

Capacity development for ecological sanitation in schools!

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Capacity development for the younger generation!

***Teaching school children
about sanitation - how to
build simple toilets, make
simple hand washing
devices etc
and how to grow healthy
vegetables and trees adds
an exciting new dimension
to sanitation promotion***



Schools Sanitation Programme

New knowledge and skills are introduced in the most practical way to a generation who can use them with considerable benefit being gained. Teachers to, as well as surrounding communities gain special skills which improve sanitary provision, hygiene and food production.



Schools Sanitation Programme

An introductory lecture using a flip chart and models also includes a lesson on how to make simple hand washing devices. Hand washing devices should be fitted to every toilet if health improvement is expected.



Simple toilet construction (Arborloo)

**School children can be
taught how to make concrete
slabs and ring beams and
also toilet houses made of
traditional materials and
also bricks**

**Here an Arborloo is being
built**



Simple toilet construction. (Arborloo)

***Digging the shallow pit
inside the concrete “ring
beam” which has been cast
on the ground. The “ring
beam” helps to stabilise the
pit. Then the slab is added
on top! Ring beams are
used where the pit is
shallow (down to 1.5m) and
the soil moderately firm.***



Simple toilet construction. (Arborloo)

***Finishing off - make the toilet
house, add the roof and hand
washer – job done!
The children are proud – so
are their parents!***



Brick toilet construction.

School children can also be taught how to build brick toilets

Dig the hole. Line the pit with bricks using a “corbelling” technique where the top is narrower than the bottom. Fit the slab. Pits of larger capacity can be built this way! Then build a brick house!



Brick toilet construction.

School children have been taught how to make several designs of brick toilet. Some with doors and some without doors. The method is valuable to all, both boys and girls and teachers!



Brick toilet construction. ***(special design)***

A special toilet has been designed for ease of construction in bricks. Here pupils who are more skilled teach those with less skill. A great achievement for school children.



Garden experiments

The usefulness of urine and compost can be taught in school gardens. The knowledge gained can then be passed on to the teachers and communities. In this case small (1 metre diameter) “ring beam gardens” are used for trials!



Garden experiments with urine

***Diluted urine is applied to
some small gardens and
not to others so that
comparisons can be made***

***Treatment per ring beam is
about 3 litres of 3:1 water
and urine, 3X per week +
watering.***

***All ring beams are watered
regularly***



Quick results!

Garden experiments with urine on poor soil

After a month the influence of urine treatment can be clearly seen for rape (X7), spinach (X4) and maize!

Upper photos untreated, lower photos urine treated.



Garden experiments

***Recording the
results
- taking
measurements!***

***Many types of food
plant can be tested
in this way!***



Maize trials

Later a series of maize trials was conducted using urine.

Some rows of maize were fed diluted urine and others water only

Huge differences were recorded!



Maize trials

***Each maize cob
was measured in 3
experiments
carried out in the
garden***

***Huge differences
were recorded!***



Other plants - Spinach

***The application of diluted urine on spinach
(2litre in 10 litres of water - twice a week)
enhanced the growth far more than
commercial fertilisers in this experiment***



Open Day

A special day was set aside to show the community including parents, community leaders, officials, headmasters and even politicians the project. It was very successful. Hundreds of people witnessed the effect of urine on maize and other plants!



*This schools project
has taught us that the
school is an ideal place
for teaching new
methods and promoting
new ideas!*

Seeing is believing

*People can believe what
they can see*

IN PRACTICE

