Session 7: Rural - Urban Convergence on Used Water, Sludge and ODF++

Context Setting

April 25 - 27, 2023
Why Urban-Rural Convergence?

- 6 lakh villages with 110 million toilets.
- Onsite treatment of black water (including the faecal sludge) - the best for rural areas.
- Commonly built toilets in rural areas are single leach pit, twin leach pit and septic tank as per National Annual Rural Sanitation Survey 2019-20.
- Honeycomb twin leach pits are the best option for onsite treatment of faecal sludge.
Why Urban-Rural Convergence?

How should you manage the raw sludge/black water in case of single pit and septic tanks?

- Using existing urban infrastructure – STPs or FSTP
- Rural FSTPs for cluster of gram panchayats

For creating a decision matrix

- Which option suits where?
- Which is economical?
- What should be the institutional structure?
- What is the financial modality?
States moving towards Urban-Rural Convergence- Why ?

✓ Mostly single pits.

✓ Rural household not interested to spend on retrofitting.

✓ Urban FSTPs venture out to nearby rural areas in search of markets as the urban capacity remains under-utilized.

✓ States like Odisha, Rajasthan, Chhattisgarh and Kerala- using urban FSTPs formally.

✓ Districts of Karnataka and Jharkhand – exploring options to rope in urban STPs.
Formalized Convergence - What is achieved?

- Fecal Sludge management services available on daily basis.
- Formalization can bring legal binding on rural and urban areas.
- Formalization – awareness generation, database creation, ensure timely emptying of pits.
- Estimate requirements and plan FSTPs only where necessary.
- Learn from mistakes, develop skills and capacities.
Stand-alone infrastructures for rural areas

- Karnataka, MP, UP and Chhattisgarh planned for stand-alone FSTPs.
- Treatment plants for cluster of panchayats
- Roles and responsibilities of the mother gram panchayat well defined.
- Financial modalities well sorted
Managing greywater in rural areas

• Clean drains, no water logging, mosquito breeding – health cost is reduced

• Greywater treated at household, community and village levels

• Utilizing the SBM funds, Fifth Finance Commission Funds and MGNREGA funds effectively

• Soak pits at village and community levels raising the groundwater levels
Community Soak pit connecting 40 households greywater into it. Location: Ariyenandal Gram Panchayat, Ramanathapuram District, Tamil Nadu
Clean drains after implementation of individual soakpits in all the households at Mariyapuram village, Warangal Rural district.
Working towards a paradigm shift in the global south...

Improvement in the groundwater level (MBGL) between 2019-2021 (post monsoon) at 4 piezometer locations in the village, Mariyapuram, Telangana
Community garden at Integrated Sanitation complex in Nattathi gram Panchayat, Ramanthapuram district
Way Forward – rural-urban convergence for used water, septage

- What is happening on the ground in rural-urban convergence of used water and septage management?
  - Can successful pilot projects be scaled up at the state level?
- Is there a need for a long term state level strategy and planning?
  - Have we exhausted the potential of intensive short five year Mission Approach of ODF and ODF++.
- Can we have standardised treatment systems for used water management in rural areas?
  - Volume of used water/grey water and faecal sludge varies from state to state and the climate. Treatment systems will vary accordingly.
  - How are the waste stabilisation ponds in rural areas working out?
- Does ground water recharge and source sustainability of drinking water require a micro watershed development approach and financing support?
Thank you!

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