

# sanitation for a girls school in uganda

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## situation before the project

### wastewater

- - drained away in soak pits
- - no wastewater treatment

### grey water

- - discharged untreated into a ditch outside the school's compound

### human excreta

- - disposed of via app. 35 pit latrines
- - flush toilets

## main problems

### wastewater & grey water

- - groundwater pollution

### human excreta

- - groundwater pollution
- - badly smelling, full of flies and in unhygienic conditions
- - limited space of the school's compound

problems with the water quality and the unsatisfying conditions of toilet facilities caused the administration of the school to ask for support to improve the situation

## project implementation

- feasibility study 2000; planning, implementation/construction and training 2003; follow-up till end of 2005
- client: sisters of the sacred heart
- local partners: kalungu girls secondary school, norman constructions, local entrepreneurs

## project implementation

### □□□□□□□□□□□□□□□□ the hardware

#### dry diverting toilets

- - 45 dry toilets for the pupils
- - diverted urine:
  - □ - is drained in soak pits
  - □ - reused as fertiliser
- - faeces (incl. anal cleansing material and ash):
  - □ - are collected in locally produced wooden containers
  - □ - dried in a covered composting area
  - □ - reused in the surrounding banana and matoke plantation

#### demonstration dry diverting toilet:

- - for the staff and as demonstration unit for guests
- - equipped additionally with an urinal to avoid misuse by male users
- - diverted urine:
  - □ - collected in jerry cans and reused as fertiliser
- - faeces (incl. anal cleansing material and ash):
  - □ - are collected in locally produced wooden containers
  - □ - dried in a covered composting area
  - □ - reused in the surrounding banana and matoke plantation

#### wastewater treatment

- - pre-treated in a septic tank to remove solids
- - horizontal subsurface flow constructed wetland system
- - infiltration of the treated wastewater into the ground through a percolation trench

## project implementation

### □□□□□□□□□□□□□□□□ the software

participatory planning

- - together with the teachers the details of the demonstration unit were developed to create the feeling of ownership and responsibility
- - a series of possible designs were presented to the teachers and any decisions (like location of the toilet; sitting or squatting type; urinal for men,...) were discussed among them

#### training

- - of students
- - of teachers
- - the O&M staff and
- - the local technicians



the hardware



the software



reuse

## conclusions & recommendations

### the success is based on a variety of reasons

- - teachers and pupils are using the same type of toilets and the teaching personnel is committed to this new technology
- - the presence of the constructors was utilised to sensitise and train teachers and pupils
- - all stakeholders were involved from the beginning of the project, any design decisions were made by the users