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On-plot sanitation in low-income urban communities: Guidelines for selection

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ON-PLOT SANITATION

IN LOW-INCOME URBAN COMMUNITIES

Guidelines for Selection

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Guidelines for selection

Andrew Cotton and Darren Saywell

Water, Engineering and Development Centre
Loughborough University
1998

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Glossary

Aqua privies

Latrine in which excreta fall directly through a submerged pipe into a watertight settling chamber below the floor, and from which effluent overflows to a soakaway or drain.

Arithmetic mean

The sum of the values of all observations divided by the number of observations.

BOD

Biochemical oxygen demand: the mass of oxygen consumed by organic matter during aerobic decomposition under standard conditions, usually measured in milligrams per litre during five days; a measure of the concentration of sewage.

Excreta

Faeces and urine.

Compost latrine

In this type of latrine, excreta fall into a watertight tank to which ash or vegetable matter is added.

Dry latrine

A latrine where users defecate into a bucket, basket or other receptacle that is regularly emptied. This type of latrine forms part of the nightsoil system.

Latrine

Place or building, not normally within a house or other building, for deposition, retention and sometimes decomposition of excreta.

Overhung latrine

Latrine sited such that excreta falls directly into the sea or other body of water.

Median

The value above which and below which half of the cases fall, the 50th percentile.

Mode

The most frequently occurring value (or values).

Nightsoil

Human excreta, with or without anal cleaning material, which are deposited in a bucket or other receptacle for manual removal (often taking place at night).

Off-set pit

Pit that is partially or wholly displaced from its superstructure.

On-plot sanitation

Sanitation systems which are contained within the plot occupied by the dwelling. On-plot sanitation is associated with household latrines, but also includes facilities shared by several households living together on the same plot.

On-site sanitation

Includes communal facilities which are self-contained within the site, in contrast to sewerage and dry latrines where excreta is removed from the site.

Pathogens

Organism that causes disease.

Percolation rate

The rate at which liquids move through soil.

Pit latrine

Latrine with a pit for accumulation and decomposition of excreta and from which liquid infiltrates into the surrounding soil.

Pour-flush latrine

Latrine with a small quantity of water is poured in to flush excreta through a water seal into a pit.

Sanitation

The means of collecting and disposing of excreta and community liquid waste in a hygienic way so as not to endanger the health of individuals or the community as a whole.

Septic tanks

Watertight chamber for the retention, partial treatment, and discharge for further treatment, of sewage.

Sewage

Wastewater that usually includes excreta and that is, will be, or has been carried in a sewer.

Sewer

Pipe or conduit through which sewage is carried.

Sewerage

System of interconnected sewers.

Soakaway

Soakpit or drainage trench for subsoil dispersion of liquid waste.

Soakpits

Hole dug in the ground serving as a soakaway.

Sullage

Wastewater from bathing, laundry, preparation of food, cooking and other personal and domestic activities that does not contain excreta.

Superstructure

Screen or building of a latrine above the floor that provides privacy and protection for users.

TACH

Total annual cost per household; includes capital (or investment) costs and recurrent costs.

Vent pipe

Pipe provided to facilitate the escape of gases from a latrine or septic tank.

VIP latrine

Ventilated improved pit latrine, pit latrine with a screened vent pipe and a partially dark interior to the superstructure.

Water seal

Water held in a U-shaped pipe or hemispherical bowl connecting a pan to a pipe, channel or pit to prevent the escape of gases and insects from the sewer or pit.

Wastewater

Sewage or sullage.

Y-junction

Chamber in which liquid may be directed along either of two pipes or channels.