



PRESS INFORMATION BUREAU
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 Ministry of Information and Broadcasting
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SUJLAM: GREY WATER MANAGEMENT CAMPAIGN

Seeking Grey Water management through people's participation

Over Six Lakh Villages to see Intense Activity on Solid & Liquid Waste Management

(Ministry of Jal Shakti)

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Introduction¹

Increase in population along with the associated development activities have not only reduced per capita availability of fresh water, but also increased pollution level of existing water bodies. To reduce the pressure on fresh water sources and improve the visual cleanliness of villages, a holistic approach to wastewater management is imperative, which means that treated wastewater must be turned into one of the sources of water in rural areas.

In rural India, liquid waste is divided into two different streams – **greywater** and **black water**. Earlier, public bathing, washing and other practices resulted in limited greywater generation that was mainly restricted to the kitchen. In present context, when Jal Jeevan Mission has ensured more than six crore tap water connections in rural households, the time has come to focus on management of grey water generated in villages.

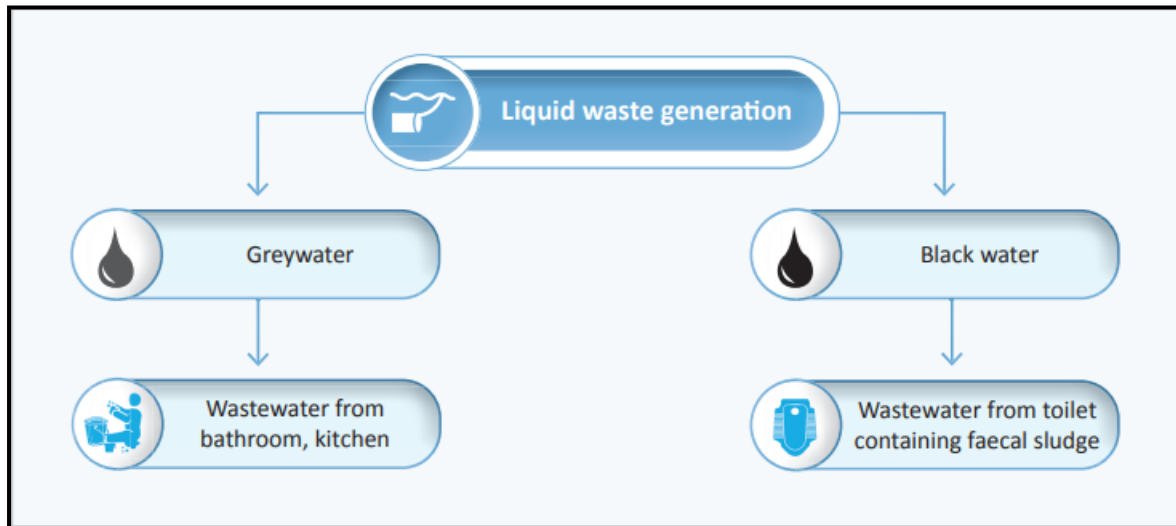
Improper disposal of greywater not only pollutes water bodies and negatively impacts the local ecosystem but also creates a contaminated environment that can result in a health hazard. These conditions, with time, have disrupted the water bodies and their ecology, making it essential to conserve the fresh water resources as well as manage the generated wastewater.

Liquid Waste Management in Villages²: Understanding the Need for Grey Water Management

The wastewater generated in the rural areas can be divided into **blackwater** and **greywater** depending upon the impurities they carry.

¹https://swachhbharatmission.gov.in/SBMCMS/writereaddata/Portal/Images/pdf/Greywater_Manual_English.pdf

²https://swachhbharatmission.gov.in/SBMCMS/writereaddata/Portal/Images/pdf/Greywater_Manual_English.pdf

