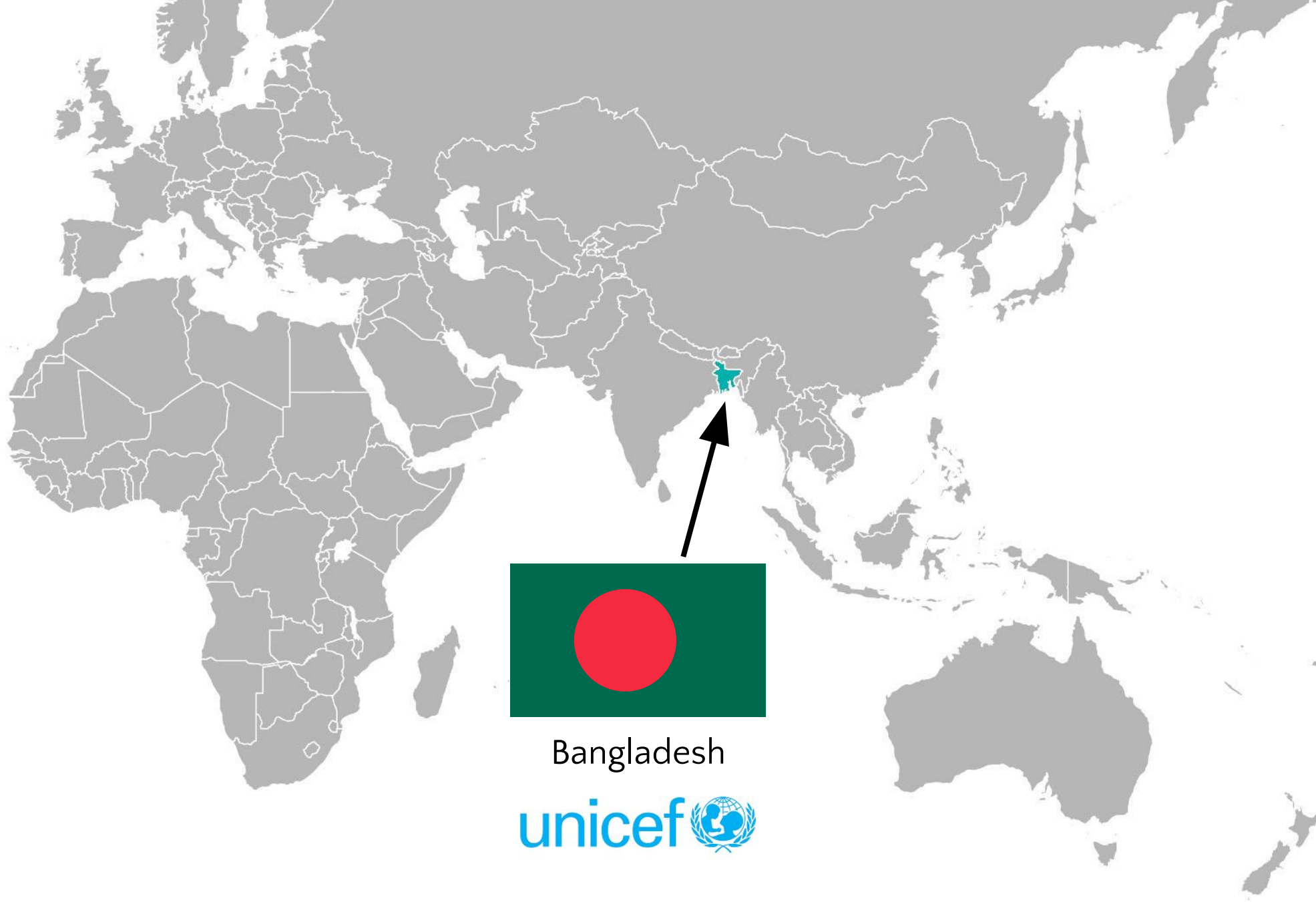




Technology Introduction



Bangladesh





Asryan Community

Rajshahi, Bangladesh

Status: Operational since November 2023

Facility:

- 40 households
- 188 community members
- 32 pit toilets

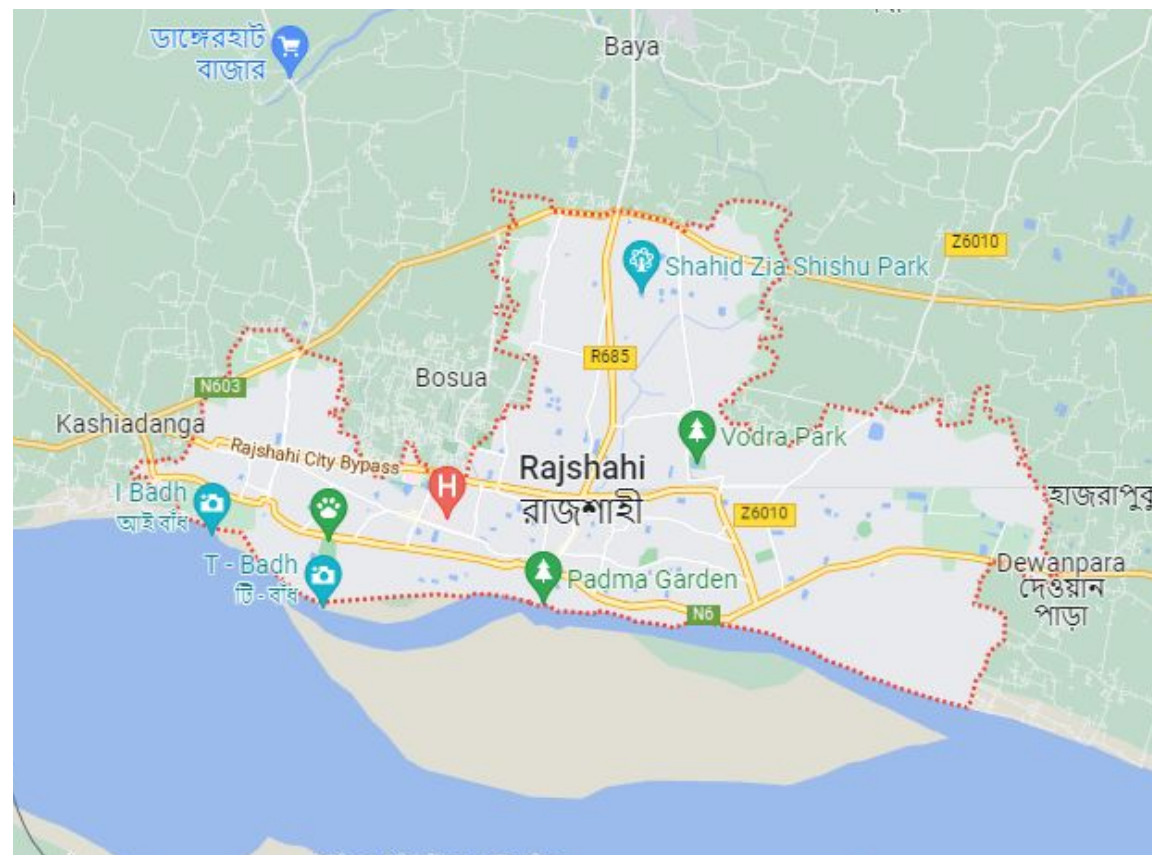
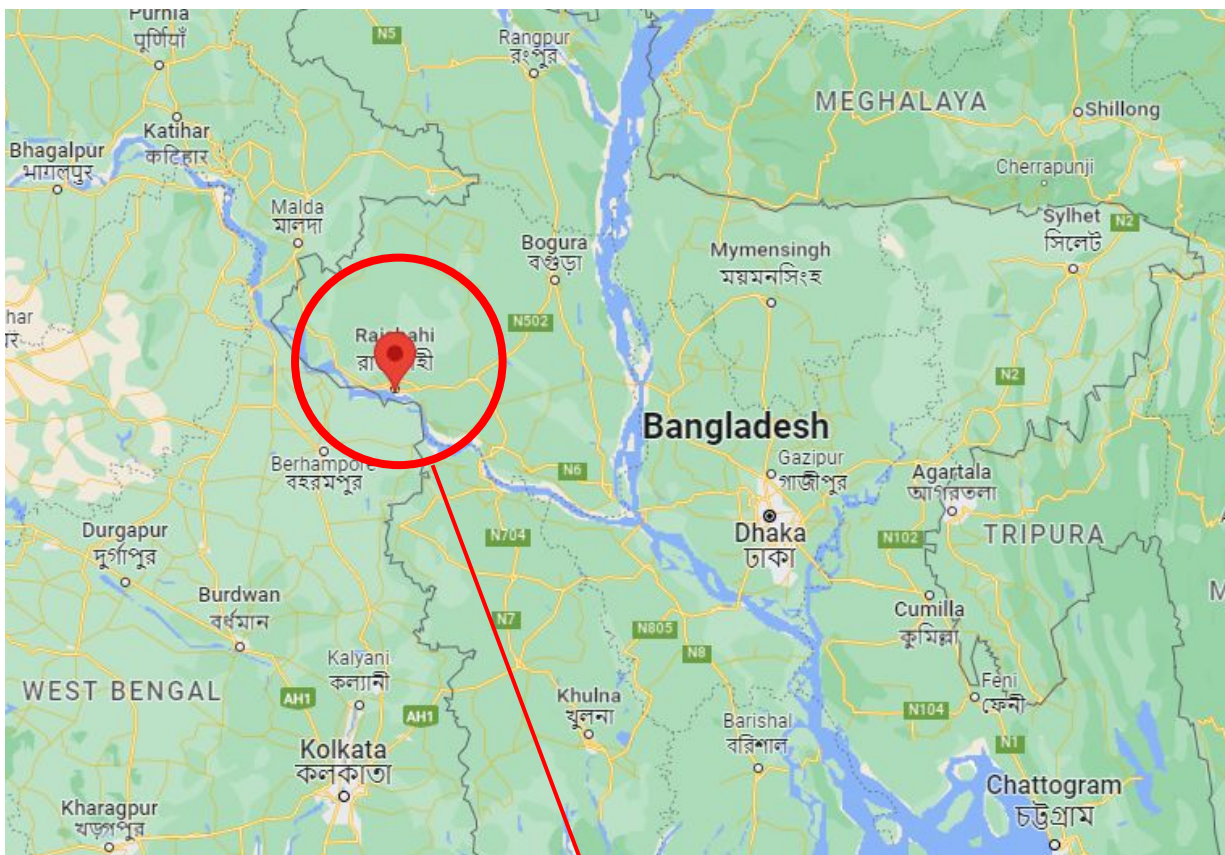
Treated Waste:

- Blackwater from pour flush toilets
- Approx. 3,240L p/day

Technology setup:

- Innovative cluster design connecting 32 individual pit toilets.
- Centralized treatment plant consisting of 9,500L septic tank and 2 x Aquonic 1000L tanks.

Rajshahi, Bangladesh



Rajshahi City – Located on the north bank of the Padma River, near the Bangladesh-India border.

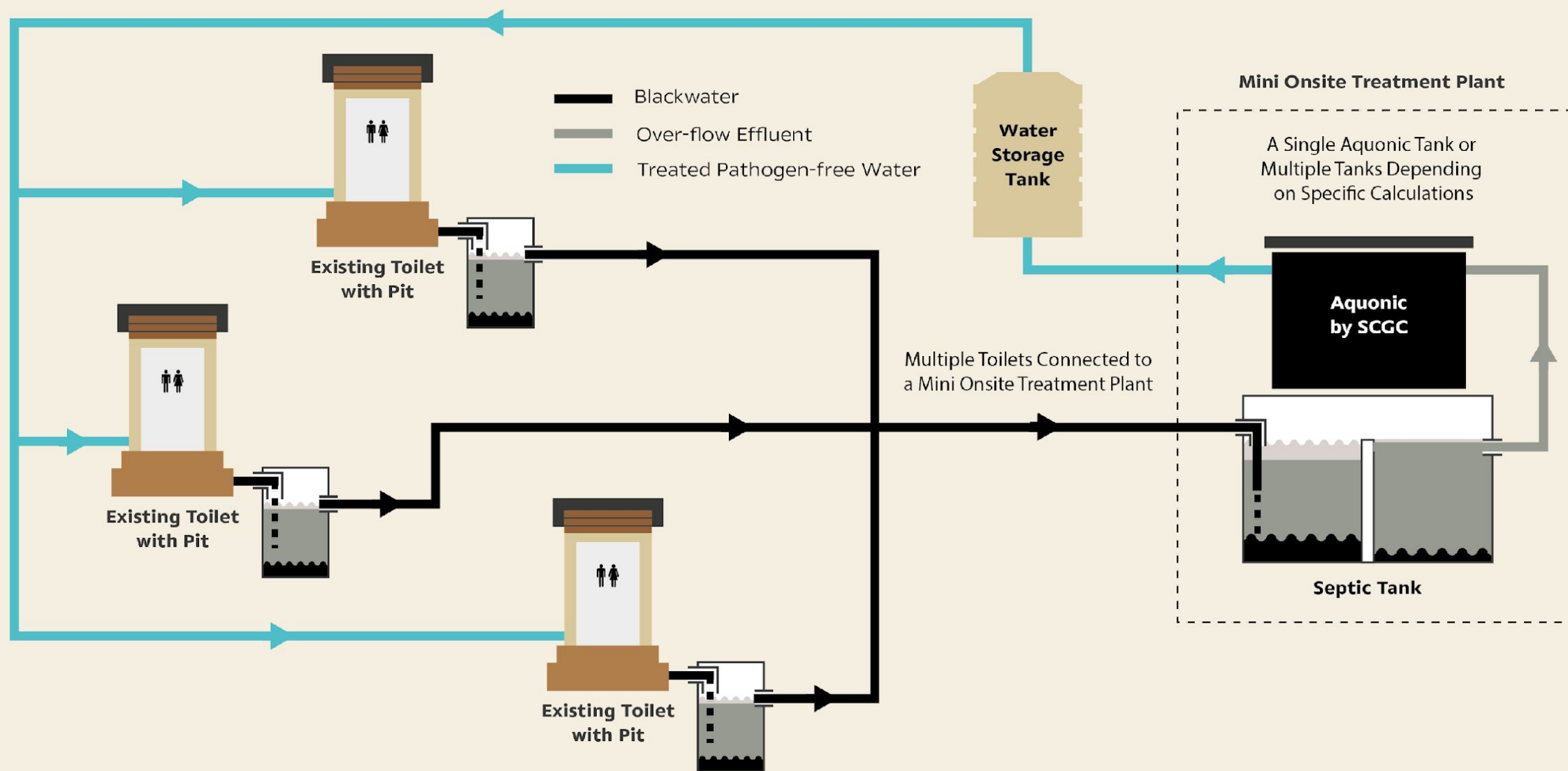
Rajshahi, Bangladesh

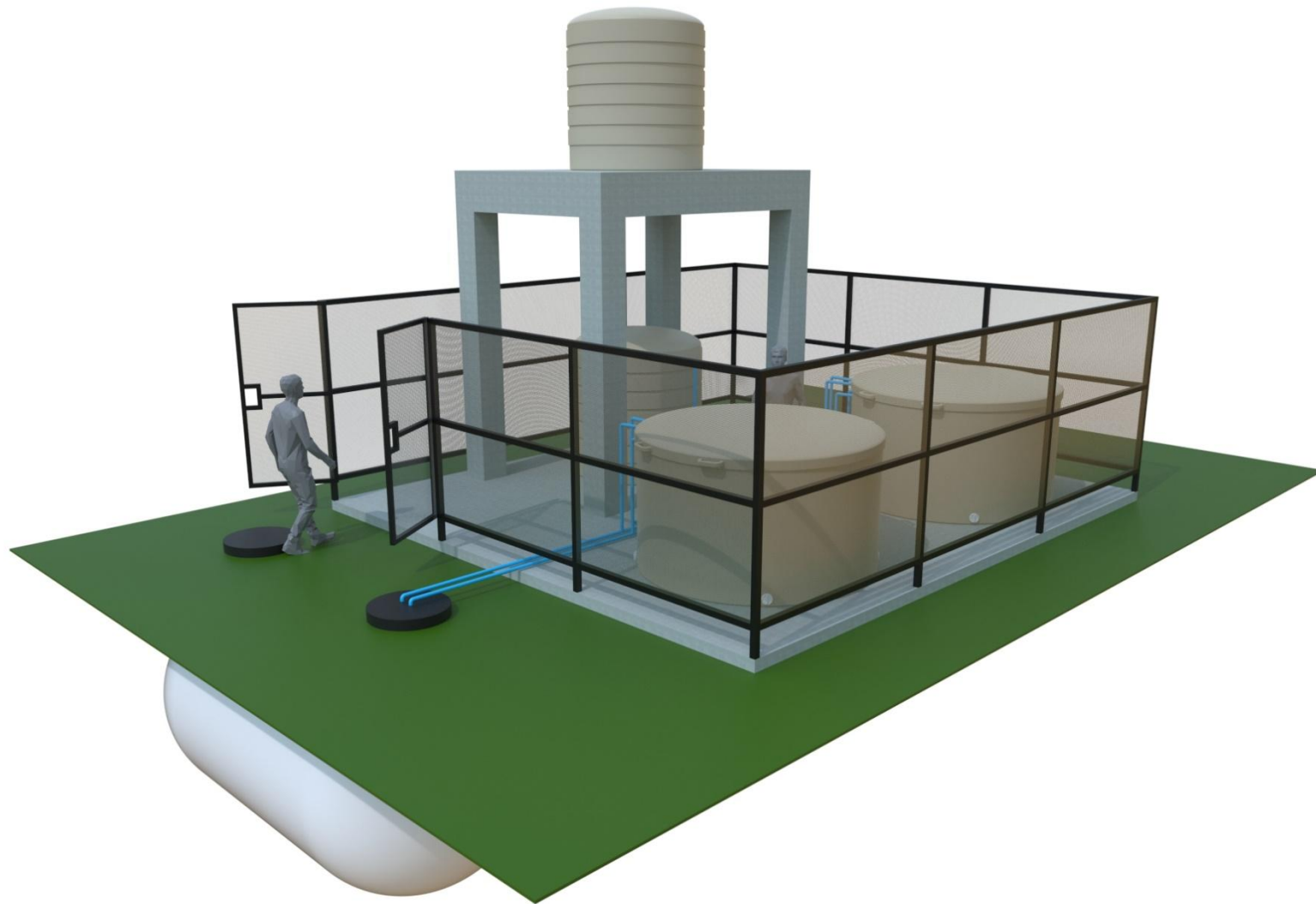


Rajshahi, Bangladesh



Rajshahi, Bangladesh





Rajshahi, Bangladesh



How to Calculate Number of Required Aquonic

Basic idea - Calculate for the maximum generation of wastewater per site

Info required

- 1) Number of toilet cubicle – e.g. 5
- 2) Volume of the toilet flush or pour – e.g. 6L
- 3) Number of hours per day the toilet is open for use – e.g. 8h
- 4) Number of days per week the toilet is open for use – e.g. 5 days

Assumptions

1. Use assumption that 1 person use toilet for 10min and flushes twice
2. Use assumption that 1 x Aquonic can treat 1000L per day, 7 days per week

Example calculation

Max wastewater per day for 1 toilet cubicle
 $= 6\text{L} \times 2 \times 6 \times 8 = 576\text{L}$

Max wastewater for toilet block per week
 $= 576\text{L} \times 5 \text{ cubicle} = 2,880\text{L} \times 5 \text{ days} = 14,400$

Required Aquonic tanks =
 $14,400 \div 7 \text{ days} = 2,057\text{L per day} \div 1000\text{L} = 2 \text{ Aquonic}$

Go Global
Act Local

