The toolkit provides sanitation and hygiene sector professionals with the current approaches to sanitation monitoring, including guidance on how to use various monitoring instruments and the latest tools and resources. The focus is on rural sanitation.
How to use this toolkit

The toolkit has been organized into seven thematic areas.

1. Monitoring the enabling environment
2. Monitoring national sanitation access
3. Monitoring Community Approaches to Total Sanitation (CATS)
4. Monitoring equity
5. Monitoring sustainability and sector performance
6. Monitoring sanitation marketing
7. Monitoring Water, Sanitation and Hygiene (WASH) in schools

The sanitation toolkit is designed to support the strengthening of sanitation programmes and to gather further insights into practitioner needs and required support. The toolkit is supported by a website: [http://www.sanitationmonitoringtoolkit.com/](http://www.sanitationmonitoringtoolkit.com/)

Topic descriptions

The toolkit brings together current thinking and practice in monitoring sanitation across various topics. Each of the following topics refers to current reports, protocols and tools that measure and analyse progress, outcomes and results of rural sanitation programmes, interventions and services.

**Topic 1  Monitoring the enabling environment**

This topic defines and explains the components of an enabling environment for sanitation and explains how this is monitored including the Country Status Overview (CSO), the WASH bottleneck analysis tool (WASH-BAT), the eThekwini commitments, the UN-water Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS), the monitoring of high-level meeting (HLM) commitments under Sanitation and Water for All (SWA) and the pan-African sector monitoring mechanism of the African Ministers’ Council on Water (AMCOW).

**Topic 2  Monitoring national sanitation access**

‘Sanitation access’ means people using improved toilet facilities. This topic introduces the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) and addresses key issues in collecting and reconciling country data. It includes current definitions and gives tips for harmonizing national and international data.

**Topic 3  Monitoring Community Approaches to Total Sanitation (CATS)**

This topic introduces different monitoring information and tools needed at the project/community, subnational, national, continental/regional and global levels. It raises key monitoring questions to be addressed and includes three priorities for monitoring.

Note: CATS is an umbrella term developed by UNICEF sanitation practitioners in 2008 to encompass a wide range of community-based sanitation programming.
1 Monitoring the elimination of open defecation (OD)
This sub-topic covers key information about open defecation, the process towards eliminating it and declaring, verifying and certifying open defecation free (ODF) status. It includes sections on global and national ODF protocols, indicators and tools as well as a section on sustaining ODF and monitoring post-ODF certification.

2 Monitoring the disposal of children’s faeces
This sub-topic sets out reasons for the safe disposal of children’s faeces and reviews findings from Multiple Indicator Cluster Surveys (MICS)/Demographic and Health Surveys (DHS) monitoring data across a range of countries. It explains the importance of standardized MICS/DHS responses as well as suggested indicators and strategies.

3 Monitoring handwashing with soap (HWWS)
This sub-topic explains why handwashing with soap is important, how it can be monitored and discusses which key handwashing indicators to monitor.

Topic 4 Monitoring equity
This topic defines equity and explains why it is important to monitor equity. It explains how Monitoring Results for Equity Systems (MoRES) works and suggests indicators for monitoring sanitation and handwashing with soap (HWWS) components of equity, using examples from various countries.

Topic 5 Monitoring sustainability and sector performance
This topic introduces the role of sector performance reviews, sustainability checks, monitoring ODF sustainability, and tools to assess sanitation service levels.

Topic 6 Monitoring sanitation marketing
This topic introduces current thinking in monitoring sanitation marketing initiatives as well as examples of indicators and results chains.

Topic 7 Monitoring WASH in Schools
This topic sets out the key elements and importance of WASH in Schools. With reference to the WASH in Schools Monitoring Package, the topic explains the challenges in the use of monitoring data and unpacks three modules: a module to be incorporated into national Education Monitoring Information Systems (EMISs), a survey module and a children’s monitoring module as well as for monitoring WASH in Schools.
Why monitor?

Monitoring is the routine assessment of activities and processes in order to measure whether activities are carried out as planned.

Evaluation is a systematic assessment of whether a programme has made the intended difference. The goal of evaluation is to answer the question: has the programme achieved its proposed objectives and impacts?

Done properly, findings from routine monitoring can inform periodic evaluation.

Monitoring assesses the human and financial inputs, activities and outputs of programmes, interventions or services. Evaluation assesses the outcomes and impacts of these programmes, interventions or services. Evaluation can be formative – taking place during the life of a project with the intention of improving the project approach or strategy – or it can be summative – distilling learning from a completed project or programme.

It is recommended that independent external parties carry out evaluations because they have greater objectivity than programme implementers.

Both monitoring and evaluation are essential components of effective management. Together they:

- provide evidence about the effectiveness, efficiency, strengths and limitations of programmes, interventions and services;
- provide feedback to stakeholders, such as funders, community members, local authorities, regulators and other sectors;
- are essential for evidence-based approaches to programming and policy making;
- build sector knowledge and enable systematic learning;
- build an evidence base for research, policy and practice;
- enable diagnostically accurate and targeted corrective action;
- help to show accountability to stakeholders, aid sustainability and contribute to building an enabling environment.

Trends in sanitation monitoring

Monitoring and evaluation in the sanitation and hygiene sub-sector aims to: measure and ensure that inputs and activities lead to their intended results and outcomes; adjust course where necessary and establish whether progress is being made towards a given goal.

In a review of current trends in sanitation and hygiene monitoring from the Water Supply and Sanitation Collaborative Council (WSSCC), four main trends in sanitation and hygiene monitoring are noted (see van der Voorden, 2013), namely:

- a shift from monitoring (infrastructure) outputs to (behavioural/quality) outcomes;
- a diversification of monitoring aspects and actors, both as subjects and implementers of the monitoring;
- a growing focus on monitoring sustainability and the equity of outcomes and services;
- a move towards systematization and harmonization, linking local-level monitoring to national-level systems.
**TOPIC 1**
MONITORING THE ENABLING ENVIRONMENT

**Purpose**

This topic provides an overview of the main tools for monitoring the environment that enables large-scale sanitation programmes to be developed and sustained. There is growing attention to monitoring the enabling environment.

**What is the enabling environment for sanitation?**

The enabling environment for sanitation is the policy, capacity and institutional and financial framework necessary for sustaining and replicating large-scale sanitation programmes. A positive enabling environment builds the attitudes, capacity and practices for effective and efficient functioning of organizations and individuals.

UNICEF’s WASH strategy emphasizes improving the enabling environment for sanitation. UNICEF country offices (see CATS Country Profiles, 2010) have identified the following six institutional issues as most challenging:

1. sanitation policy;
2. leadership and institutional arrangements;
3. budgets and financing for sanitation;
4. human resource capacity for implementation, including the quality of facilitation in CATS;
5. the development of a sanitation market;
6. pro-poor financial arrangements.

Six tools have been developed which help monitor the enabling environment for sanitation.

2. WASH bottleneck analysis tool (WASH-BAT).
3. Monitoring Regional Sanitation Conference (SAN) commitments.
4. UN-water Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS).
5. Monitoring of Sanitation and Water for All (SWA) high-level commitments.
6. Regional monitoring mechanisms.

A final section addresses aligning these different approaches.
Table: A short description of tools for monitoring the enabling environment

<table>
<thead>
<tr>
<th>Category of tool</th>
<th>What are you looking for?</th>
<th>Which tool is most appropriate?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage monitoring</td>
<td>Country coverage data of sanitation or open defecation?</td>
<td>JMP</td>
</tr>
<tr>
<td>Country analysis</td>
<td>An analysis of sanitation bottlenecks that also generates a costed, prioritized action plan that has the consensus of all major sector players</td>
<td>WASH-BAT</td>
</tr>
<tr>
<td></td>
<td>A detailed WASH country analysis where participatory tools are not appropriate or where an external consultant is more appropriate</td>
<td>CSO</td>
</tr>
<tr>
<td>Regional monitoring</td>
<td>Standardized data on sector inputs (finance, institutions, human resources etc.)</td>
<td>GLAAS</td>
</tr>
<tr>
<td>Global commitment monitoring</td>
<td>Progress against global political commitments</td>
<td>• SWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• High-Level Commitment Dialogue (HLCD)</td>
</tr>
</tbody>
</table>
**Tool 1**  
Country Status Overviews (CSOs)

*Level: Country and regional*

**What are CSOs, SDAs and MAPAS?**

Country Status Overviews (CSOs) are a national level tool to provide oversight of the achievements of the WASH sector, benchmark service delivery pathways and identify issues that might be inhibiting progress. Applied to each subsector of WASH in a country, including urban and rural sanitation, CSOs score progress in three areas (or pillars) of service delivery: enabling service delivery, developing services and sustaining services.

**Figure: Three pillars of service delivery are used to score CSO progress**

![Diagram of three pillars: Enabling, Developing, and Sustaining](https://example.com/diagram.png)


The methodology (known as CSO1) was first created by the Water and Sanitation Program (WSP) Africa in 2006 as a tool to gain an overview of what countries needed to do to reach the Millennium Development Goals (MDGs). CSO2 methodology has developed into a more rigorous and replicable approach with three distinct tools (i.e. scorecard, costing tool and questionnaires; see CSO2 methodology below). Rolling out this standard methodology enabled a comparative analysis across countries and revealed sector trends. The methodology has also been designed so that, if repeated in the same country, the enabling environment for service delivery can be analysed over time.
A synthesis report of 32 CSO2s in African countries was undertaken in 2011 by the WSP in collaboration with African Ministers’ Council on Water (AMCOW) and other partners. The comparative analysis of the results has been published by WSP (AMCOW, 2011). The methodology has also been extended by WSP to Latin America – where they are called Monitoring Country Progress in Water Supply and Sanitation (MAPAS) – and South Asia and South East Asia – where they are called Sector Development Analyses (SDAs). CSOs have evolved in response to different regional priorities.

- In Latin America, the infrastructure built in the 1970s and 1980s is reaching the end of its lifespan, so sector investment requirements for replacement of capital stock are more than 50 per cent of the total requirements in all countries. A key issue emerging from MAPAS is that countries have no reserve mechanisms in place, putting at risk the progress in coverage achieved during the past two decades. The costing model has been adapted to show the relative effects of new service development versus replacement of existing capital stock. The concept of the ‘medium-term scenario’ has been introduced, which compares the current situation with a second scorecard showing the expected results and recognizing existing efforts to improve sector performance.

- SDAs in South East Asia have been adapted to focus on the shift in service delivery options and problem solving in this transition. There has been considerable focus in SDAs in South Asia on the core challenge of addressing open defecation. Indicators have been added to address: equity, city-wide faecal sludge management and key water resource issues.

What is CSO2 methodology?

The CSO2 methodology involves contracting an experienced regional or country consultant to work with the government applying three data gathering methodologies.

1. **CSO2 scorecard**
   This is an assessment framework allowing identification of drivers and barriers in the ‘service delivery pathway’ between inputs (finance) and outcomes (coverage) in each of the four subsectors: urban water supply, rural water supply, urban sanitation and rural sanitation. The scorecard assesses each building block of a functioning subsector, from enabling policies to the quality of user experience. Scores are generated with reference to a range of specific questions and a simple visual key (green, yellow, red) allows problem building blocks (barriers) to be easily identified. The detailed questions in the scorecard for each pillar of service development and sub-sector are presented in Appendix A of the CSO synthesis report (AMCOW, 2011).

2. **CSO2 costing tool**
   The CSO2 costing tool is an Excel-based model combining population, coverage, and technological data to estimate both the annual investment required for new and replacement infrastructure in each subsector and the proportion that will be met from public finance based on subsidy policy. Requirements are then compared with anticipated public investment from national, donor and NGO sources to identify any investment gaps.
3 Questionnaire to line ministries

This questionnaire elicits formal inputs to the costing model as well as supplementary qualitative information regarding progress, for example, on donor coordination.

