at several stations on the route, communication tools, health-care facilities, compost beds, and other related amenities to ensure proper disposal of waste generated during the pilgrimage.

A massive communication campaign was implemented from Kathua to the holy Amarnath Cave to foster a neat and clean pilgrimage experience, as well as preserve

the beauty of the natural surroundings. This included the issuance of guidelines for making a sustainable and zero landfill event. Hoardings, banners, insignia and sign boards with messages on safe sanitation practices were installed en route to Pahalgam and Baltal axis and on the Sonmarg and Pahalgam route in the Himalayan region. They displayed messages to encourage waste management, recycling, and reducing the use of plastic and other non-biodegradable materials.

Educational material was available in multiple languages across the region, explaining the proper use of assets on the ground, importance of cleanliness during the pilgrimage, environmental impact of littering, and practical tips for waste management.

A Yatra anthem was sung by renowned Bollywood singer Shaan Mukherji. Other IEC materials included movable inflatable mascots, touch screen kiosks, audio jingles. Reusable cloth bags were distributed for free.



## Outcome

The first five days of the campaign saw a footfall of 50,000 pilgrims at the Amarnath Cave, during which not even a single case of litter or open defecation was reported. Such was the impact of the sanitation campaign. The message propagated was simple: 'Let us work together to uphold the sanctity of these sacred places and leave a positive impact for generations to come'.

