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**ASSESSING** SANITATION SERVICE LEVELS – A New Approach

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Sanitation improvement is not as straightforward as the concept of “a ladder” with incremental improvements from open defecation to full flush, might suggest.

The ranking of appropriate technical options is highly context and settlement specific and dependent on the availability of water, soil and groundwater conditions, supply chain realities, settlement densities, types of housing and/or size of plot, and so on. In reality, ‘higher’ or more sophisticated technology options that are not well operated or maintained represent a substantially graver public health and environmental risk than options lower down the traditional sanitation technology ladder.

In the WASH Cost Working Paper 3, the research team set out to provide a common framework to analyse and compare water and sanitation cost data being collected across different country contexts with different service delivery norms and standards.

The emphasis in WASH Cost is on collecting and understanding full life cycle service costs, including operational, capital maintenance and direct and indirect support costs. This represents a fundamental shift away from a focus on capital investment costs for water or sanitation facilities or technologies, to the costs of sustainable water and sanitation services. The Working Paper reviews the use of the concept of a sanitation ladder as a tool for participatory decision making (e.g. PHAST, PRA, etc), and as a tool for global monitoring of the achievement of the sanitation MDGs (JMP 2008, 2010). As noted by Kvarnström et al (2008), the JMP approach has been criticised within the sector because it does not deal with service indicators such as quality, reliability and sustainability of water and sanitation. Kvarnström also notes that by definition, a technology-based approach restricts options to the technologies listed and is not open to other options developed through sector innovation.

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Building on Kvarnström’s concept of functional areas across the sanitation service delivery chain, the team proposed parameters and indicators for sustainable sanitation services across each functional area. It is suggested that this approach is not only useful for the WASHCost research, but could also be considered more broadly by those involved in planning and monitoring sanitation service delivery.

The contribution of WASHCost’s approach to assessing sanitation service levels is a set of globally comparable sanitation service levels comprising service indicators, rather than sanitation technology options as set out in sanitation ladders most commonly used today.

Sanitation services are defined as the (i) containment, (ii) collection, (iii) treatment, (iv) disposal and (v) re-use of excreta and solid and liquid waste.

It was proposed that service levels be assigned separately for excreta and urine management, for grey water, and for solid waste, which are all parts of a sanitation service.

**Proposed parameters₅ and indicators for WASHCost sanitation ladder**

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| Service Parameters (6) | Service Indicators |
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| Accessibility | Distance from users, effort required for use, safety, privacy (7), dignity, minimises flies and bad odours, waiting time in the case of communal facilities. |
| Use | Safe and hygienic use by all members of the household, day and night and in all seasons, and infant faeces disposed in the latrine. |
| Reliability | Effort required for operation and maintenance of the toilet, e.g. pit desludging (mechanical) or emptying (manual).Operation and maintenance safe for users and service providers.Longevity and robustness of top and ‘underground’ structures. |
| Environmental protection | Environmentally safe containment, collection, treatment, disposal and re-use of excreta and urine. Productive re-use of safe by-products. |

Based on these four service parameters and taking into account the reality of sanitation services in the focus countries and considering all the functional areas of the sanitation service delivery chain, a sanitation service ladder of five broad categories or levels was proposed, three of which represent different types of acceptable service and two represent a limited or below standard service, which do not meet basic norms and do not properly merit the description of a service.

The three levels of acceptable services can be described as follows:

**Basic service:**

At this level all households have reasonable access to a safe, relatively robust, private sanitation facility, available hand washing facilities, relatively weak desludging and other long term maintenance provisions, and non problematic environmental impact or safe disposal of sludge. This is typical of most acceptable rural and peri-urban sanitation services.

**Improved service:**

At this level, all users have easy access at all times to a convenient, private, safe, robust sanitation facility which seals against flies and bad odours, has nearby hand washing facilities, where minimal effort is required for desludging and long term maintenance, and there is non-problematic environmental impact or safe disposal of sludge.

**Highly improved service:**

At this level, users have immediate access at all times to a convenient, private, safe, robust, secure sanitation facility which seals against flies and bad odours, as well as having immediate access to hand, anal and latrine cleansing facilities with soap, where minimal or no effort required for desludging or long term maintenance, and there is positive environmental impact, e.g. productive re-use of safe by-products.

The full Working Paper (and composite ladder) is available online (www.washcost.info/redir/content/.../file/WASHCost\_brochure\_2011.pdf.) and it is hoped that the water and sanitation service ladders developed for WASHCost research purposes can be used as part of the process of setting norms and targets with respect to ongoing service delivery and will also serve an advocacy function.

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2. WASHCost is a five year action research project investigating the costs of providing water, sanitationand hygiene services to rural and peri-urban communities in Ghana, Burkina-Faso, Mozambique and India (Andhra Pradesh). The objectives of collecting and disaggregating cost data over the full life-cycle of WASH services are to be able to analyse costs per infrastructure and by service level, and to better understand the cost drivers and through this understanding to enable more cost effective and equitable service delivery. WASHCost is focused on exploring and sharing an understanding of the true costs of sustainable services (see www.washcost.info).

3. Assessing sanitation service levels – A New Approach, Potter et al 2010, www.washcost.info/redir/content/.../ file/WASHCost\_brochure\_2011.pdf.

4. The terms “latrine”, “toilet” and “facility” are used interchangeably in this paper.

5. Scale and affordability are also crucial important service parameters, addressed in the research though data aggregation and analysis.

6. Service parameters can be thought of as being composite service indicators.

7. This indicator does not refer only to individual household latrines. Privacy is also possible with communal facilities and refers to having a door and walls for privacy and safety.

References:

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