A strength of CSOs is that, in using external agents for verification and by incorporating a multi-stakeholder analysis, they can deliver an accurate and comprehensive sector analysis. In some instances, external agents have not delivered the quality needed. In others, the government has been slow to verify the final output. In general, CSOs take around three months to complete (including kick off meetings, consultation with key country sector stakeholders, presentation of draft findings, and finalization and sign off by the Government). UNICEF country staff members have supported this process in many countries.
Tool 2

WASH bottleneck analysis tool (WASH-BAT)

Level: Country and subnational

What is a WASH-BAT?

The water, sanitation and hygiene bottleneck analysis tool (WASH-BAT) is another response to the needs of the sector to better diagnose and solve the key challenges it faces. Developed by UNICEF, the WASH-BAT has its roots in another UNICEF and World Bank tool, the Marginal Budgeting for Bottlenecks (MBB) tool, which was developed for the health sector more than 10 years ago. (The tool can be downloaded from <www.devinfolive.info/mbb/mbbsupport>.)

The WASH-BAT has drawn on a variety of other tools and approaches, including CSOs, and is a user-friendly, Excel-based tool that defines a comprehensive set of enabling factors operating at different levels of the service delivery system. The principal users of the tool are expected to be line ministries responsible for water, sanitation and hygiene. The tool stimulates users to apply a root-cause analysis of the major constraints on sector progress in their own setting and determine the requirements and consequences of removing them. The quality of the process is dependent on being able to bring the sector leaders and key stakeholders together to complete the WASH-BAT. Undertaking a WASH-BAT ideally requires the full engagement of sector leadership, including government officials, to participate in a five-day workshop.

Like CSOs, WASH-BATs provide a rational, evidence-based approach for analysing the WASH sector. However, in addition to identifying priority problems in the WASH sector, the WASH-BAT is used to formulate a sector (or sub-sector) investment plan comprising a costed set of activities designed to remove bottlenecks in the enabling environment that constrain efficient, sustainable and equitable service delivery.

The WASH-BAT uses a modular approach, such that lead agencies can choose which modules to apply in each context. The modules cover a range of levels and sub-sectors: national, subnational, service provider, community/household and/or urban water, rural water, urban sanitation and rural sanitation.

For each sub-sector, the user scores the enabling factors, identifies bottlenecks (as well as their causes and how to remove them), estimates the costs and funding available to implement the activities and prioritizes them on the basis of their relative importance to increasing sector efficiency.

WASH-BATs do not benchmark service performance or estimate the funding gap to reach targets. Neither do they advise on technology choice or business strategy. But through the use of easy-to-operate software, WASH-BATs can generate results quickly and can empower country decision-makers to run ‘what-if’ scenarios.
WASH-BATs are flexible, adaptable and can be completed in a short time frame. (The initial workshop takes five days and some reports have been generated in as little as three weeks.) A challenge with using the WASH-BAT is getting all the senior stakeholders to commit the time to participating in a five-day workshop. Alternative approaches to applying the WASH-BAT are being evaluated to overcome the demands on time from senior stakeholders.

Having gone through pilot implementation, starting in Ghana in 2012 and Sierra Leone in 2013, based on country demand and UNICEF and partner capacity, the WASH-BAT is now poised for an extensive roll-out to national agencies to analyse and indicate solutions to sanitation problems, including improving the overall sector framework. In 2013, UNICEF supported 10 countries to implement the WASH-BAT. In 2014, an additional 23 countries have requested similar support (March 2014 estimate).

The tool’s evaluation of the enabling factors that determine sector efficiency, equity and sustainability helps to bring greater focus to aspects that have received inadequate attention in the past, such as equity, hardware maintenance, programme delivery mechanisms, ‘software’ spending and underlying determinants of programme performance, such as social norms.

**When to use a WASH-BAT and when to use a CSO?**

Both the WASH-BAT and CSOs are useful for deepening country-level sector analysis. In general, use a WASH-BAT when there are identifiable sector leaders who are concerned to improve sector impact and who can be brought together to work through an analysis of the sector. CSOs may be more useful where an independent assessment could provide clarity on key issues and give the opportunity for an extended period of data collection and analysis.

WASH-BATs can be completed in a shorter time-frame and are cheaper to implement than CSOs, but do require a high level of participation from key sector leaders at one time. WASH-BAT outcomes reflect scoring by participants in a workshop setting while CSOs, in the first instance, reflect the opinions of a consultant after interviewing relevant stakeholders. The WASH-BAT analysis is led mostly by government stakeholders through a participatory process that aims to reach consensus on problems in the enabling environment and what to do about them. The WASH-BAT produces an action-oriented, costed work plan. CSOs provide recommended actions that governments can then develop into action plans.

**What is the WASH-BAT methodology?**

The application of the WASH-BAT requires a collaborative effort, involving a range of WASH sector stakeholders and external partners. The tool is also designed to cater to different user types and hence provides flexibility in scope, focus and informational outputs. The detailed WASH-BAT methodology is described in UNICEF’s ‘Water, Sanitation and Hygiene Bottleneck Analysis Tool (WASH-BAT): Methodology Description’ (UNICEF, September 2013).

In a step-by-step approach, the WASH-BAT methodology tool assists the user to:
The methodology takes a key group of country sector leaders through a nine-step process.

Source: Author’s compilation

Source: UNICEF, Water, Sanitation and Hygiene Bottleneck Analysis Tool (WASH-BAT), Methodology Description. Accompaniment to the WASH-BAT in Excel and to be used in conjunction with the Software User Manual, September 2013
The bottleneck analysis, the core of WASH-BATs, covers two different worksheets. The ‘enabling factors’ worksheet first scores each criterion and then the ‘bottleneck analysis’ worksheet identifies the bottlenecks. A ‘score summary report’ worksheet provides an overview of the scores of each enabling factor across the four implementation levels of each sub-sector. The table below gives the enabling factors for rural sanitation at a national level.

**Table: Enabling factors and indicators at national level for rural sanitation**

<table>
<thead>
<tr>
<th>Enabling Factor</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal framework</td>
<td>A legal framework exists that includes the human right to (rural) sanitation, and pro-poor and socially inclusive policies</td>
</tr>
<tr>
<td>Policy</td>
<td>Rural sanitation and hygiene policy, containing national service norms, equity aspects and future adaptation requirements, is approved by cabinet and used by stakeholders</td>
</tr>
<tr>
<td>Targets</td>
<td>Rural sanitation targets in the Poverty Reduction Strategy Paper (PRSP) or national development plan are realistic and specifically mention poor and vulnerable groups</td>
</tr>
<tr>
<td>Social norms</td>
<td>Social norms and national leaders (e.g. government leaders, ministry staff, religious leaders, personalities) provide enabling environment for improved sanitation and hygiene practices</td>
</tr>
<tr>
<td>Institutional leadership</td>
<td>Institutional roles for rural sanitation and hygiene are clearly defined and put into operation, with leadership provided by a government agency with the appropriate capacity</td>
</tr>
<tr>
<td>Stakeholder coordination</td>
<td>Government has a programmatic sector-wide approach to rural sanitation and hygiene, with donors harmonized and supporting implementation of the rural national sanitation plan</td>
</tr>
<tr>
<td>Investment plan</td>
<td>National investment programme for rural sanitation and hygiene is operational, realistic, pro-poor and based on a needs assessment; it considers a range of options and has been validated by range of stakeholders</td>
</tr>
<tr>
<td>Programming</td>
<td>Annual (or multi-year) work plans for rural sanitation and hygiene are developed, reviewed, implemented, and evaluated based on the available budget</td>
</tr>
<tr>
<td>Annual review</td>
<td>An annual review monitors rural sanitation and hygiene performance and activities completed, with participation from stakeholders, to enable setting of new targets and undertakings</td>
</tr>
<tr>
<td>Sector and service monitoring</td>
<td>Monitoring systems regularly measure service levels, use and functionality, reflecting international (WHO/UNICEF</td>
</tr>
</tbody>
</table>
Joint Monitoring Programme) as well as national coverage definitions

<table>
<thead>
<tr>
<th>Analysis of equity</th>
<th>Periodic analysis by government or civil society organizations assesses equitable service outcomes of rural sanitation and hygiene programmes, and whether equity criteria set by government have been applied in funding decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget and expenditure adequacy</td>
<td>Financial flows to rural sanitation and hygiene are sufficient to meet national targets, and include software costs, maintenance funds, disaster risk management and climate change</td>
</tr>
<tr>
<td>National budgeting and accounting structure and coverage</td>
<td>Budget and expenditure data show separate values for rural sanitation and hygiene, poor/vulnerable groups, domestic spending and official donor investment</td>
</tr>
<tr>
<td>Budget utilization</td>
<td>High percentage of domestic budget and official donor commitments earmarked for rural sanitation and hygiene is utilized</td>
</tr>
<tr>
<td>Decentralization</td>
<td>Decentralized authorities are guided and supported in playing their roles</td>
</tr>
<tr>
<td>Promotion and scaling up sanitation services</td>
<td>Tools for promoting rural sanitation and hygiene have been specifically adapted before being used at scale through a national programme</td>
</tr>
<tr>
<td>Private sector development</td>
<td>A private sector development and partnership programme for rural sanitation is led by a capacitated government programme</td>
</tr>
<tr>
<td>Supply-chain and services</td>
<td>A national supply-chain for sanitation equipment, pit emptying and hygiene services meets rural households needs in terms of both availability and price</td>
</tr>
</tbody>
</table>

Source: UNICEF, Water, Sanitation and Hygiene Bottleneck Analysis Tool (WASH-BAT), Methodology Description. Accompaniment to the WASH-BAT in Excel and to be used in conjunction with the Software User Manual, September 2013

The early roll-out of WASH-BATs to developing countries has shown that these can bring together country leadership and assist them to reflect on the big picture and discuss challenges and solutions in an open atmosphere. The use of a standardized set of enabling factors, indicators and scoring criteria provide a consistent guiding framework to the dialogue. Issues in using WASH-BATs in future country dialogue include: the regularity of usage (Could WASH-BATs be used annually?) and timing (WASH-BATs are to feed into official sector processes, such as Joint Sector Reviews).

Examples of WASH-BATs
WASH-BATs are being implemented in more and more countries, providing new lessons on their application. WASH-BATs were applied to several levels of analysis (the national level, subnational level, project/community level and the service providers’ level) in the institutionally complex situation in Madagascar (see: UNICEF, ‘Madagascar WASH Sector Service Provision: Bottleneck Assessment, final report, January 2014’). In Kenya, the WASH-BAT was powerfully applied at the county level.

Bottleneck analysis (a variation of WASH-BAT) has also been successfully applied in schools. The analysis in Tanzania, for example, helped Tanzanian stakeholders to understand the serious neglect of school sanitation and to prioritize actions. The figure below, for example, is the outcome of the enabling environment analysis for WASH in Schools in Tanzania.

**Figure: Results from WASH-BAT in Tanzanian schools, 2013**

![Figure: Results from WASH-BAT in Tanzanian schools, 2013](image)

Source: UNICEF, Tanzania WASH in Schools WASH-BAT, WASH Programme presentation, 2013

**Further country resources**

**Sudan**


**Burundi**

Burundi WASH BAT Report, 25-28th March 2014, Support to National Planning for Results Initiative (NPRI) and WASH BAT Workshop in Burundi.


Participants’ evaluation of WASH BAT Workshop, Burundi, March 2014.
Tool 3
Monitoring Regional Sanitation Conference (SAN) commitments

Level: Regional and country

From 2002, Regional Sanitation Conferences (SAN) have been held in Africa, East Asia, Latin America and South Asia to build political momentum for the neglected sanitation sector.

