

Wastewater Production, Treatment, and Use in Swaziland

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Wastewater production and treatment

- Domestic Activities
 - Rural
 - Discarded without minimal treatment
 - Traditional method i.e. use of ash
 - Urban
 - Wastewater plants
 - Septic ponds
- Industrial Activities
 - Pre-treatment by respective industries then conveyed to Septic ponds
- Agricultural Activities
 - No treatment of waste water

Wastewater use and/or disposal

- There are **no direct uses of wastewater** in Swaziland
- Treated wastewater is **channeled to the main watercourse** and used for irrigation downstream.
- Some communities use it for **watering backyard gardens** with or without traditional treatments
- There is a potential of wastewater use but the problem is the **stigma attached to wastewater**

Regulations and implementation of guidelines

- Two official institutions responsible for wastewater in rural and urban areas
 - Rural Water Supply Branch
 - Swaziland Water Services Corporation
- Draft National Water Policy (2011) and the Swaziland Water Act (2003) advocate for fresh water management and docile on re-use of wastewater
- No efforts have been made to recycle wastewater for re-use

Challenges

- **Stigma** attached to wastewater
 - People are unwilling to adopt wastewater use
 - People perceive wastewater re-use as taboo
- **Most industries cheat** and never pre-treat their wastewater water
 - Polluter Pays Principle exist but not enforced
- **Limited capacity and expertise** within the water sector
 - No courses/programme offered at the university specifically for wastewater

Government's approach to wastewater management

- Outlining the possibilities of wastewater use in future
 - Government water reports
- Mandating institutions to deal with wastewater
 - Rural Water Supply Board
 - Swaziland Water Services Corporation
- Training communities to reuse wastewater for backyard gardens
 - Rural Water Supply Board

Possible solutions

- Capacity building
 - Introduce wastewater programmes at University level
 - knowledge, attitude, practice
 - Awareness creation
- Exchange programme with institutions already implementing wastewater use.
- Policies focusing on wastewater re-use and management
- Enabling environment
 - Authorities should be willing to adopt wastewater reuse and management