

## *Theme 5: Rural-Urban convergence for treated used water and sludge management- emerging opportunities and solutions*

*-what needs to be done to promote this convergence, prioritising equity, inclusion and justice considerations.*

### Treated water from STPs/FSTPs reuse in rural, urban and peri-urban cases

- In-situ storage, reuse, and repurposing of treated water where possible as default option; where not possible due to land/topographical restrictions, neighbourhood-based utilisation in line with the ecological zones
- Water reuse based on local water demand; some examples
  - Lake rejuvenation: if the topography allows for lake rejuvenation either locally or via existing local well-maintained canals, seasonal streams, river paths to rural water reservoirs
  - Industrial use: Mandate for local industries to use treated used water as a priority over fresh water
  - Farm use: Mandate for farms to use treated used water on non-edible crops over freshwater
- Data-driven decisions
  - Assessment of quantity, quality, current uses, water availability (ground and surface) and water requirements should be part of informed planning and policy for reuse.
- Stakeholder mobilisation:
  - In new developments in Peri-Urban areas, mobilisation of community similar to mobilisation in rural areas under JJM
  - Revitalisation of already built peri-urban areas to have in-house treatment, reuse and repurpose
- Capacity building:
  - Invest in the perspective and capacity building of Urban Local Bodies, Municipalities and Public Utilities and ensure appropriate skills are available on various modes of treated used water reuse/repurposing

- Costs
  - Subsidising costs of water reuse, if any, e.g., pumping, testing etc., by the Government. User charges for water should not be more than the charges of the irrigation department for fresh water
- Peri-urban and rural convergence by treating Rural WW and treated urban used water under Amrit Sarovar where possible

### Treated sludge from STPs/FSTPs reuse in rural, urban and peri-urban cases

- Reuse of treated sludge based on local demand;
  - If STP/FSTP are near farms, use sludge as compost, soil conditioner etc
  - If the location demands energy, then prioritise sludge reuse towards that etc.

### Convergence in Treatment

- Extend FSTPs to take on rural FS to utilise unused capacity within a 10 km boundary
- ULBs/Municipality will have the responsibility of sending cess-pool vehicles for desludging from rural communities
- GPs to moderate the advance fee collection and emptying at the rural end
- As Twin pit toilets are permanent in-situ solutions, create exclusive rural FSTPs only when demand for it ( operational feasibility ) is clear

### Equity, inclusion and justice

- Define priorities on water/sludge assignments under high demand, Rural needs over Industries, communities with no water access over those that have some available access