Table: Regional Sanitation Conferences (SAN) (2002–2013)

<table>
<thead>
<tr>
<th>Year</th>
<th>Africa</th>
<th>South Asia</th>
<th>East Asia</th>
<th>Latin America</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>African Conference On Sanitation And Hygiene (AfricaSan)</td>
<td>South Asian Conference on Sanitation (SACOSAN)</td>
<td>East Asia Ministerial Conference On Sanitation And Hygiene (EASAN)</td>
<td>Latin American Conference on Sanitation (LATINOSAN)</td>
</tr>
<tr>
<td>2002</td>
<td>AfricaSan 1, Johannesburg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td></td>
<td>SACOSAN I, Dhaka</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>AfricaSan-South, Gaborone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>AfricaSan-East, Addis Ababa, AfricaSan-West, Ouagadougou</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td>SACOSAN II, Islamabad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td>EASAN-1, Beppu</td>
<td>LATINOSAN 1, Cali</td>
</tr>
<tr>
<td>2008</td>
<td>AfricaSan 2 (or called + 5), Durban</td>
<td>SACOSAN III, Delhi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>AfricaSan-East, Kampala</td>
<td>SACOSAN IV, Colombo</td>
<td>EASAN-2, Manila</td>
<td>LATINOSAN 2, Foz de Iguacu</td>
</tr>
<tr>
<td>2011</td>
<td>AfricaSan 3, Kigali</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>AfricaSan-East, Addis Ababa</td>
<td></td>
<td>EASAN-3, Bali</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>AfricaSan-West and Central, Dakar, AfricaSan-Southern Africa, Lusaka</td>
<td>SACOSAN V, Kathmandu</td>
<td></td>
<td>LATINOSAN 3, Panama</td>
</tr>
</tbody>
</table>

From the outset, SAN recognized that a blend of political support, technical advance and knowledge exchange was needed to develop momentum for sanitation. The vision of the SAN dialogue was that governments should lead sanitation improvement, while engaging civil society, the private sector and external support agencies.

**SAN commitments and commitment tracking**

Key SAN products have been regional and country political commitments: the eThekwini commitments (AfricaSan+ 5), Cali declarations (LATINOSAN 1), the Colombo statement (SACOSAN IV) and the Beppu statement (EASAN-1) are the most commonly quoted statements.

The latest commitment statements are summarised below.


**EASAN**: The government of Indonesia hosted the third East Asian Ministerial Conference on Sanitation and Hygiene (EASAN-3) in September 2012, in Bali. The meeting produced the Bali statement (see <www.unicef.org/indonesia/Bali_Declaration_EASAN-3.pdf>).

**LATINOSAN**: The Republic of Panama hosted the third Latin American Sanitation Conference (LATIONSAN 3) from 29 to 31 May 2013, in Panama. The meeting produced the Declaration of Panama. The theme was ‘Universal Sanitation: New Challenges, New Opportunities’.


SAN meetings have sought to achieve binding resolutions among regional governments, which are followed up by post-meeting actions. The focus on the political meeting itself has been complemented by better tracking of progress made against these ministerial commitments to avoid empty promises being made at SAN conferences. The process of tracking has in turn helped sharpen the commitments to make progress more easily measurable.

Each SAN has established different regional mechanisms for tracking these commitments. The website <www.WASHwatch.org> is an online platform for monitoring government policy commitments and budgets for WASH. Presently, (March 2014) only African and South Asia are tracked, but the platform has been set up to track all countries.
The intention is for SAN meetings to be integral to an on-going regional dialogue on how to reach targets and improve sanitation sector performance. The figure below shows this integration in the planning for AfricaSan 3.

**Figure: Integration in the planning for AfricaSan 3**


**Monitoring the eThekwini commitments**

**Level: Regional and country**

In 2008, the AfricaSan+ 5 conference, which coincided with the International Year of Sanitation, brought together over 600 participants, including ministers from 32 African countries. The conference culminated in the eThekwini Declaration – a strong statement of commitments by African governments to prioritize sanitation. In many ways, the eThekwini declaration has been the political launch pad for concerted efforts to improve the sanitation situation across Africa.

Based on the eThekwini Declaration in 2008 (see <www.wsp.org/sites/wsp.org/files/publications/eThekwiniAfricaSan.pdf>), nine key indicators have been selected to track the progress countries make on the eThekwini commitments on sanitation. The indicators have three standard answers (good progress, sufficient/some progress, insufficient progress) which allows for tracking changes in the enabling environment over time. These nine indicators have been presented in traffic light form, first in 2009, and again in 2011 in preparation for AfricaSan 3.
The high degree of variation in the sanitation environment across Africa limits the utility of eThekwini monitoring as a country benchmarking tool. Comparisons cannot be made between an upper middle-income country, such as South Africa, and one that has had no functioning government for 20 years, such as Somalia. However, reviewing results across the commitments provides useful insights into commonalities in commitment achievements. The traffic light report shows that there has been progress across most countries in developing national sanitation policies and action plans, but that securing adequate budgets and rolling out monitoring and evaluation systems has remained a challenge.

**Refining and improving eThekwini indicators**

The eThekwini commitments are based on self-assessment. Progress reviews showed that reported data in the tracking reports did not reflect the continuing serious sanitation situation on the ground. This has led to a process of sharpening the definitions of indicators. On closer examination, it became apparent that the original indicators and criteria do not adequately measure the implementation of the eThekwini commitments. For example, previous monitoring indicators and criteria captured the existence of national sanitation plans, but not the second half of the commitment, which calls for steps to be taken to ensure national sanitation programmes are on track. Other commitments were not included in the all-Africa eThekwini monitoring – for example, the commitment to use effective and sustainable approaches to build and strengthen capacity for sanitation and hygiene implementation. As a result, AMCOW tasked the AfricaSan task force (which includes UNICEF) to refine indicators to properly reflect progress and propose indicators for those targets for which no indicators exist. A new and more detailed set of indicators has been developed and discussed with countries at a series of sub-regional AfricaSan meeting in 2012 and 2013. The revised indicators can be found here.
Aligning global and regional monitoring processes in African countries

Preparation for AfricaSan 4 (planned for late 2014) has involved country reviews of progress against the revised set of eThekwini indicators and aligning the measurement of these indicators with existing and on-going processes at country level, as well as other regional and global monitoring processes. The 2012–2013 sub-regional AfricaSan meetings sought to align the revised eThekwini commitments with AMCOW Country Status Overview (CSO) scorecards, the UN-water Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS) report as well as monitoring of the Sanitation and Water for All (SWA) high-level commitments.
**Tool 4**

**UN-water Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS)**

*Level: Global and country*

**What is GLAAS?**

The UN-water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) is a UN-water initiative implemented by the World Health Organization (WHO). The objective of GLAAS is to provide policy makers at all levels with a reliable, easily accessible, comprehensive and global analysis of the evidence to make informed decisions about sanitation and drinking water. GLAAS has evolved since its first pilot report in 2008 and now places emphasis on monitoring the inputs required to extend and sustain WASH systems and services through a country-led process. A secondary goal is to analyse the factors associated with progress, or lack thereof, to identify drivers, bottlenecks and knowledge gaps and to assess strengths and challenges across countries.

The global GLAAS report is published biennially and includes an assessment of government policies and institutions; the investments, in terms of financial and human resources; the volume and targeting of foreign assistance; and the relative influence of all these factors on performance. GLAAS is also a principal source of evidence for member states and other major stakeholders for the High-Level Commitment Dialogue (HLCD) and to outline their commitments at the biennial Sanitation and Water For All (SWA) High-Level Meetings (HLMs) hosted by UNICEF at the World Bank Spring Meetings (including the most recent HLM held in April 2014). The 2013/2014 GLAAS report plans to gather survey data from over 90 countries and nearly 30 external support agencies as well as collect information from other sources, including the Organisation for Economic Co-operation and Development (OECD), the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) and civil society organizations.

For more information see <www.who.int/water_sanitation_health/glaas/en>.

**What is GLAAS methodology?**

GLAAS – unlike the JMP, which relies on data from existing survey instruments – gathers its own primary data through questionnaires distributed to countries and financing agencies. In the current round of data gathering, WHO are further strengthening the support given to countries to assist them in completing the form by appointing external facilitation staff to assist some countries. A guidance note on completing the questionnaire is also available. The process of completing country questionnaires encourages multi-stakeholder dialogue across ministries and with donors and civil society organizations. The final report that is submitted is essentially based on self-assessed data and governments have to sign off on the submission.

The questionnaire solicits information on the delivery of drinking water supply and/or sanitation services and/or the status of hygiene promotion activities. Information gathered in this survey will
be presented in the 2014 UN-water GLAAS report. The 2013 country questionnaire contains four sections that cover selected aspects of the enabling environment that impact the provision of water and sanitation services.

- **Section A on governance**, which is an extensive section, including national laws, incorporation of human rights in WASH, institutional responsibilities and coordination, sustainability and citizens engagement.
- **Section B on monitoring**, which examines the effectiveness of monitoring, including attention given to exclusion and performance monitoring.
- **Section C on human resources**, which includes the causes of human resource gaps and the impact of shortages.
- **Section D on finance**, which is an extensive section on financial planning and implementation and measurement of financial flows.

External agencies also submit their data by questionnaire.

In prior years, the main product of GLAAS has been a global report analysing the data and highlighting lessons learnt. In 2014, in addition to a global report, emphasis was given to specific country reports so that information could be fed back to support country dialogue and decision making. In 2014, GLAAS staggered the production of data to enable some first-cut findings to be presented at the 2014 HLM with the full report expected when all the country data is fully assembled.
Tool 5
Monitoring of Sanitation and Water for All (SWA) high-level commitments

Level: Global and country

What is SWA?

Sanitation and Water for All (SWA) is a global partnership of 95 partners (June 2014) including developing country governments, donors, civil society organizations and other development partners working together to catalyse political leadership and action, improve accountability and use scarce resources more effectively. Partners work towards a common vision of universal access to safe water and adequate sanitation. SWA aims to create a virtuous cycle of robust planning, institutional strengthening, better resource utilization and higher investment.

SWA is a platform:

- for coordinated action;
- for global high-level dialogue;
- to implement the aid effectiveness agenda in the WASH;
- to strengthen mutual accountability.

For more information on SWA visit the SWA website at <http://sanitationandwaterforall.org/about>.

What are the HLM and HLCD?

Every two years, SWA convenes a High-Level Meeting (HLM) of national and global decision makers to discuss the state of sanitation and water development and highlight the sector on a global platform. The meeting is significant as it engages ministers of finance to address the fundamental bottlenecks holding back progress and encourages all parties to act on international aid effectiveness principles. This includes ministerial commitments (from countries and donors) and aligning and harmonizing efforts. The 2012, SWA HLM was unprecedented in attracting over 50 ministers and high-level dignitaries. It demonstrated the increase in political prioritization of WASH that SWA seeks to achieve. The meeting resulted in attendees committing to over 400 tangible actions. In 2014, SWA HLM was attended by leaders from more than 50 countries, both major donors and programme countries, who set serious, measurable commitments for tackling the problem of water and sanitation for the people who are among the poorest and most marginalized in the world. Among the commitments, 17 countries pledged to end OD by or before 2030 and more than 20 countries pledged to have universal access to water and sanitation – that is, access for every one of their citizens – by 2030 or earlier.

The SWA secretariat works with country and donor focal points to track progress made against these commitments. Recognizing that the process of implementing and tracking progress is as
important as the process of preparing commitments and the meeting itself, SWA has shifted to focus on a High-Level Commitment Dialogue (HLCD).

The SWA HLCD is a global process fostering an on-going political dialogue on WASH at national and global levels. It is focused on achieving results at country level. The HLCD provides a platform for mutual accountability among stakeholders and also further strengthens the sector dialogue at country level. The aims of the HLCD mirror those of the SWA partnership, namely: i) increasing political prioritization, ii) improving evidence-based decision making, and iii) strengthening country processes.

