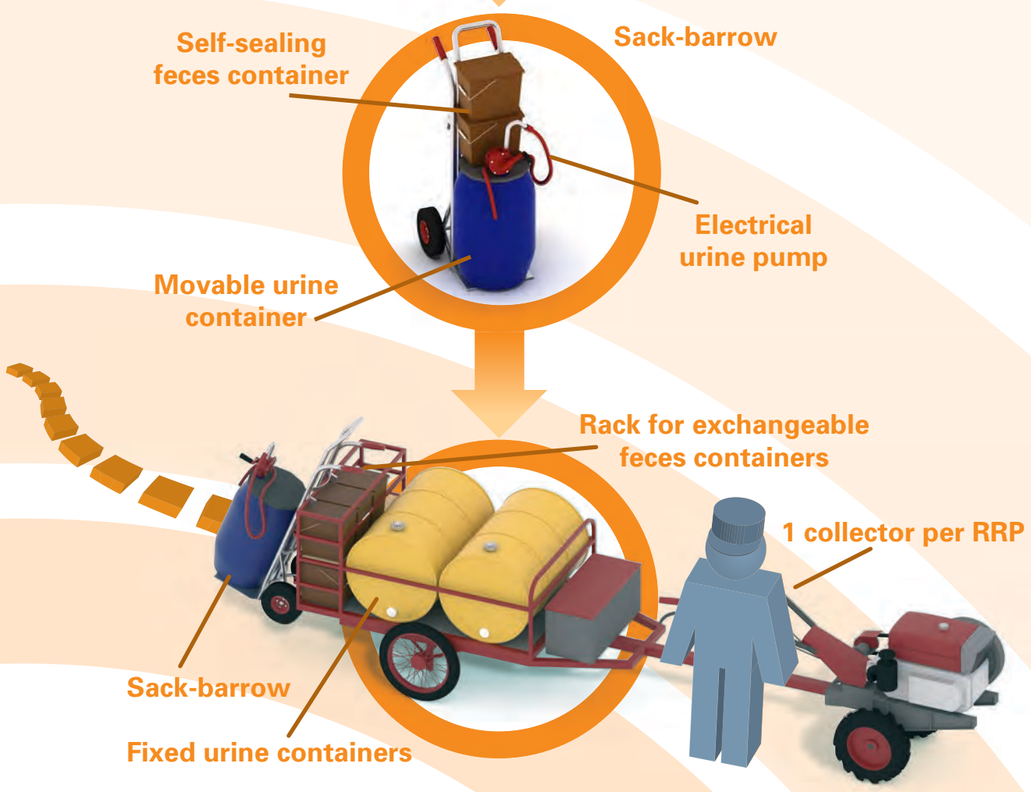
Standardized system

eawag aquatic research

A collector with a two-wheel tractor picks up separated feces and urine from each toilet facility twice-weekly

Facility with 2 toilets:
2 families (5 persons) share 1 toilet

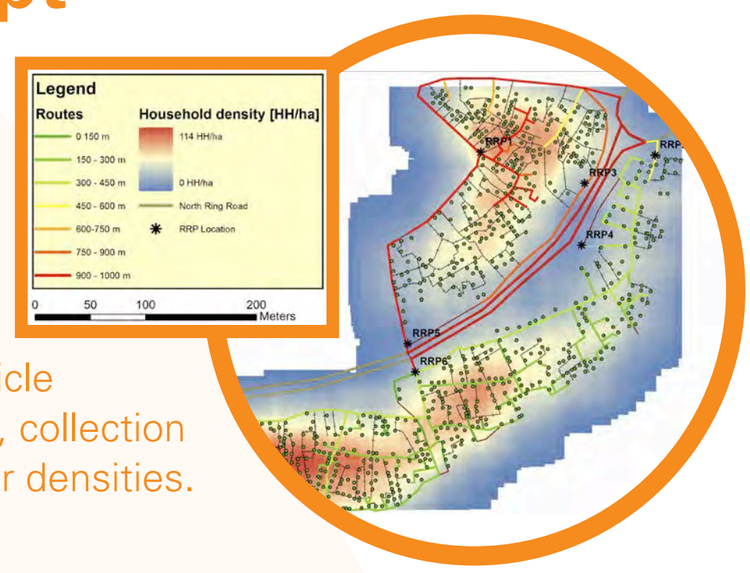
Hygienic pumping of urine & exchange of feces containers by collector



Proof of concept

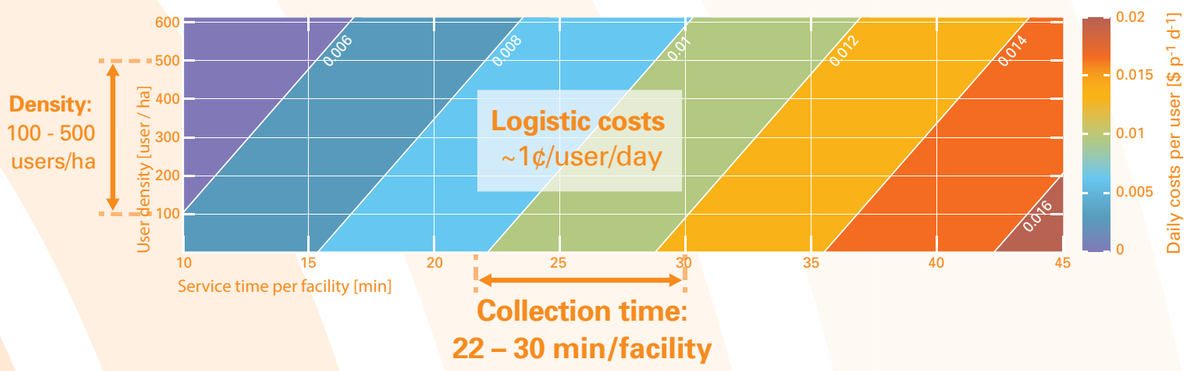
Method:

Costs and reliability of the logistic concept have been assessed through stochastic modeling based on GIS data. The model considers a variety of factors such as vehicle investment costs, labor costs, collection time, route distances and user densities.



Results:

- Logistic costs mainly depend on collection time and user density.
- A collection time below 30 min/facility and a user density above 100 users/ha assure financial viability of the service concept.
- Main assumptions: 6-day week, 8-hour work day, typical distribution of easy and less accessible roads.



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diversion
for safe sanitation

Transport Logistics Service Concept

Design by EOOS