

**Water and Sanitation for Disabled People  
and Other Vulnerable Groups**



# **Water and Sanitation for Disabled People** and Other Vulnerable Groups

**Designing services to improve accessibility**

*Hazel Jones & Bob Reed*



Water, Engineering and Development Centre  
Loughborough University  
2005



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## **Glossary of terms and abbreviations**

CBR	community-based rehabilitation
DPO	disabled people's organisation
DRA	Demand Responsive Approach
g.i.	galvanised iron
MDGs	Millennium Development Goals
NGO	non-governmental organisation
PRA	Participatory rural appraisal, or participatory reflection and action
PRSP	poverty reduction strategy paper/process
WATSAN	water and sanitation
PVC	polyvinyl chloride, a type of plastic from which water pipes are made
VIP latrine	ventilated improved pit latrine

### **Organisations**

APCPD	Action to Positive Change on People with Disabilities
BPKS	Bangladesh Protibandhi Kallyan Somity
BCODP	The British Council of Disabled People
CABDIC	Capacity building of people with disabilities in the community
CRP	Centre for the Rehabilitation of the Paralysed
CSID	Centre for Services & Information on Disability
DFID	Department for International Development, UK
HI-B	Handicap International Belgium
HITS	Uganda Society of Hidden Talents
IICP	Indian Institute of Cerebral Palsy
SCI Centre	Spinal Cord Injury Centre
UN	United Nations
UNICEF	United Nations Children's Fund
WEDC	Water, Engineering and Development Centre
WSP	World Bank Water and Sanitation Program

### **Language of disability**

disabled people's organisation	An organisation run by and for disabled people themselves
disability sector	Refers in this book to disabled people's organisations and disability service providers (government and non-government) with a focus and interest in disability and development.
disability	The outcome of the interaction between a person with an impairment and the environmental and attitudinal barriers he or she may face.

impairment	Problems in an individual's body structure or function (including psychological function) as a significant deviation or loss.
impairment and disability	It is most accurate to refer to people with impairments, or disabled people, not 'people with disabilities'. But the term 'disability' is often used interchangeably with the less common 'impairment', particularly outside the UK. This document therefore includes direct quotes that use the term disabilities to refer to impairments.
environmental factors	Make up of the physical, social and attitudinal environment in which people live and conduct their lives.
social model of disability	Recognises that disability is caused not by a person's impairment, but by the disadvantage or restriction of activity caused by a society which takes little or no account of people who have impairments.

### **Language of infrastructure**

accessible facility	Facilities with features – whether designed and constructed to be accessible, or with changes or additions that make them more comfortable, less hard work, or simply possible to use by a disabled or frail elderly person, with or without the support of a family member or piece of equipment.
adapted facilities	Facilities with additions, or changes which are fixed to the structure in order to increase accessibility.
assistive device	Aid or equipment used by a disabled person, often designed specifically to meet their individual needs, which enables him or her to carry out an activity more easily or more independently.
cement mortar	A mixture of sand, cement and water.
cement screed	A thin layer of cement and water to give a hard, smooth finish.
gradient	Way of measuring how steep a slope is.
inclusive design	Aims to create beautiful and functional environments that can be used equally by everyone, irrespective of age, gender or disability. It extends from inception, through the planning process, design, construction, occupation, management and operation. Each of these stages should be fully inclusive involving disabled people and other potential consumers in their development and evaluation. Disabled people are not a homogenous group with identical needs, and when the principles of 'inclusive design' are applied, the built environment will also become accessible to other users who are excluded through poor design or discriminatory attitudes.

inclusive environment	An inclusive environment does not attempt to meet every single need, but, by considering people’s diversity, inclusive environments can break down barriers and exclusion and will often achieve superior solutions that benefit everyone. [2]
kerb	A low raised edge along a path or ramp.
pointing	Cement mortar, sand or earth between bricks or blocks of a path to improve stability and drainage.
ramp	A slope constructed with an even surface, with a gradient of 1 in 20 or steeper, that makes it possible to pass from one level to another.
sarong/ wrapper	Large rectangular piece of cloth often with a variety of uses, including clothing (e.g. skirt, dress, shawl or headscarf) and for covering the body during and after bathing. Also known as a lunghi, sin, khrama, etc.
transfer	To move to and from a wheelchair, to the ground, or another seat, such as a toilet seat or bathing seat.

### Units of measurement

Metric measurements have been used throughout, usually centimetres (cm). If more than 2 metres, given in metres. Occasionally millimetres have been used, where it is usual, e.g. for diameter of pipes, tap sizes, etc.

cm	centimetre
mm	millimetre
m	metre
L, W, D, H	length, width, depth, height
LH, RH	left-hand, right hand
L	litre
%	per cent
° e.g. 90°	degrees – e.g. 90 degrees
Ø or dia	diameter
~	approximately
>	more than
<	less than
1 : 20, 1 : 15, etc.	way of describing how steep a gradient or slope is, i.e. a 1 : 20 slope rises 1cm over a length of 20cm.

### References

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2. Disability Rights Commission (2003) Creating an Inclusive Environment - a report on improving the Built Environment. <http://www.drc-gb.org/publicationsandreports/publicationhtml.asp?id=157&docsect=0&section=0>