**Figure: The SWA HLCD process**

Source: SWA Secretariat, ‘Developing SMART Commitments for the 2014 High-Level Meeting’, 2014

The HLCD is the dialogue between SWA partners, the secretariat and countries covering the following activities:

1. **Preparation:** the preparatory process that countries and donors/banks carry out in advance of the SWA HLM to develop specific commitments.
2. **Meeting:** the biennial HLMs, where ministers table specific commitments to be implemented over a two-year period.
3. **Monitoring:** the annual monitoring of commitments tabled at the HLMs.

**How does SWA monitor commitments?**

SWA is a partner-led and partner-governed initiative and partners self-report on progress against commitments. The SWA Secretariat, hosted by UNICEF, facilitates the reporting process. Guidelines for reporting on progress and a common reporting format have been developed. The reporting format was based primarily on a five-point colour-coded scale as follows: ‘complete’, ‘almost complete’, ‘good progress’, ‘slow progress’ and ‘no progress/major barriers’. Commitments are also coded according to the three SWA Priority Areas (political prioritization, evidence-based decision making and national planning processes). Country partners are encouraged to consult
with other stakeholders in their tracking processes to increase the accuracy of the information through triangulation and to increase credibility by reducing the subjectivity of the report.

The 2013 progress report against HLM commitments provides a detailed description of the methodology for tracking commitments.

The preparation for the 2014 HLM has seen a significant shift towards selection of a smaller number of country commitments (just over 250 commitments were made) in strategic areas. Commitments for 2014 were intended to be:

- 'communicable in 90 seconds': few, but focused;
- 'game changing': carefully ambitious;
- 'balancing': existing plans with new priorities;
- 'sequencing': short term and structural;
- 'smart': specific, measurable, achievable, relevant, time-bound.

The process puts a strong emphasis on alignment, so that HLM commitments derive from and are linked to national priorities which are, in turn, informed by other analytical and bottleneck analysis tools (including CSOs, WASH-BATs and GLAAS reports). HLM commitments were, for example, integrated into the recent AfricaSan regional meetings.

Five sets of guidance notes have been prepared for the development of commitments on the following:

1. national advocacy campaigns
2. preparation of commitments
3. reporting on commitments
4. engaging ministries of finance
5. donors and development banks.

Other SWA activities of interest to sanitation monitoring include:

- the development of country economic analyses of the impact of sanitation
- donor profiles, which summarize donors financing to the sector.
Tool 6
Regional monitoring mechanisms

Level: Regional and country

Regional monitoring

Some regions are developing monitoring systems to track progress against regional political commitments in water and sanitation. Regions and countries in those areas can differ widely and have different priorities. This means that neither all regions, nor necessarily all countries within regions, are interested in analysing or monitoring the same range of issues and that much of the data is not really suited to regional or global aggregation. But some significant regional monitoring efforts that include sanitation are underway.

In Africa the African Ministers’ Council on Water (AMCOW) is developing a pan-African monitoring process to report on progress against the Sharm el-Sheik commitments in the water sector made by African heads of state. An ambitious monitoring system has been planned, addressing seven areas of commitment to water development on the continent. The system plans to aggregate national government and regional water data.

South Asian countries attending the Ministerial Conference on Sanitation and Hygiene for South Asia (SACOSAN) committed in 2006 that an Inter-Country Working Group (ICWG) would be responsible for harmonized monitoring of country progress towards agreed targets in sanitation and hygiene. SACOSAN monitoring has focused not only on access, but also on functionality, equity, health, education and financial allocations. In April 2012, health ministers in the South Asian Association for Regional Cooperation (SAARC) agreed that a common monitoring framework should include access to safe sanitation and drinking water.

The pan-African sector monitoring mechanism of the African Ministers’ Council on Water (AMCOW)

The Assembly Decision (Assembly/AU/ Decl.1 (XI)) of the African Union (AU) in Sharm el-Sheik in July 2008 affirmed the eThekwini Declaration and requested the African Ministers’ Council on Water (AMCOW) to report to the AU assembly annually on the progress made.

In 2012, AMCOW undertook a process of partner consultation that led to the establishment of a pan-African water and sanitation monitoring mechanism. The selected process was to align with and support the country monitoring mechanisms. The system is built on country self-reporting. The AU is conscious of alignment issues and has created a strong multi-stakeholder task force (including UNICEF) to support development of this regional monitoring system.

Data is collected in seven themes.

- Theme 1: water infrastructure for economic growth.
• Theme 2: managing and protecting water resources.
• Theme 3: achieving water supply and sanitation MDGs.
• Theme 4: global changes and risks management in Africa.
• Theme 5: water governance and management.
• Theme 6: financing the water and sanitation sector.
• Theme 7: education, knowledge, capacity development and water information.

The AU issued its first continental African Water report in 2012 summarizing this monitoring information. The data in the first report are limited and reflect only a 41 per cent response rate, but plans are in place to develop a monitoring process as a source of evidence for sector advocacy. The sanitation data submitted are those utilized by national governments.
TOPIC 2
MONITORING NATIONAL SANITATION ACCESS

National-level monitoring of sanitation access is a key topic to help track progress against national goals and supports decision making, advocacy as well as policy and programmes design. In many countries, a definitive source of information of sanitation is the national census, but this is usually only carried out once a decade. This section reviews some key tools for monitoring national sanitation access:

1. Joint Monitoring Programme (JMP).
2. Multiple Indicator Cluster Surveys (MICS).
3. Managing discrepancies in national sanitation access data.

Tool 1 Joint Monitoring Programme (JMP)

The WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) is the official United Nations mechanism tasked with monitoring progress towards the Millennium Development Goal (MDG) relating to drinking water and sanitation (MDG 7, Target 7c).

The issues presented in this discussion are:

- What is the JMP?
- What definitions does the JMP use?
- What sources does the JMP use?
- What method does the JMP use?
- How do I get sanitation JMP data for a specific country?
- Post-2015 monitoring.

Tool 2 Multiple Indicator Cluster Surveys (MICS)

Multiple Indicator Cluster Surveys (MICS) are a UNICEF initiative, which assists countries in collecting and analysing data to fill data gaps for monitoring the situation of children and women. MICS has enabled many countries to produce statistically sound and internationally comparable estimates in health (including water, sanitation and hygiene), education, child protection and HIV/AIDS.

The issues presented in this discussion are:

- What is Multiple Indicator Cluster Surveys (MICS) data?
- What sanitation data does MICS collect?
- How can MICS data be used in country sanitation programmes?
Tool 3 Managing discrepancies in national sanitation access data

Many developing countries are faced with apparently contradictory data on levels of access to sanitation. This section discusses common discrepancies and how to resolve them.

Guidance information presented in this discussion includes:

- steps to improve data convergence;
- harmonizing National Sanitation Standards;
- defining a pit latrine;
- handling information on shared sanitation.
Tool 1
Joint Monitoring Programme (JMP)

Level: Global and country

What is the JMP?

The WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) is the official United Nations mechanism tasked with monitoring progress towards the Millennium Development Goal (MDG) relating to drinking water and sanitation (MDG 7, Target 7c), which is to: ‘Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation’.

The core objective of the JMP is to compile, analyse and disseminate high quality, up-to-date, consistent and statistically sound global, regional and country estimates of progress towards internationally established drinking water and sanitation targets. The JMP plays a vital role in monitoring the impact of service development funded by national governments, bilateral and multilateral external support agencies, foundations and civil society organizations. The JMP draws on the mutually reinforcing strengths of both WHO and UNICEF and has grown into the single authoritative global source for objective drinking water supply and sanitation coverage estimates.

From its first report in 1993, the JMP has gained strength in resolution, consistency and accuracy of its outputs as well as in its global outreach. A key shift was from using administrative data to household surveys. There have also been significant improvements in the data presented by the JMP, particularly in the way that recent reports and a number of regional ‘snapshots’ have introduced the ‘ladder approach’ so that incremental steps towards use of improved water and sanitation facilities have been identified. The figure below (from the JMP Progress on Drinking Water and Sanitation 2014 Update) illustrates how the JMP shows data in a more nuanced way.

Figure: Sanitation coverage trends by developing regions and the world (1990–2011)
In 2006, the JMP established a set of core questions (see <www.wssinfo.org/fileadmin/user_upload/resources/1268174016-JMP_Core_Questions.pdf>), which sought to harmonize definitions of water and sanitation access across all statistical sources. Core questions were established on drinking water, sanitation and disposal of children’s faeces.

The 2008 JMP report highlighted those countries making the most rapid progress, reflecting the efforts made by those countries that were starting from a low coverage rate in the baseline year of 1990. The new OD rates published during the International Year of Sanitation were used to great effect at the highest levels of government of some of the major developing countries to generate a renewed interest and greater emphasis on sanitation. The JMP has also collected some gender-disaggregated data through the major international household survey programmes. This has made possible a mapping of the distribution of the burden of collecting water that falls to women, men, boys and girls.

What definitions does the JMP use?

The JMP has developed a standard set of definitions that it uses to track sanitation access and use. Note that the JMP tracks and reports on the actual use of facilities, rather than only access, which need not necessarily imply use. (See the section below on discrepancies between JMP data and official government sanitation statistics.) The indicator measure use of improved sanitation is the proportion of the population using an improved sanitation facility.

Definitions of acceptable sanitation access and use can vary widely within and among countries and regions and, as JMP is mandated to report at global level and across time, it has created a set of categories for improved and unimproved facilities that are used to analyse the national data on which its trends and estimates are based. The table below indicates the types of sanitation included in each of these categorizations. The JMP has developed a sanitation ladder to help highlight the practice of OD and to provide a clearer picture of sanitation facility levels, rather than a simple pass/fail standard. The four-rung JMP sanitation ladder is presented below.
**Figure: Four-rung JMP sanitation ladder**

- **Open defecation**: When human faeces are disposed of in fields, forests, bushes, open bodies of water, beaches or other open spaces or disposed of with solid waste.

- **Unimproved**: Unimproved sanitation facilities do not ensure hygienic separation of human excreta from human contact. Unimproved facilities include pit latrines without a slab or platform, hanging latrines and bucket latrines.

- **Shared**: Sanitation facilities of an otherwise acceptable type shared between two or more households. Only facilities that are not shared or not public are considered improved.

- **Improved**: Improved sanitation facilities ensure hygienic separation of human excreta from human contact.

Source: See [www.wssinfo.org/definitions-methods/watsan-ladder](http://www.wssinfo.org/definitions-methods/watsan-ladder)

**Table: Types and definitions of sanitation**

<table>
<thead>
<tr>
<th>Types of sanitation</th>
<th>Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved sanitation</td>
<td><strong>Flush or pour-flush to:</strong></td>
</tr>
<tr>
<td></td>
<td>• piped sewer system</td>
</tr>
<tr>
<td></td>
<td>• septic tank</td>
</tr>
<tr>
<td></td>
<td>• pit latrine</td>
</tr>
<tr>
<td></td>
<td><strong>Ventilated improved pit (VIP) latrine</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Pit latrine with slab</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Composting toilet</strong></td>
</tr>
<tr>
<td>Unimproved sanitation</td>
<td>• Flush or pour-flush to elsewhere (that is, not to piped sewer system, septic tank or pit latrine)</td>
</tr>
<tr>
<td></td>
<td>• pit latrine without slab/open pit</td>
</tr>
<tr>
<td></td>
<td>• bucket</td>
</tr>
<tr>
<td></td>
<td>• hanging toilet or hanging latrine</td>
</tr>
<tr>
<td></td>
<td><strong>Shared facilities of any type</strong></td>
</tr>
<tr>
<td></td>
<td><strong>No facilities, bush or field</strong></td>
</tr>
</tbody>
</table>

Source: [www.wssinfo.org/definitions-methods/watsan-categories](http://www.wssinfo.org/definitions-methods/watsan-categories)
Sanitation ladders

The four-rung sanitation ladder gives an understanding of the proportion of population globally with no sanitation facilities at all, of those reliant on technologies defined by the JMP as ‘unimproved’, of those sharing sanitation facilities of otherwise acceptable technology, and those using ‘improved’ sanitation facilities.