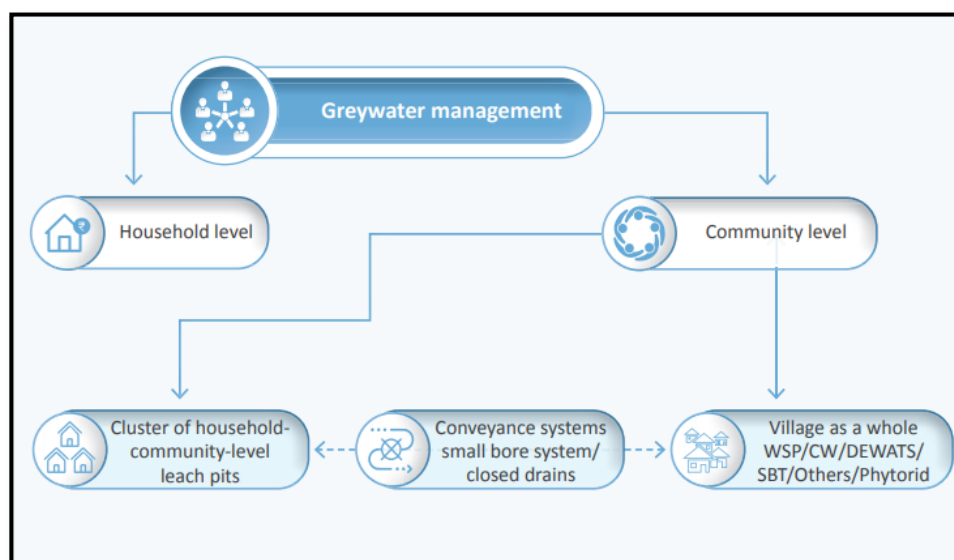


Blackwater: Wastewater generated from toilets containing faecal matter with very high amount of pathogens.

Greywater: Wastewater is generated from bathing, washing, general cleaning, kitchen, maintenance of livestock, as well as from community stand posts, wells, hand pumps and other institutional areas, etc. Greywater contains only one-tenth of the nitrogen that black water does and significantly fewer pathogens. As a result, the organic content of greywater decomposes more rapidly than that of black water and thus its treatment is easier. These characteristics make it reusable as a sustainable source of water for irrigation, and also for other purposes, but only after treatment which allows it to meet specific quality criteria.

Greywater Management: Implementation

Ensuring efficient greywater management in rural areas requires technological solutions to be cost-effective, capable of handling both small and large quantities of greywater (as required), and simple enough to be operated and maintained by the Gram Panchayat (GP).



Options for Greywater Management include the following³

1. Household Level Interventions

- **Soak Pit:** A soak pit is a dug-out pit that is filled with graded stones and gravels. The stones increase the surface area over which biological and chemical actions take place. Installation of soak pits is also recommended near hand-pumps, stand posts, etc. at community level as a measure for management of the greywater generated.
- **Leach Pit:** A leach pit is either constructed in honeycomb brick masonry with cavities in alternate layers or by stacking concrete rings having five to six holes in each ring.
- **Magic Pit:** A magic pit is a covered, porous-walled chamber that allows water to slowly soak into the ground. Pre-settled effluent from a collection tank is discharged to the underground chamber.
- **Kitchen Garden:** Greywater can be used for watering the plants in a kitchen garden. This not only solves the issue of greywater management but also reduces the demand for freshwater.

2. Community Level Interventions

- **Community Leach Pit:** This is a brick-lined pit constructed at a convenient place for a group of houses. Greywater from the houses should be carried to this pit.
- **Waste Stabilization Pond:** A Waste Stabilization Pond (WSP) is a series of shallow man-made basins that facilitate digestion of organics in the greywater through natural processes within the stipulated retention time. A WSP comprises of anaerobic, facultative, and maturation ponds.
- **Decentralised Wastewater Treatment System (DEWATS):** DEWATS is a proven nature-based treatment technology suitable for wastewater treatment including greywater, which works under the action of gravity, negating the requirement of any electromechanical components and hence provides the advantage of minimal maintenance. DEWATS follows four stages of treatment namely – pre-treatment, solid liquid separation, treatment of liquid component, and polishing of the effluent, which can be designed, based on the characteristics of inflow water and the level of treatment required.
- **Constructed Wetlands:** A horizontal flow Constructed Wetland (CW) is a planted filter bed for the treatment of wastewater (e.g., greywater or blackwater) It is a large gravel and sand-filled channel that is planted with aquatic vegetation. As wastewater flows horizontally through the channel, the filtration material filters out particles and microorganisms degrade the organic bodies present.
- **Phytorid Technology:** Phytorid is a scientifically developed systematic treatment methodology for wastewater. It combines physical, biological and chemical processes.

