## Webinar on Greywater Management in Phase II of SBM-G



A discussion was held with States on Liquid Waste Management (LWM) technologies suitable for rural areas which are to be implemented as a part of the Swachh Bharat Mission Grameen (SBM-G) Phase II. The event saw the participation of technology experts as well as District/State partners, who shared their valuable experiences in this field.

Welcoming the participants who were present at the webinar either through Zoom or YouTube live, **Mr. Arun Baroka, Additional Secretary, Department of Drinking Water and Sanitation (DDWS)** set the context, explaining that Phase II of the SBM-G campaign would have exclusive focus on SLWM in a holistic manner.

He also highlighted the main verticals of ODF Plus which were ODF sustainability and management of biodegradable waste including GOBAR-Dhan, plastic waste, greywater and faecal sludge; and funding available through SBM and 15<sup>th</sup> Finance Commission.

**Shri Upendra Prasad Singh, Secretary, DDWS** talked about the significance of SBM-G Phase II in the coming days. He expounded on the importance of the sustenance of ODF status and steps to ensure Greywater Management.

"SLWM is important to ensure village cleanliness. It is a continuous activity that needs to be done every day and requires a higher degree of behaviour change," Shri Singh said. The topography, area, space would factor into the selection of technology which should be simple, low cost and can use local materials.

"A condition assessment needs to be done by States before they come out with a LWM plan. We need not have hi-fi technology – just one that can treat water at a reasonable cost. Technology treatment should depend on requirement of a village. One size will not fit all," he reiterated. The Secretary also pointed out that convergence is required to achieve effective SLWM in all villages.

## **Technical Session:**



The technical session of the workshop was moderated by **Mr. Shrikant Navrekar**, NTAC (National Technology Advisory Committee) member and Environmental Sanitation Facilitator. In his presentation titled – **Rural Greywater Management: Magnitude**, **Principles and Practices**, he pointed to some important greywater facts; the consequence of

mishandling of greywater; the current practices in its management; the principles of GWM and technology options available for decentralised and centralised methods.

He mentioned that the criteria for the selection of greywater management technology are availability of space, geohydrological conditions, sources of water, availability of common spaces, and economic status of the GP.



Tamil Nadu: In his presentation, Shri G. Lakshmipathy, Additional Director, SBM-G Tamil Nadu, highlighted how Tamil Nadu is ensuring effective greywater management in rural areas by using low-cost and simple technologies such as individual household soak pits as well as community soak pits using both horizontal and vertical filter type models.

Sharing the Tamil Nadu experiment, Shri Lakshmipathy shared state initiatives, scheme overviews and infrastructure facilities that were put in place along with interesting case studies. "The technology adopted had to be simple, adoptable, scalable, low cost, environment friendly – those were the prerequisites," he elaborated.



**Telangana:** In Telangana, the Palle Pragathi programme under SBM-G Phase 2 has led to the construction of 7,93,973 individual magic soak pits with 2,98,819 under construction.

The aim is to have magic soak pits in every household, according to Mr. Sandeep Kumar Sultania, Secretary PR&RD and Sanitation, Telangana.

While sharing the State strategy for Greywater Management Mr. Sultania informed that their soak pit initiative for open-drain free villages has contributed to a significant decrease in Dengue and Malaria cases; and 22 ODF Plus villages.



Punjab: Ms. Parneet Shergill, Additional Secretary, Water Supply and Sanitation and Mission Director, Punjab, in her brief on Exsitu treatment technologies for GWM presented a brief overview about the village ponds which are integral part of rural Punjab. She dwelt at length on the issues and challenges, their approach and strategy, IEC activities and capacity building, in

addition to the technologies adopted to manage greywater.

Ms. Shergill also mentioned case studies of Mansa where waste stabilisation ponds were constructed; also throwing light on their pilot projects of Root Zone Technology where Typha plant is used for treating greywater and Nano Bubble technology, explaining the cost comparison of all the different technologies.



Maharashtra: Mr. Aman Mittal, CEO-Zilla Parishad, Kohlapur, Maharashtra talked about the successful greywater management project implemented in the district. He waxed eloquent about the 3step bio remediation and phytoremediation technology; stabilisation tanks at Bajarbhogaon; liquid waste management in Panchaganga River Basin;

Nanded pattern of liquid waste management; Plantation of Arum on waste water treatment plant at Rashivad GP; the community soak pits at Ghotawade and Alave villages.

The focus of their district administration has also been on stopping nala water from getting into water bodies, and public participation in Paryavarampurak Ganesh Utsav from 2015-2020 to prevent them from immersing their Ganesh idols into the river.



Dr. Rajesh Biniwale, NTAC (National Technology Advisory Committee) member, and Scientist with NEERI, Nagpur: The scientist presented a scientific view of wastewater treatment. In his presentation titled – Sewage treatment: Methods, Issues and Solutions that used minimum energy, he explained the Science behind sewage treatment and the approach for the rural set up.

Other areas he covered were: Technology selection approach wherein he detailed the technology, the application, the advantage and challenges; the Design Approach; Extent of treatment; and the centralised and Decentralised treatment. He also showcased case studies of Phytorid and its performance for STPs.

A **question and answer session** followed during which issues such as standards for discharge of grey water and technologies suitable for hard strata and high-water table areas were discussed.