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*Brief presentation on  
Scaling up sustainable SSHE, TSC & fluoride mitigation  
(Water Safety Approach) in Ujjain & Jhabua Districts of M.P.*



*Sponsored by:  
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*Presented By:  
H.B.Dwivedi  
(Addl. Director)*

*National Center for Human Settlements & Environment , Ujjain*

## Reuse of grey water at house hold level.

Water Scarcity is the biggest problem at village level for different uses. Average 20 liter water is used for bathing by each & every person. This water is wastages by drain. Most of the time grey water is stored in deepen places & a lot of diseases generated due to stagnant waste water. Now grey water is used for toilet flushing & gardening.





## Water Reuse System at House Hold Level

### Specification of filter:

S.NO.	ITEM	DIMENSIONS	FILTER MATERIAL	ROLE
1.	Sponge filter	15cmx15cmx10cm	sponge	To check solids, hairs & other particles
2.	Filter I	40x 60 x 30 cm.	Gravels 10to 20 mm.	Purification of gray water
3.	Filter III	40x 60 x 30 cm	Fine gravels – 6-10mm	Purification of gray water
4.	Step Aereation	20x 60 x 20 cm.		Aeration, Odor removal, etc.
5.	Grey water storage tank	60x 60 x 50 cm		Storage of gray water
6.	PVE pipe and Steel sewage	50mm and jali 2mm porse		Flow of gray water from chamber to chamber



## Check List for W.R.S.

- 20cm.thick base concrete of 40mm metal in 1:3:6 ratio only in collection tank.
- 10C.M.thick base concrete of 12-20mm metal in 1:2:4 ratio
- Brick masonry work in 1:4 cement mortar
- Cement plaster in 1:4 cement mortar in all side
- Thickness of wall will be of 10cm.
- Flow of grey water from one chamber to another chamber should be one down & one down
- Outlet should be at the base of each chamber for the cleaning of filter media.
- Separate water supply should be for anal cleaning
- Chamber should be covered by bamboo net or other low cost cover can be used.
- Steel sieves must be in outlet of bathroom.
- Construction time required for WRS system only one day.



## Operation & maintenance at H. H. level systems

- Sponge filter should be clean in alternate day .
- Filter chamber should be flush weekly with the support of provided out let in each chamber .
- The whole filter material should be clean and replace once in a month. Cleaning work should be only by wearing hand gloves.
- Gray water collection tank should be clean weekly.
- Bathroom should not be use for urinal, cleaning wounds, vomiting & menses period and also avoid to clean bathroom with phenyl.





## Benefits

- Available of Grey water for flushing of toilet is making sustainability for sanitation.
- Villagers are saving 100 to 150 liter water per day by each beneficiaries.
- Saving of drinking water by reuse of grey water.
- Grey water is using for irrigation of horticulture & other plants.
- Wastage water is not stagnant near by houses. So, system is helping to reducing diseases like Dengue, Chicken guniya, viral fever, etc.



*Thanks*