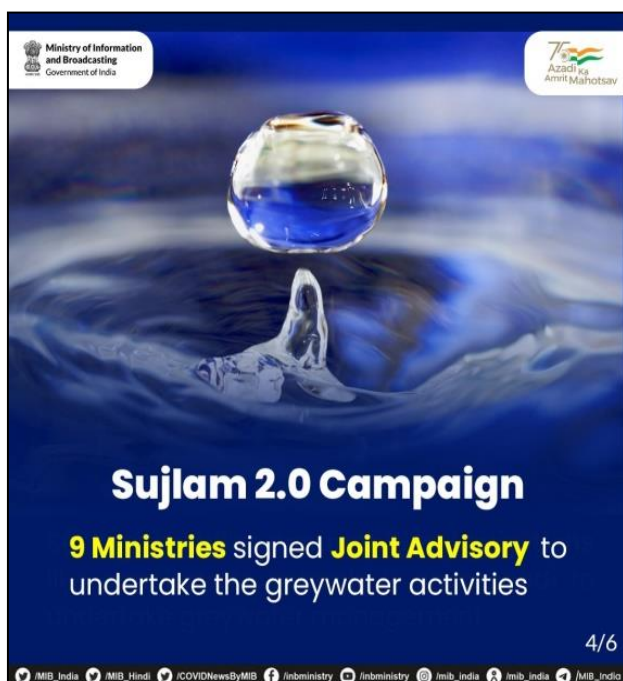
³https://swachhbharatmission.gov.in/SBMCMS/writereaddata/Portal/Images/pdf/Greywater_Manual_English.pdf

It is a scalable technology that works on gravity and has a low electric power requirement. It is also easy to maintain.

SUJLAM 2.0⁴: Campaign for Greywater Management

Union Minister of Jal Shakti, Shri Gajendra Singh Shekhawat launched the Sujlam 2.0 campaign for greywater management at a virtual event hosted by the Department of Drinking Water and Sanitation (DDWS), Ministry of Jal Shakti to mark the World Water Day, 2022.

- A Joint Advisory was signed by nine Ministries namely the Ministry of (M/o) Jal Shakti, M/o Rural Development, M/o Women & Child Development, M/o Youth Affairs and Sports, M/o Tribal Affairs, M/o Health and Family Welfare, M/o Education, M/o Environment, Forest and Climate Change and M/o Panchayati Raj, on how greywater management will be taken up at their level based on convergence model with all those who are directly associated in programme implementation.

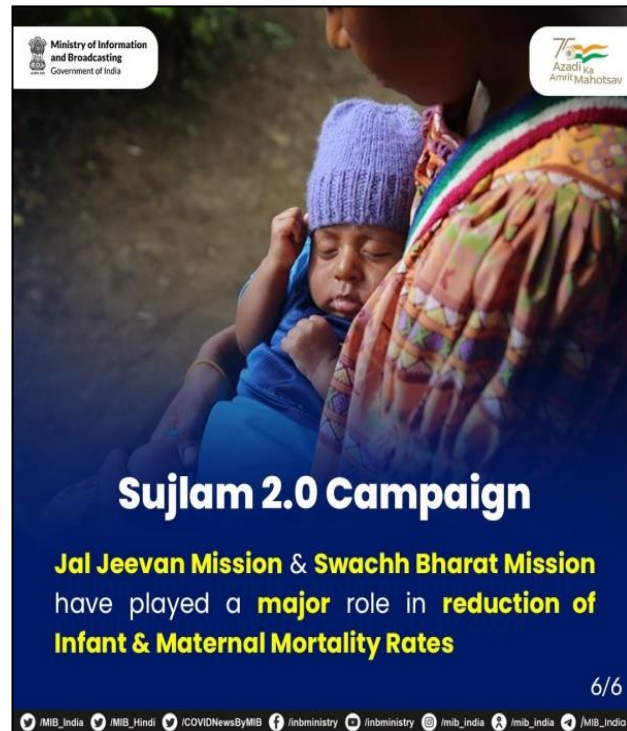


- Under this campaign, the Ministry plans to mobilize communities and institutions like panchayats, schools, anganwadi to undertake greywater management. The Panchayati Raj Institutions (PRIs) would work with people to ensure that greywater is managed at the most appropriate local level through construction of household and community soak pits.

- This campaign will see people undertake collective situation assessment, plan and implement greywater management activities. IEC efforts for popularizing the significance of greywater management and mobilizing collective community action will be undertaken at State, District and local level.