These refinements allow countries and the international community to form a clearer understanding of the situation of access to water and sanitation. As definitional differences are often the prime cause for discrepancies in the estimates between country figures and the JMP estimates, the ladder tries to show precisely where this discrepancy arises. This new way of analysing access has become an essential tool for data reconciliation at national level, between the different stakeholders and especially sector agencies and national statistics offices, as well as between the national level and the JMP.

What sources does the JMP use?

The country level estimates for sanitation use originate from data collected by national statistics offices, nationally representative household surveys, national censuses and, in some cases, administrative records. The JMP assembles, reviews and assesses this country data from a wide variety and increasing number of sources.

A few notable household survey sources for the JMP are given below.

- **Demographic and Health Surveys (DHS)**
  DHS are nationally-representative household surveys funded by the US Agency for International Development (USAID) that provide data for a wide range of monitoring and impact-evaluation indicators in the areas of population, health, and nutrition.

- **Multiple Indicator Cluster Surveys (MICS)**
  MICS are a UNICEF initiative that assist countries in collecting and analysing data to fill data gaps for monitoring the situation of children and women. MICS has enabled many countries to produce statistically sound and internationally comparable estimates in health (including water, sanitation and hygiene), education, child protection and HIV/AIDS (see section below).

- **World Health Surveys (WHS)**
  The World Health Organization (WHO) compiles comprehensive baseline information on the health of populations and on the outcomes associated with the investment in health systems. It provides baseline evidence for the way health systems are currently functioning and is able to monitor inputs, functions, and outcomes. Also within the implemented Survey Programme, the WHO Evidence, Measurement and Analysis unit has developed the Study on global AGEing and adult health (SAGE) as part of an on-going programme of work to compile comprehensive longitudinal information on the health and well-being of adult populations and the ageing process.

- **Living Standards Measurement Surveys (LSMS)**
The LSMS are an on-going research initiative of the World Bank generating policy-relevant household-level data that provides an increasingly broad range of technical assistance as methods and technology continue to improve.

What method does the JMP use?

The JMP’s method is to derive progress estimates based on linear regression. So data for each point in time are trend data not actual data points. For each country, survey and census data are plotted on a timescale from 1980 to the present. A linear trend line, based on the least-squares method, is drawn through these data points to provide estimates for all years between 1990 and 2012 (wherever possible). The total estimates are population-weighted averages of the urban and rural numbers. Sanitation trend analyses at country-level are made for sanitation facilities of an improved type and open defecation. The estimates for sanitation facilities of an improved type are then discounted by the proportion of the population that shares an improved type of sanitation facility. The ratio (proportion of the population that shares an improved sanitation facility between two or more households, including those used a public toilet) derived from the average of all available ratios from household surveys and censuses is subsequently subtracted from the trend estimates of total sanitation facilities of an improved type, and this gives the estimates for shared sanitation facilities.

How do I get sanitation JMP data for a specific country?

The JMP country data summary sheets are available for each country.

The JMP data provide a good overview of the progress a country has made over time. Moreover, because the data are differentiated by the use of different sanitation facilities/practices and coverage in both rural and urban areas, they provide a disaggregated view. Consequently, they can show general patterns and trends in sanitation practices. The JMP also provides maps, graphs and data that can be produced at country level and address specific data requirements. The JMP does not systematically present subnational estimates for different regions within a country, and therefore it is less useful as a tool to monitor the progress a subnational sanitation promotion programme has made. However, the JMP is extending its services and reaching out to assist countries to reconcile JMP and national data including (for example, as in Ethiopia) support to subnational estimates.

The JMP website (<www.wssinfo.org>) provides further information, including a detailed overview of definitions, FAQ about the calculation of JMP estimates and JMP country data summary sheets.

Post-2015 monitoring

The JMP facilitated a process of expert consultations on possible targets and indicators for water, sanitation and hygiene post-2015. This expert consultation involved over 200 international experts and 100 organizations over a period of two years culminating in an expert consensus aimed to
feed into the deliberations of member states and other organizations. The aim of the consultation was to come up with a set of post-2015 WASH targets that are ambitious, achievable and measurable, addressing some of the shortcomings and unfinished business of the MDGs and guided by the concept of progressive realization of the Human Right to Water and Sanitation.

The consensus established four priority issues.

1 Consistent with the United Nations (UN) Deputy Secretary-General’s Call to Action on Sanitation, there was broad consensus on the need to eliminate OD as a first priority and JMP would develop a specific focus on monitoring this post-2015.

2 Targets should specifically include hygiene (handwashing with soap is top priority for improved health and access to menstrual hygiene management is crucial for women’s health, safety and dignity and to stopping girls from dropping out of school) and go beyond households, to include access to WASH in Schools and health facilities.

3 Post-2015 targets should also introduce an additional higher benchmark called ‘safely-managed services’. For water, this means having access on premises to a reliable supply that is sufficient to meet domestic needs and does not represent a significant risk to health. For sanitation, this means having a system to safely store and transport excreta to a designated site for disposal or treatment.

4 Post-2015 targets also need an explicit focus on reducing and eliminating inequalities in access between population sub-groups. Full details of the latest proposals are available in the factsheet produced by WSSCC at <www.wssinfo.org>.
Tool 2
Multiple Indicator Cluster Surveys (MICS)

Level: Country and subnational

What is Multiple Indicator Cluster Surveys (MICS) data?

UNICEF assists countries in collecting and analysing data to fill data gaps for monitoring the situation of children and women through its international household survey initiative, the Multiple Indicator Cluster Surveys (MICS). MICS are the world’s largest source of statistics on children and are essential for monitoring progress towards the Millennium Development Goals (MDGs). Because all MICS are based on the same questions and methodologies, they are easily comparable. Videos explaining MICS and how to use them are available at <www.childinfo.org/mics.html>.

Governments usually carry out MICS with technical support from UNICEF and other UN agencies. Trained interviewers collect representative data through a series of face-to-face interviews. Since the mid-1990s, the MICS have enabled many countries to produce statistically sound and internationally comparable estimates of a range of indicators in the areas of WASH, health, education, child protection and HIV/AIDS. MICS findings have been used extensively as a basis for policy decisions and programme interventions and to influence public opinion on the situation of children and women around the world.

Results from MICS, including national reports and micro-level data sets, are widely disseminated after completion of the surveys and can be downloaded from the MICS pages at <www.childinfo.org/mics.html>. The latest version of MICS (MICS 5) is scheduled for 2012–2014.

What sanitation data does MICS collect?

The MICS are an important source for tracking progress over time and a key input to the JMP. The latest version of MICS (MICS 5) has four questions on sanitation in the household survey.

1. What kind of toilet facility do members of your household usually use?
2. Do you share this facility with others who are not members of your household?
3. Do you share this facility only with members of other households that you know or is the facility open to the use of the general public?
4. How many households in total use this toilet facility, including your own household?

The answers to the MICS questions are tabulated and discussed in the MICS country reports available at <www.childinfo.org/mics.html>.

The MICS household survey also includes a question on the disposal of children’s faeces.
How can MICS data be used in country sanitation programmes?

Because the MICS use a cluster-sampling approach, they are not well suited to monitoring country programmes. But MICS are a good method of measuring equity at the national level: they show disaggregated results, such as urban/rural, and they break down the results by the education level of the head of the household, religion, wealth quintiles and region. Because of this wealth of disaggregated data, MICS are useful tools for advocacy, benchmarking and targeting. MICS data can be especially useful in identifying exclusion and assisting governments in setting more realistic and specific long-term goals for disadvantaged groups.

Country-level MICS data can be found at <www.childinfo.org/mics.html>. MICS country reports are highly recommended as an essential tool for keeping track of the progress the sector makes over time.
Tool 3
Managing discrepancies in national sanitation access data

Many developing countries are faced with apparently contradictory data on levels of access to sanitation. Common discrepancies between national and international coverage estimates are caused by:

- different definitions of access between different data sources (for example, the inclusion or exclusion of people using shared improved toilets is a common discrepancy between different coverage estimates);
- use of old estimates which do not reflect the latest findings from sample surveys or censuses;
- use of the latest survey or census findings versus use of the JMP – JMP figures represent a trend based on linear regression;
- different population estimates, including a different distribution of urban and rural populations; and
- the use of JMP or household surveys (which represent outputs or the experience from a user perspective) versus statistics captured by a service provider on what services have been built or are being managed. Data from service providers (measuring latrines) may also rely on service coverage assumptions (e.g. a communal latrine or school latrine cubicle serving so many people) or not take into account facilities that are dysfunctional.

Steps to improve data convergence

There are a number of steps to develop more coherence and convergence in national level sanitation data.

- Provide a clear explanation of the definitions, nature and methods of collection of JMP data.
- Clarify the definitions, standards and norms in the collection of national data.
- Check that national service coverage statistics are realistic and that they take into account facilities that are no longer functioning or not used.
- Promote improvements in the transparency of national data collection.
- Promote research into national monitoring.
- Encourage multi-stakeholder dialogue to reconcile different data sources and build consensus on what numbers best reflect the national situation.
Reconciling data in Ethiopia

Two key national data sets, the Ministry of Water and Energy (MoWE) provider data and JMP data, showed rural water coverage figures that differed up to 30% in 2010. From 2012, Ethiopia undertook a National WASH Inventory (NWI) that collected provider and user data applying service standard norms. A concerted national dialogue between stakeholders in Ethiopia resulted in improvements in the household survey data and, as a result, the latest JMP result recorded a higher figure (39% for 2011), while the NWI lead to a downward revision of MoWE results (to 49%), leaving just a 10% access figure difference (see the figure below). The convergence of these figures and a better understanding of what each figure is measuring have given policy makers and Ethiopia's leadership clarity on the scale of the challenge it faces to achieve the national target of universal access.

Figure: JMP and MoWE data for rural water coverage in Ethiopia (1990–2013)

Source: Butterworth, John, 'Why different methods generate different numbers: Case study from Ethiopia', presentation, Monitoring Sustainable WASH Services Delivery Symposium, IRC, 2013

Harmonizing national sanitation standards

When JMP definitions deviate from national definitions, figures on the percentage of people who use improved sanitation facilities may vary. Harmonization is always desirable, but not always feasible or critical. This can have a minimal effect, for instance, if a country accepts shared sanitation facilities as improved, but only 6 per cent of the population shares (as in Pakistan, JMP, 2014). But there are cases where the difference can be sizeable. In Ghana, for instance, it is common to share latrines, a normal practice for 59 per cent of the population (JMP, 2014).
Classifying these latrines as ‘unimproved’ has a significant impact on Ghana’s national sanitation coverage status according to the JMP (see discussion on shared latrines below).

The latest version of MICS (MICS 5) included three questions on this topic:

- Do you share this facility with others who are not members of your household?
- Do you share this facility only with members of other households that you know, or is the facility open to the use of the general public?
- How many households in total use this toilet facility, including your own household?

These questions aim to differentiate the use of facilities that anyone can use, which are expected to be largely public sanitation facilities, from the use of facilities only by a known group of people, which are expected to be largely shared private facilities.

