

Proposed Strategy for Grey Water Management in Amroha

1. Introduction Grey water wastewater from household activities like bathing, washing clothes, and kitchen use—forms a significant part of domestic wastewater. If not managed properly, it can lead to waterlogging, contamination, and health hazards. District with its mix of rural and urban settlements, requires a decentralized and sustainable approach to grey water management to improve sanitation, groundwater recharge, and water reuse.

2. Objectives Prevent water stagnation and reduce wastewater-related diseases. Promote decentralized treatment and reuse of grey water. Enhance groundwater recharge through natural filtration methods. Integrate grey water management with existing sanitation and water conservation programs.

3. Implementation Strategy A. Household-Level Grey Water Management

1. Soak Pits & Kitchen Gardens: Encourage households to construct soak pits to absorb grey water, reducing surface runoff. Promote kitchen gardens using treated grey water for irrigation.
2. Simple Filtration Units: Install sand and gravel filters for primary grey water treatment before reuse. Train households in using organic filtration techniques like reed beds.
4. Awareness Campaigns: Conduct workshops in villages and schools on grey water reuse. Encourage households to use biodegradable detergents to prevent water contamination.

B. Community-Level Grey Water Treatment

1. Decentralized Treatment Units (DTUs): Construct community-level grey water treatment units in Gram Panchayats. Utilize bio-filters,

constructed wetlands, and stabilization ponds for natural water treatment.

2. Drainage Management: Develop covered drains to channel grey water to treatment systems instead of allowing open discharge. Regular desilting and maintenance of drains to prevent blockages and mosquito breeding. 3. Reuse and Groundwater Recharge: Construct recharge pits and percolation tanks in public places to utilize treated grey water for groundwater recharge. Use treated grey water for irrigation in community parks, schools, and Gram Panchayat buildings. C. Institutional & Policy Support 1. Integration with MGNREGA & SBM: Utilize funds under MGNREGA for constructing soak pits and drainage systems. Link grey water management with Swachh Bharat Mission (Gramin) to promote sustainability. 2. Capacity Building & Monitoring: Train Gram Panchayat officials, SHGs, and village water committees in grey water treatment techniques. Implement a monitoring system for grey water projects, ensuring long-term functionality.

3. Strict Regulations: Enforce by-laws to prevent indiscriminate discharge of grey water on streets and open areas. Encourage the use of eco-friendly soaps and detergents through policy measures.

4. Expected Outcomes Reduction in waterborne diseases and mosquito breeding. Improved sanitation and aesthetics in villages and towns. Increased water availability for irrigation and groundwater recharge. Strengthened community participation in water conservation efforts.

5. Conclusion A well-planned grey water management strategy will help Sonbhadra achieve sustainable water use, reduce health risks, and contribute to environmental conservation. By combining decentralized treatment, community engagement, and policy support, the district can set an example for efficient wastewater management in rural and semi-urban areas.