⁴<https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1808621>

- Under Sujlam 2.0 campaign, **over 6 lakh villages will see intense activity on solid and liquid waste management.**
- Works related to construction of soak pits, stabilization ponds for greywater treatment, drainage and repair of flood channels on large scale will be taken up under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).
- There are about **4.68 lakh kitchen gardens in the anganwadi centres (AWCs)**. The treated greywater will be used to irrigate these kitchen gardens.
- As part of the Sujlam 2.0 campaign, **schools have a key role to play, not only in creation and maintenance of greywater management assets, but also serving as hubs for generating awareness and promoting behaviour change** among children and youth by acting as ambassadors for sustainable water and sanitation.
- Sujlam 2.0 Campaign seeks to ensure that the nation achieves effective greywater management in rural areas, so that they become **Water, Sanitation and Hygiene (WASH) enlightened villages.**



SUJLAM Campaign: The Initial Phase⁵

The Ministry of Jal Shakti began ‘SUJLAM’, a ‘100- day campaign’ as part of the ‘Azadi Ka Amrit Mahotsav’ celebrations to create more and more Open Defecation Free (ODF) Plus villages by undertaking waste water management at village



level particularly through creation of One million Soak pits and also other Grey water management activities. The effort of the campaign was directed towards achieving the ODF Plus status for villages across the country in an accelerated manner in a short time. The

⁵<https://pib.gov.in/PressReleasePage.aspx?PRID=1748899>

Campaign started from August 25, 2021 and continued to run for the next 100 days.

The campaign not only built desired infrastructure i.e. soak pit for management of greywater in villages but also aided in the sustainable management of water bodies.

The disposal of waste water and clogging of water bodies in the villages or on the outskirts of the villages had been a major problem. The Campaign helped in management of the wastewater and in turn helped to revive the water bodies.

It gave a boost to the momentum of Swachh Bharat Mission (Grameen) phase II activities through community participation and increased awareness about ODF-plus activities, thus ensuring long term maintenance and sustainability of built infrastructure.

The key activities which were organised in the villages under this campaign include:

- 1) Community consultations, Khuli Baithaks and Gram Sabha meetings to analyse the current situation.
- 2) Passing of resolutions to maintain ODF sustainability and achieve needed number of soak pits to manage the greywater.
- 3) Development of a 100-day plan to undertake sustainability and soak pit construction related activities.
- 4) Construction of requisite number of soak pits.
- 5) Retrofitting of toilets where needed through IEC and community mobilization.
- 6) Ensuring that all new households in the village have access to toilets.

Fund Allocation

Funds to execute the activities for greywater management can be sourced from Swachh Bharat Mission-Gramin (SBM-G) Phase II or through 15th Finance Commission tied-grants or MGNREGS or through convergence of all.

2.2 billion people across the world are facing water crisis. Sustainable Development Goal (SDG)-6 aims to provide universal **access to safe and clean drinking water and sanitation**. A number of ministries under Government of India have come together to prepare the road map for water source sustainability. This indeed has put the spotlight on greywater management by making it people's movement.

References:

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- <https://pib.gov.in/PressReleasePage.aspx?PRID=1748899>
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- <https://pib.gov.in/PressReleaseDetailm.aspx?PRID=1807805>
- <https://pib.gov.in/PressReleasePage.aspx?PRID=1796190>
- [Brochure on Grey Water Management](#)
- [Poster on Grey Water Management](#)
- [Grey water management Manual](#)

Twitter links:

- [https://twitter.com/gssjodhpur/status/1506141133134450691?ref_src=twsrc%5Etfw%7Ctwcamp%5Etweetembed%7Ctwterm%5E1506141133134450691%7Ctwgr%5E%7Ctwcon%5Es1 &ref_url=https%3A%2F%2Fpib.gov.in%2FPressReleaseIframePage.aspx%3FPRID%3D1808621](https://twitter.com/gssjodhpur/status/1506141133134450691?ref_src=twsrc%5Etfw%7Ctwcamp%5Etweetembed%7Ctwterm%5E1506141133134450691%7Ctwgr%5E%7Ctwcon%5Es1&ref_url=https%3A%2F%2Fpib.gov.in%2FPressReleaseIframePage.aspx%3FPRID%3D1808621)
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- <https://twitter.com/narendramodi/status/1506097544589627394>

Video links:

- [Grey Water Management](#)
- [Greywater Management \(GWM\) solutions for ODF Plus villages](#)
- [Greywater Management in rural India](#)

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