Perceptions on the benefits of prescribing and standardizing high-cost sanitation technologies have changed a lot in recent years. Back in 1986 in India, UNICEF recommended one standard design for rural and urban on-site sanitation: the double vault pour flush latrine (Elledge, 2003). Such standards still exist in several countries. In Zimbabwe, where 40 per cent of the rural population practices OD (JMP, 2014), the VIP-latrine remains the standards set by the government. This is one of those cases where harmonization is likely to be challenging, and which requires an in-depth understanding of national sanitation practices, the local sanitation market and the underlying reasons for the high standard.

In most countries demand-led low-cost total-sanitation approaches are challenging the idea of imposing (unachievable) standards on the rural and urban poor. One of the CATS principles underlines this (i.e. that sanitation policy does not impose standards for households for choice of sanitation infrastructure).

**Defining a pit latrine**

Discrepancies in sanitation definitions may exist between what is considered, for example, ‘adequate’ by a community, ‘hygienic’ by a government and ‘improved’ by the JMP. Harmonizing standards helps to make country monitoring more coherent, enables clear targets to be established and means that national and international reports are better able to reflect the reality on the ground.

The degree to which newly built latrines meet the national and/or JMP sanitation standard is a common concern for governments, development agencies and donors. This is a dilemma particularly when popular sanitation promotion approaches, such as UNICEF’s Community Approaches to Total Sanitation (CATS) have demonstrated that uptake can be accelerated when communities are allowed to determine their own standards.

One of the key categories of improved sanitation facilities is the pit latrine with slab. This form of dry latrine often represents the lowest rung on the sanitation ladder that is recognized as an improved sanitation facility, particularly in rural areas. These latrines play a critical role in ensuring
the transition from unimproved to improved sanitation facilities – and thus ensuring progress towards meeting the MDG target for sanitation.

**Definition of a basic pit latrine**

The definition of what constitutes a basic or simple pit latrine can be contentious because of multiple adaptations (different types of slabs, different superstructures, etc.). Under the MDGs, basic sanitation is defined as:

the lowest-cost option for securing sustainable access to safe, hygienic and convenient facilities and services for excreta and sullage disposal that provide privacy and dignity, while at the same time ensuring a clean and healthful living environment, both at home and in the neighbourhood of users.

The more specific JMP definition of a pit latrine with slab is:

a dry pit latrine that uses a hole in the ground to collect the excreta and a squatting slab or platform that is firmly supported on all sides, easy to clean and raised above the surrounding ground level to prevent surface water from entering the pit. The platform has a squatting hole, or is fitted with a seat.

The above JPM definition is highly compatible with the CATS approach in that it neither prescribes a concrete slab (The French translation of the JMP definitions has created some confusion. The French translation of slab (dalle) connotes a solid, usually concrete slab rather than the more general term intended by the definition. As a result, many stakeholders remain uncertain whether pit latrines with non-concrete slabs, particularly those with mud or earth covered floors, qualify as an improved sanitation facility. Nevertheless, the use of a concrete slab/platform/’dale’ is not a criterion), nor specifies any particular building material for the superstructure (as long as it provides privacy). It does not say, for example, that a latrine needs a roof or that the squatting hole needs to be covered.

In conclusion, the JMP definition of a pit latrine with slab will render the majority of simple pit latrines constructed under promotion programmes that trigger communities to design and construct their own latrines as ‘improved’, as long as they follow the basic criteria in the above definition.

**Handling information on shared sanitation**

In current JMP definitions, shared sanitation facilities are categorized as ‘unimproved’ facilities. Yet there are many societies, such as Ghana, which have a high number of shared facilities and the national policy accepts shared facilities as improved. In other situations, separate households within in the same kin group share latrines and the argument has been made that this is similar to having a household latrine and so latrine access should be regarded as improved.
With the assumption that sharing constitutes a greater public health risk, there has been a proposal that, in the post-2015 JMP definitions, facilities shared with fewer than five households might be regarded as ‘improved’ and above this amount as ‘unimproved’. Kelly Baker of Emory University is currently studying the impact of sharing latrines on sanitary conditions in the Global Enteric Multicenter Study (GEMS) – the largest, most comprehensive study of childhood diarrhoeal diseases ever conducted in developing country settings (see <http://medschool.umaryland.edu/GEMS>). Initial findings seem to suggest that the prevalence of faecal contamination does increase in shared facilities and that sharing a facility (with a low threshold of just 1 to 3 other households) is commonly associated with moderate to severe diarrhoea in young children.

Heijnen et al (2014) conclude that the evidence to date does not support a change of existing policy of excluding shared sanitation from the definition of improved sanitation used in international monitoring and targets. However, such evidence is limited, does not adequately address likely confounding, and does not identify potentially important distinctions among types of shared facilities.

Research on the public health significance of shared sanitation is continuing. For the time being, sharing a latrine is still regarded as unimproved access.
TOPIC 3
MONITORING COMMUNITY APPROACHES TO TOTAL SANITATION (CATS)

This topic begins with an overview of monitoring Community Approaches to Total Sanitation (CATS) and then explores each of the key components in turn.

There are three components to be monitored in CATS:

1. Elimination of OD.
2. Disposal of children’s faeces.
3. Handwashing with soap.

What is CATS?

Over 53 countries are implementing some form of community approach to eliminate open defecation, collectively called Community Approaches to Total Sanitation (CATS). CATS is an umbrella term developed by UNICEF sanitation practitioners in 2008 to encompass a wide range of community-based sanitation programming, including Community-Led Total Sanitation (CLTS), School-Led Total Sanitation (SLTS) and Total Sanitation Campaigns (TSC).

As a direct result of UNICEF support, as of June 2013 over 25 million people now live in around 37,000 ODF communities. Through indirect support, such as technical assistance for policy and standards development, advocacy and capacity building, a further 92 million people are living in ODF communities around the world. See ‘CATS Field Notes based on case studies from India, Nepal, Sierra Leone, Zambia’.

Monitoring CATS

Different levels, different information needs

Different monitoring data are needed and collected at the community, subnational, national, continental and regional/global levels. Data collected at community and subnational levels feeds into national data that in turn contributes to global/regional data as illustrated in the figure below.
Levels of CATS monitoring

Information from monitoring tools, such as the ODF Monitoring Protocol, can be used at community, subnational and national levels.

A good ODF Protocol should outline the indicators to be monitored at community, subnational and national levels, along with the recommended processes for data collection, compilation, analysis and verification. At community level, data collected should show the effect of CATS programmes on target populations. At subnational level, data collected should be used to monitor the quality of the design and implementation of CATS programmes. At national level, the consolidated data should be able to provide an overview of the efficacy of national strategies.

Monitoring tools, such as the Country Status Overview (CSO), WASH bottleneck analysis tool (WASH-BAT), UN-water Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS) and Multiple Indicator Cluster Surveys (MICS), also indicate whether or not national ODF/CATS strategies are working. Tools, such as the eThekwini commitments and Sanitation and Water for All (SWA), and tools measuring achievements of the Millennium Development Goals (MDGs), such as the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP), provide a basis for comparison between countries.

Monitoring information from the community level needs to be fed into analysis of monitoring information at the subnational level, which is, in turn, fed into the analysis of monitoring at national and global levels.

Specific information and tools are needed at different levels to answer key monitoring questions.

Source: UNICEF, Monitoring CLTS presentation
### Table: Information and tools needed to answer key monitoring questions

<table>
<thead>
<tr>
<th>Need to know</th>
<th>Community</th>
<th>Subnational/Provincial</th>
<th>National</th>
<th>Regional/Global</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effect on target population</strong></td>
<td>• Baseline practices – OD, HWWS, disposal of children’s faeces</td>
<td>• Costing data</td>
<td>• Consolidated data on sector performance – ODF population, investment, contribution to other social/health outcomes</td>
<td>• Regional sanitation processes (i.e. AfricaSan, SACOSAN, EASAN, LatinoSan)</td>
</tr>
<tr>
<td>• Changes in behaviour over time</td>
<td>• Performance compared among districts</td>
<td>• Triggering to ODF ratios (quality)</td>
<td>• CSO</td>
<td>• ODF Protocol (number of ODF communities, number of communities triggered, etc.)</td>
</tr>
<tr>
<td>• Contribution to other outcomes, such as health and socioeconomic factors</td>
<td>• OD status of all communities</td>
<td>• OD status of all communities</td>
<td>• WASH-BAT</td>
<td></td>
</tr>
<tr>
<td><strong>Quality of design and implementation</strong></td>
<td></td>
<td></td>
<td>• GLAAS</td>
<td></td>
</tr>
<tr>
<td><strong>Are national strategies working?</strong></td>
<td></td>
<td></td>
<td>• MICS/DHS</td>
<td></td>
</tr>
<tr>
<td><strong>How do we compare with other countries?</strong></td>
<td></td>
<td></td>
<td></td>
<td>Progress on high-level commitments (e.g. eThekwini) against increased expenditure, leadership, coordination, and equity and gender issues</td>
</tr>
</tbody>
</table>

Monitoring and evaluation (M&E) systems for CATS at scale must be in line with national policies and country capacity and budgets, which will require attention to make ODF (and post-ODF) monitoring cost efficient.

Monitoring of CATS at the community level needs to address these questions (ideally these should be incorporated into a national ODF Protocol):

- What is your definition of ODF? (i.e. What are the indicators for verifying ODF claims?) Typically, the absence of OD, presence of HWWS facilities and safe disposal of children’s faeces are the three critical indicators?
- What type of baseline data is needed? (i.e. Which indicators show change in community OD behaviour?)
- Which indicators will you choose to measure process quality? (e.g. Are the facilitators performing?)
- How will you monitor sustainability? What kind of ongoing support and monitoring is needed in the community? Who can provide this over the long term? Will you have a second tier ODF status (i.e. ODF+)?
- What kind of coordination and information management system is needed to link information at different levels?
Figure: Questions to monitor CATS at community level and guide the development of a national ODF Protocol

Source: UNICEF, Monitoring CLTS presentation
1 Monitoring the elimination of OD

Level: Country, subnational and community

Eliminating OD is important for human health and is directly linked to reduced stunting and improved educational and health outcomes for children. ODF means that there is no faeces openly exposed in a community. It also means that all members of the community have access to and are using a latrine.

Defining ODF

Countries often have definitions of ‘ODF’ and ‘improved sanitation’ that differ from the JMP definitions. There is a need to harmonize monitoring and indicators around national goals and targets.

