

Background

Supply of clean water and basic sanitation for everybody is by United Nations Documents and WHO declared a human right and guaranteed for all citizens by Constitution of New South Africa.

International co-operation is favourable to develop and adopt innovative technologies to regional needs for people's benefit.

German-South African Project

German government dedicated a grant for a project to be jointly realized by a consortium of German and R.S.A. firms and institutions which is co-financed by RSA Department of Science and Technology.

Ikwezi Local Municipality in Eastern Cape is the beneficiary municipality for the national pilot and demonstration project. Project partners are responsible for dissemination in rural regions in South Africa and widespread use worldwide.

Project aim

is to develop and demonstrate a Communal Waterhouse system which comprises water recycling and solar energy technologies for laundry, sanitation, room conditioning, and water and room heating, based on proven technologies combined in a user friendly, economical and climate protecting manner.

Project schedule

Project includes

- scientific research to adopt technologies to local needs,
- construction of a demonstration unit,
- on-site processing due to the needs of people.

Every activity is realized in close co-operation with Ikwezi Local Municipality and regional stakeholders.



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Communal Waterhouse

**A German – South African
demonstration project for safe
and sustainable basic sanitation
and solar energy use
Ikwezi Local Municipality**



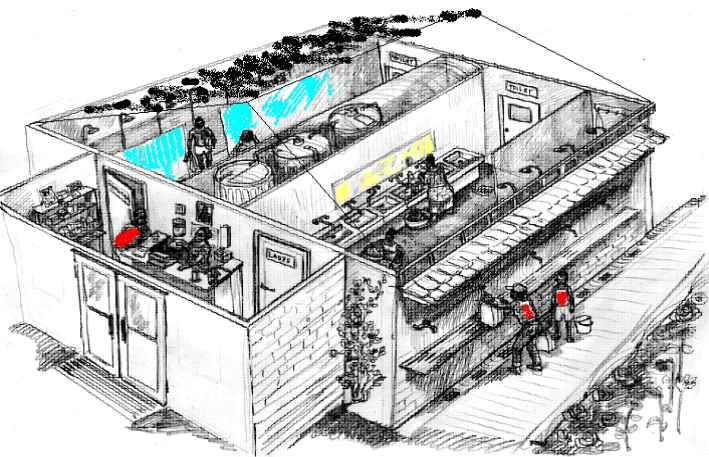
Funded by
German Federal Ministry of Education and Research
(BMBF; Grant No. 02WD0737) and South African
Department of Science and Technology (DST)

The background

CWH

was developed by German and South-African partners to improve living conditions of rural people by sustainable and safe basic sanitation. It comprises facilities for

- clean water tapping
- laundry and drying,
- showers and sanitation, and
- services in a communication centre.



RSA patent 2006/09618

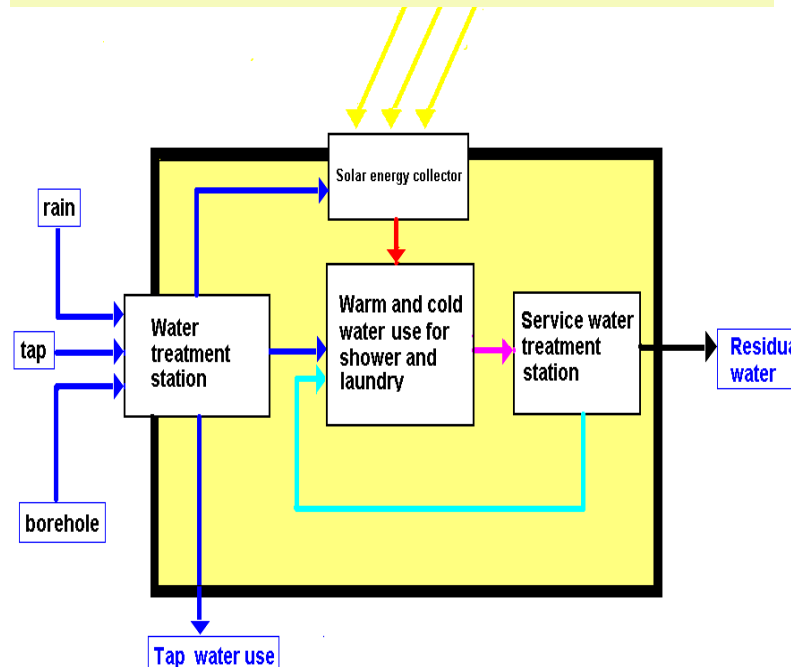
CWH general view artists version

The technology

CWH

consists of four long term proven moduls of sustainable technologies, successfully applied worldwide, combined in an innovative manner, including

- water recycling for high quality service water (after EU regulation),
- water heating by solar energy
- solar room conditioning
- modern water saving toilet systems.



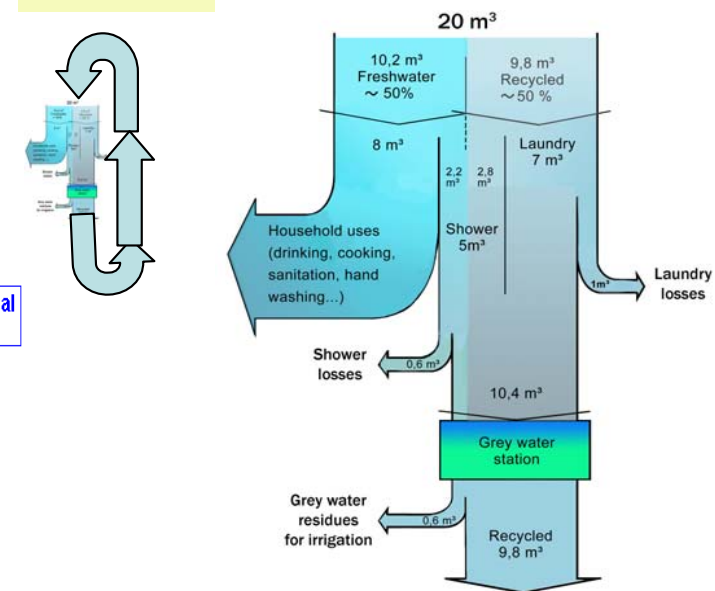
Principal scheme of CWH technology

The effects

CWH

results in an improved water supply, higher water use efficiency and better sanitary conditions for rural people at low costs.

- Water use efficiency is improved by 2-3 times.
- Energy need is reduced by 100 MWh per year.
- Climate effect is up to 100 ton of carbon dioxide equivalents per year per unit.



Provisional water recycling and balance scheme