

## Feasible water supply and sanitation combinations in periurban areas

Combination number	Water supply service level	Sanitation options	Notes
1.	Public standpipes	Community-managed sanitation blocks - see References #1 & 2 below	It is assumed that individual household sanitation facilities are unaffordable.
2.	Community-managed standpipes	Community-managed sanitation blocks, on-site systems, or condominial sewerage	Choice depends on space availability and costs. <i>Note:</i> the combination of standpipes and condominial sewerage is feasible - see Reference #3 below.
3.	Yard-taps (one tap per household)	On-site systems, condominial sewerage or low-cost combined sewerage	Choice depends on space availability and costs.
4.	Multiple-tap in-house supplies	Condominial sewerage or low-cost combined sewerage	In low-density non-poor areas on-site septic tank systems may be cheaper.

Reference #1: Community-designed, built and managed toilet blocks in Indian cities (*Environment & Urbanization*, 2003: <http://eau.sagepub.com/cgi/reprint/15/2/11.pdf>).

Reference #2: University of Leeds webpage on Community Sanitation Blocks (<http://www.personal.leeds.ac.uk/~cen6ddm/CommunalSanitation.html>).

**Note:** The WHO/UNICEF Joint Monitoring Programme does not currently accept the use of “public or shared” sanitation facilities as providing “access to adequate sanitation facilities”,\* but this is wrong: access to well-maintained community-managed sanitation blocks of the type described in Reference #1 above *is* access to adequate sanitation facilities.

\*[http://www.wssinfo.org/en/122\\_definitions.html](http://www.wssinfo.org/en/122_definitions.html).

Reference #3: Sewerage: shallow systems offer hope to slums (*World Water*, 1985: <http://www.personal.leeds.ac.uk/~cen6ddm/pdf%27s%201972-1999/e6.pdf> - *this paper includes a brief description of the strictly Brazilian-style simplified sewerage scheme installed in a low-income area on the outskirts of Karachi where some 27 litres of water per person per day were obtained from public standpipes, showing that on-plot water connections, or a large water consumption, are not necessary for simplified sewerage to work well.*