Table: Examples of minimum standards for ODF certification in different countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Definition of minimum standards for ODF certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>100% ODF</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>Basic sanitation</td>
</tr>
<tr>
<td></td>
<td>Flushed and pour-flushed toilets/latrines with piped sewer system or septic tank</td>
</tr>
<tr>
<td></td>
<td>Pit latrines with slab and water seal or lid or flap</td>
</tr>
<tr>
<td></td>
<td>Pit latrines with slab, but no water seal, lid or flap</td>
</tr>
<tr>
<td></td>
<td>Ventilated improved pit latrines</td>
</tr>
<tr>
<td></td>
<td>Composting latrines</td>
</tr>
<tr>
<td>Eritrea</td>
<td>100% of the community stopped defecating in the open and the latrines have handwashing facilities (as a proxy indicator for handwashing)</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>ODF: 100% reduction in OD</td>
</tr>
<tr>
<td>Ghana</td>
<td>• No visible signs of human excreta within the community (total absence of faecal matter that is visible to the eye or able to be accessed by houseflies, including faeces in toilet facilities, chamber pots, surrounding bushes/shrubs, refuse dumps etc.)</td>
</tr>
<tr>
<td></td>
<td>• All community members, including children, dispose of their faecal matter in an acceptable manner that does not perpetuate faeco-oral disease transmission</td>
</tr>
<tr>
<td></td>
<td>• ‘Acceptable manner’ in this context means that faeces should:</td>
</tr>
<tr>
<td></td>
<td>– be covered</td>
</tr>
<tr>
<td></td>
<td>– not be accessible to flies</td>
</tr>
<tr>
<td></td>
<td>– not be stored in a polythene bag</td>
</tr>
<tr>
<td></td>
<td>– be put in a latrine</td>
</tr>
<tr>
<td></td>
<td>– be buried deep enough to prevent animals from exposing it.</td>
</tr>
<tr>
<td>India</td>
<td>No OD at any time – all households, schools and pre-schools use a functional toilet</td>
</tr>
<tr>
<td>Indonesia</td>
<td>• All households (and schools) defecate only in improved latrines</td>
</tr>
<tr>
<td></td>
<td>• No human excrement is seen in their surroundings</td>
</tr>
<tr>
<td>Country</td>
<td>Definition of minimum standards for ODF certification</td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>Kenya</td>
<td>The community imposes sanctions, regulations or other efforts to prevent OD practices. The community establishes a monitoring mechanism to achieve access of 100% of households to their own improved latrines. There are clear, written efforts or strategies to achieve total sanitation. Households should have a toilet that is seen to be in use; toilets used have hole covers and there should be no active OD sites (i.e. no human excrement in the open).</td>
</tr>
<tr>
<td>Malawi</td>
<td>ODF: No open defecation; 100% toilet coverage (sharing acceptable). ODF++: no OD; 100% toilet coverage (sharing acceptable); 100% drop hole covers; 100% handwashing facilities; all institutions ODF++</td>
</tr>
<tr>
<td>Nepal</td>
<td>No OD; 100% toilet coverage; one household one toilet; toilet in all institutions (schools, government offices, community centres); toilets in public places</td>
</tr>
<tr>
<td>Nigeria</td>
<td>No faeces openly exposed to the environment; use of any form of latrine that prevents exposure of faeces to the environment; handwashing practice and provision of institution latrines</td>
</tr>
<tr>
<td>Uganda</td>
<td>No OD; 100% latrine coverage; 100% handwashing facilities</td>
</tr>
<tr>
<td>Zambia</td>
<td>Complete stoppage of OD practices with One Family, One latrine</td>
</tr>
</tbody>
</table>

Source: Author’s compilation

**Verifying and certifying ODF** is a crucial part of the ODF monitoring process.

There are excellent examples of protocols and tools for verifying and certifying ODF:

- **Sierra Leone**: Verification and certifying ODF Status.
- **Ghana**: Checklist for ODF Verification and Certification (Ministry of Local Government and Rural Development, Environmental Health and Sanitation Directorate).
- **Zambia**: Verification Procedure (Ministry of Local Government and Housing) and Certification Procedure (Ministry of Local Government and Housing).

**Sustaining ODF** is emerging as a critical challenge. The current focus on triggering communities into action needs to be complemented by consistent follow-up and mentoring to support communities after triggering. CATS programmes will need to ensure that planning and resource allocations take this into consideration.

It is important that programme planners recognize that the achievement of ODF status through CATS brings programmes to the end of one phase (ODF certification) and to the start of the next phase (post-ODF achievement of sustainable sanitation and stabilization of the new social norm). Key recommendations to address sustainability include:

- ensuring follow-up support and ongoing hygiene promotion beyond ODF certification, focusing on reinforcing the new ODF social norm and using various channels of communication and
platforms, such as engagement with: i) faith-based organizations; ii) community and natural leaders; iii) school children and iv) mass media. This will require post-ODF programming with commensurate investments;

- establishing stronger links with community health strategies and other relevant development programmes, such as Water Safety Planning;
- establishing ongoing monitoring of ODF status, through decentralised national systems wherever possible; where this is not feasible, monitoring ODF-certified villages at least annually through sustainability checks to see whether they have relapsed;
- enabling households to move up the sanitation ladder by increasing availability and affordability of durable and desirable sanitation products and services through sanitation marketing (SanMark).

The Community-Led Total Sanitation (CLTS) Follow-Up Guidelines (Follow-Up Guidelines for CLTS prepared May 2010 by Engineers Without Borders, Canada. They are based on the insightful contributions of district CLTS leaders across Malawi) provide information for effective follow up visits after CLTS triggering to:

- document specific aspects of progress and change;
- support and motivate those involved in CLTS on the ground;
- learn about the process of change since the triggering.

The table below provides guidance for monitoring change. Further information on supporting, motivating and learning can be found in the CLTS Follow-Up Guidelines.

**Table: Guidance for monitoring change after CLTS triggering**

<table>
<thead>
<tr>
<th>Human faeces</th>
<th>Facilities</th>
<th>Behaviour</th>
<th>Action plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Visit the OD area and note if there is any evidence of faeces.</td>
<td>• Note presence of new sanitation facilities, built since triggering.</td>
<td>• When you record the number of new sanitation facilities, remember that it only counts if it is 'in use'.</td>
<td>• Compare what the community committed to at triggering (i.e. the Action Plan) to what has been done so far.</td>
</tr>
<tr>
<td>• Use all senses: look, smell and listen for flies.</td>
<td>• How many new latrines have been built?</td>
<td>• What evidence do you look for that show latrines are being used?</td>
<td>• By what date did the community want different changes to occur?</td>
</tr>
<tr>
<td>• Is there less faecal matter than before?</td>
<td>• How many latrines are in the process of being constructed? (i.e. pits dug, etc.)</td>
<td>• What shows that handwashing facilities are being used?</td>
<td>• Are the different changes in the community happening faster or slower than planned?</td>
</tr>
<tr>
<td>• Have people diverted to new OD areas?</td>
<td>• Are there any new handwashing facilities?</td>
<td>• Are drop hole covers actually covering the entire hole? Is it possible for any flies to go in and out?</td>
<td>• Are the local leaders keeping track of the community’s</td>
</tr>
<tr>
<td>• Away from home, are there places where people OD? (e.g. field, road, church, school)</td>
<td>• Do you notice any latrine improvements? (e.g. drop hole covers, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Do any latrines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human faeces</td>
<td>Facilities</td>
<td>Behaviour</td>
<td>Action plan</td>
</tr>
<tr>
<td>-------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>meet standards for basic sanitation? (e.g. safe, private, functional, safe distance from water points)</td>
<td>out?</td>
<td>progress?</td>
<td></td>
</tr>
<tr>
<td>• Do any latrines meet standards of improved sanitation?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Examples of ODF Protocols**

UNICEF’s ‘Monitoring Protocol for the Elimination of Open Defecation in Sub-Saharan Africa’ (2013) paper reviews the processes and protocols for defining, reporting, declaring, certifying and sustaining ODF. It also addresses questions about sustaining ODF and provides ideas for country ODF Protocols.

**Suggestions for making the most out of an ODF Monitoring Protocol**

- Develop one consistent protocol for the WASH sector in-country by building consensus for a common approach to defining and monitoring ODF.
- Develop a monitoring framework that includes both process and output outcomes to reflect such parameters as facilitator quality, data reliability, etc.
- Investigate the use of mobile/smartphone/GPS technologies which may enable more ‘real-time’ monitoring of the situation on the ground and allow for increased versatility in data presentation and mapping.
- Consider ways of recognizing communities that do not involve subsidized awards to communities so as not to undermine the CLTS approach.
- Include a time lag between reporting of ODF by communities and certification to help ensure that the new behaviour is being sustained.
- Aim for a second level of ODF (e.g. ‘ODF+) to ensure continued follow-up after certification and to increase the likelihood of sustainability of the new behaviours.
- Include and budget for follow-up visits with communities to achieve sustainable/improved latrines as part of the CATS process and not as an add-on.
- Consider the certification and sustainability of ODF as the main outcome, not the initial ODF reporting.
- Incorporate handwashing with soap (HWWS) and safe disposal of children’s faeces into the triggering process to strengthen health outcomes. This is key to maintaining an ODF environment.

**Country examples**
Taking global guidance and local contexts and standards into account, countries have developed their own protocols that provide useful examples for the development of an ODF Protocol in your country.

- The Protocol for Implementing CLTS in Kenya (Ministry of Health)

**Examples of CLTS monitoring tools and findings**

- Rural sanitation, climbing the sanitation ladder, Integrated Water Supply and Sanitation Programme: One Million Initiative in Mozambique
- Evaluation Form for Improved Sanitation (CLTS) in Mozambique
2 Monitoring the disposal of children’s faeces

*Level: Country, subnational and community*

While the impact of poor sanitation is often measured by the effects on children, most sanitation interventions target adults. Global monitoring of sanitation coverage against the MDGs generally also overlooks sanitation among young children. Total sanitation means that all people’s faeces are disposed of safely, including those of young children. Although child faeces are most likely to have pathogens, in many cultures children’s faeces are considered less harmful than other faeces.

Analysis using the household surveys, MICS and DHS, shows that many households using improved sanitation still practice unsafe child faeces disposal, with rates worst among more marginalized households. For example, less than 20 per cent of children’s faeces are disposed of safely in the majority of countries in Africa.

Figure: Safe/improved disposal of children’s faeces in countries in Africa


As with adult sanitation, safe disposal of children’s faeces should ensure both separation of the stool from human contact and an uncontaminated household environment. Instances where a child uses a toilet or latrine or their faeces are put or rinsed into a toilet or latrine are considered safe while other methods are considered unsafe.
Figure: Proportion of the under-five population in 79 developing countries, by child faeces disposal method

Sources: DHS/MICS

Monitoring indicators

Information on the disposal of children's faeces is collected through MICS Indicator 4.4, which assesses the disposal of children’s faeces.

For any children under 3 years old, the survey question asks: The last time [name] passed stools, what was done to dispose of the stools?

When calculating the proportion of children's faeces which were safely disposed of, the numerator is the number of children under the age of 3 years whose last stools were disposed of safely, and the denominator is the total number of children under the age of 3 years.

Standard responses are:

- Child used toilet/latrine
- Put/rinsed into toilet/latrine
- Put/rinsed into drain or ditch
- Thrown into garbage (solid waste)
- Buried
- Left in the open
- Other
- Don’t know.

These standard responses are important because:
 harmonized questions and a standard set of responses allows for easier comparison between datasets;
- the use of diapers or potties may be common in some countries, but are only an intermediary step in the disposal process;
- the final disposal location best determines the safety of the faecal disposal practice.

It is important that the verification of the safe disposal of children’s faeces is incorporated into the ODF verification process.

Table: Examples of indicators used to monitor the safe disposal of children’s faeces

<table>
<thead>
<tr>
<th>Element</th>
<th>Type</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe disposal of children’s faeces</td>
<td>Knowledge</td>
<td>Percentage of caretakers who are aware of the risk of the unsafe disposal of children’s faeces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of caretakers who know which disposal techniques are considered safe</td>
</tr>
<tr>
<td>Practice (ODF certification criteria)</td>
<td></td>
<td>Percentage of children age 0–3 years whose (last) stools were disposed of safely (MICS)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of children who are not autonomous in using a latrine whose (last) stools were disposed of safely</td>
</tr>
<tr>
<td>Exposure (total sanitation)</td>
<td></td>
<td>The percentage of ODF communities where the 100% safe disposal of children’s faeces has been incorporated in the certification criteria</td>
</tr>
</tbody>
</table>

**Country data and reports**

Useful country reports on the safe disposal of children’s faeces can be found in ‘Table EN.6: Disposal of Child’s Faeces’ at <www.childinfo.org/mics_available.html>. Data is disaggregated by rural/urban, region, wealth quintile and caretaker’s education, providing a wealth of information for designing and monitoring promotion campaigns. The Demographic Heath Surveys (DHS) also enquire about the care practices of children under the age of 3. The latest DHS survey of your country is available at <www.measuredhs.com/countries>.

Country profiles, using the available MICS and DHS data, have been developed by UNICEF and WSP. These can be found at <www.wsp.org/childfecesdisposal>.

**Strategies going forward**

Interrupt faecal transmission at two points:

1. Sanitary disposal of child’s faeces.
2 Caregiver contact with child’s faeces (handwashing with soap).

Increasing improved disposal of faeces can be incorporated into many existing initiatives.

- CATS: emphasize that a community is not ODF unless everyone, including young children, are defecating in a safe location or their faeces are disposed of safely.
- Encourage the use of potties for young children, the placement of the potty in a latrine/toilet area, and the subsequent disposal of faeces into a toilet/latrine.
- If washable diapers are used, encourage the safe disposal of the wash water (i.e. not in the household yard).
- Promote handwashing with soap after handling a child’s faeces or cleaning an infant’s bottom.
3 Monitoring handwashing with soap (HWWS)

Level: Country, subnational and community

There is strong evidence that handwashing with soap (HWWS) reduces the main causes of child mortality and a range of diarrhoeal and respiratory infections. Different types of handwashing promotion programmes and initiatives have different goals, including advocacy, behaviour change, education, health impact or combinations of these.

The UNICEF Handwashing Monitoring and Evaluation Toolkit is a thorough guide to planning and implementing monitoring and evaluation (M&E) for handwashing promotion programmes.

Figure: Programme phases and monitoring and evaluation activities


The user-friendly guide is designed to be adaptable to a variety of programmes, and introduces the reader to:

- the seven major steps of monitoring and evaluating handwashing promotion;
- choosing indicators appropriate to the programme's objectives;
- collecting the necessary data and sample questions for indicators relevant to handwashing advocacy, education and behaviour change;
- designing evaluation plans, including the advantages and disadvantages of different methods for undertaking quantitative assessments (e.g. comparison against baseline; comparison groups; randomized control trials (RCTs); stepped wedge design and propensity score matching);
- health impact measurement and caveats for the inclusion of health impact assessment as part of an M&E plan. There is little evidence about the effects of large-scale WASH programmes on population health and well-being. Measuring health impacts has a range of challenges, however, including the need for large sample sizes and repeated measures; the costs of data collection; confounding factors (e.g. malnutrition, socioeconomic status); complicated design and analysis; and the need for epidemiological and statistical expertise.
**TOPIC 4**
**MONITORING EQUITY**

*Level: Country, subnational and community*

**Sanitation and equity**

Sanitation improvements have been concentrated in the richer segments of the population. In Africa, the poorest quintile is 20 times more likely to practice OD than the richest quintile.

**Figure: Wealth quintile distribution of sanitation improvements in Africa**

![Wealth quintile distribution chart](chart)


Inadequate sanitation and hygiene affects poorest households most, and young children in particular are more exposed and susceptible to sanitation-related health risks.

In addition to poverty in terms of income and assets, a range of groups are socially excluded, such as women and girls, disabled people, the elderly, those living in informal settlements or urban slums and those living in distant, hard-to-reach areas.

For women and girls, exclusion may mean being left out of decision making about constructing latrines or handwashing stations, being denied access to safe toilets even where they exist or a lack of access to menstrual hygiene management measures. For disabled people, exclusion may mean an inability to physically access toilets or reach handwashing facilities.
'Equity involves recognizing that people are different and require specific support and measures to overcome the specific impediments that stand in the way of their being able to access and use services sustainably, in this case safe sanitation and hygiene practices’ (Patkar and Gosling, 2011, <http://www.wsscc.org/sites/default/files/publications/equity_and_inclusion_synthesis_africa_working_paper_for_africasan_final.pdf>).

Equity means correcting inequalities.


Monitoring equity in sanitation and hygiene is needed at all levels.

- Equity is monitored at the local level by identifying excluded groups and assessing the barriers they face in accessing and using hygienic toilets and practicing hygienic behaviours.
- Equity is monitored at provincial, state (Note: state refers to organs of state and national to actual populations, they are different for monitoring purposes) and national levels by developing systems with disaggregated data (by poverty quintile, by gender, by age, etc.) to target those who are hardest to reach and have the highest need (with targeted financing and with appropriate rewards and sanctions) and to track changes at all levels.

The Working Group on Equity and Non-Discrimination (of the UNICEF-WHO Joint Monitoring Programme Process For Drinking Water and Sanitation on Post-2015 Global Monitoring of Water, Sanitation and Hygiene) has produced a useful checklist for evaluating proposed WASH targets and indicators, aimed at allowing decision-makers to determine whether issues of equity, equality and non-discrimination are adequately addressed given the demands and limits of global monitoring.

Equality Checklist

When examined as a whole, do the goals, targets, and indicators:

- prioritize basic access and focus on progressive realization toward safe and sustainable water, sanitation and hygiene for all, while reducing inequalities?
- address spatial inequalities, such as those experienced by communities in remote and inaccessible rural areas and slum-dwellers in (peri-)urban areas?
- focus on inequities, shining the light on the poorest of the poor?
- address group-related inequalities that vary across countries, such as those based on ethnicity, race, nationality, language, religion, and caste?
- attend to the impacts of individual-related inequalities that are relevant in every country of the globe, such as those based on sex/gender, age, disability, and health conditions imposing access constraints—as they are experienced both inside and beyond the household?
- Do they address menstrual hygiene management?
Eliminating open defecation is an important pillar of our equity agenda as it largely affects the poorest and most vulnerable groups of people. The impacts for children would be significant in terms of morbidity and mortality reductions, and improved educational achievements. Elimination of open defecation would also ensure that basic human rights are met including intangible, but nevertheless very important benefits such as privacy and dignity, especially for women and girls’ (See MoRES Toolkit: Indicator Selection Guidance – WASH, UNICEF, 2012:1).

What is MoRES?

The UNICEF-led Monitoring Results for Equity Systems (MoRES) is a conceptual framework to improve equitable planning, programming, implementation, monitoring and management based on data collection and analysis of bottlenecks (constraints) as well as taking appropriate corrective action.

It confirms UNICEF’s commitment to use data to improve outcomes for the most disadvantaged.

MoRES is based on a determinant framework that recognizes that there are enabling and constraining factors (or bottlenecks) that affect the achievement of desired results.

A bottleneck is defined as a factor constraining progress in the delivery of goods or services to a target population, and in the sustained consumption of that service. A bottleneck can be the absence of an enabler or the presence of a disabler.

Determinant analysis is a systematic approach to identifying priority bottlenecks to achieving the 10 determinants and to unpacking the reasons why specific bottlenecks and barriers exist in order to identify strategies to address them. See MoRES Bottlenecks and Strategies to address them.

Ten determinants of equity are identified within four main domains. Country-specific indicators need to be identified for each of these determinants.

Table: Determinant analysis to identify priority bottlenecks

<table>
<thead>
<tr>
<th>Categories of determinants (domains)</th>
<th>Determinants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabling environment</td>
<td>– Social norms&lt;br&gt;– Policy and legislation&lt;br&gt;– Budget and expenditure&lt;br&gt;– Management and coordination</td>
</tr>
<tr>
<td>Service delivery (broadly corresponds to supply)</td>
<td>– Essential commodities and inputs&lt;br&gt;– Access to information</td>
</tr>
<tr>
<td>Behaviour change (broadly corresponds to demand)</td>
<td>– Financial access&lt;br&gt;– Social and cultural practices&lt;br&gt;– Continuous use</td>
</tr>
<tr>
<td>Quality</td>
<td>– Sustainability of services</td>
</tr>
</tbody>
</table>
**Equity bottlenecks and indicators**

Critical indicators are:

- the proportion of a country’s population using an improved sanitation facility (disaggregated by residence and wealth quintile);
- the proportion of a country’s population that practices OD (disaggregated by residence and wealth quintile);
- the number of countries globally having a national policy or legislation on elimination of open defecation.

**Table: Guidance for the selection of level 3 (WASH-related) country-specific indicators based on frequently found bottlenecks**

<table>
<thead>
<tr>
<th>Determinants</th>
<th>Examples of bottlenecks</th>
<th>Ideas for country-specific indicators</th>
<th>Links with monitoring tools</th>
</tr>
</thead>
</table>
| **Social norms** | Provision of sanitation (through construction programmes, subsidies) does not change social norms (i.e. does not result in increased use of facilities/reduction in OD)  
Girls are pursuing education in environments that lack adequate facilities, supplies, and gender sensitivity | Percentage of population ODF/living in ODF communities  
Percentage of schools with adequate sanitation facilities  
National legislation on sanitation with specific reference to the elimination of OD | Elimination of ODF Protocol  
CATS in Schools  
UNICEF Handwashing Monitoring and Evaluation Toolkit  
WASH-BAT |
| **Enabling** | Weak political will and leadership | Lead institution identified  
National Sanitation policy and strategy available  
Sectoral review of eThekwini commitments (or equivalent)  
CSO completed or reviewed | The eThekwini Declaration and AfricaSan Action Plan 2008  
WASH-BAT |
<table>
<thead>
<tr>
<th>Determinants</th>
<th>Examples of bottlenecks</th>
<th>Ideas for country-specific indicators</th>
<th>Links with monitoring tools</th>
</tr>
</thead>
</table>
| Legislation/Policy | • Standardization of sanitation technology restricts communities to a limited menu of technologies  
• No comprehensive sanitation policy, with clear accountabilities  
• Policies of various ministries with sanitation components overlap, contain inconsistencies in approaches | • Lead institution identified  
• National Sanitation policy and strategy available  
• Sectoral review of eThekwini commitments (or equivalent)  
• CSO completed or reviewed | • The eThekwini Declaration and AfricaSan Action Plan 2008  
• WASH-BAT |
| Budget/Expenditure | • National budget allocated to sanitation in general and to ODF initiatives in particular remains very low – only a very few NGOs are piloting ODF approaches  
• Low budget allocations for sanitation and lack of accountability – as a result, sanitation programmes tend to rely on donor supported projects. Where funds are available, they are often used for infrastructure rather than sanitation promotion | • Percentage of national budget allocated to sanitation and hygiene  
• Availability of budget for sanitation promotion at subnational level  
• Agreed percentage of national WASH budgets allocated to sanitation promotion  
• Sectoral review of eThekwini commitments (or equivalent)  
• CSO completed or reviewed | • The eThekwini Declaration and AfricaSan Action Plan 2008  
• SWA high-level commitments |
| Management/Coordination | • Lack of adequate cross-ministry coordination group on sanitation  
• Difficulties creating cross-ministerial consensus, particularly if a ministry is not willing to let go of its mandate, but also not willing to lead on improving the sector  
• Lack of accountability  
• Lack of data/monitoring system | • Lead institution identified  
• Sectoral review of eThekwini commitments (or equivalent)  
• National plan with targets, strategies, resources and accountabilities  
• National monitoring and information system in place  
• Regional reports on sanitation  
• Existence of WASH consultative group on sanitation | • The eThekwini Declaration and AfricaSan Action Plan 2008 |
<table>
<thead>
<tr>
<th>Determinants</th>
<th>Examples of bottlenecks</th>
<th>Ideas for country-specific indicators</th>
<th>Links with monitoring tools</th>
</tr>
</thead>
</table>
| Availability of essential   | - Availability of construction materials and skills at community level is a challenge in some areas. In most areas bricks are locally produced but in some districts, brick moulding is a challenge due to loose soils. River sand and pit sand are not available in some areas while cement is rarely available in most remote rural areas  
- Predetermined technologies and supply driven programmes do not meet needs and are often too expensive to be replicated/maintained  
- Supply chain – supplies dispersed (no ‘one-stop shop’, inconsistent quality and availability, insufficient variety of technology options)  
- Project approach does not create sustainable latrine component supply chains  
- Lack of technological options for adverse hydro-geological conditions or topographical terrain                                                                                                                                                                                                                           | - Percentage of communities with at least one entrepreneur stocking WASH commodities  
- Percentage of latrines constructed from locally available materials  
- Sanitation Marketing strategy in place                                                                                                                                                                                                                           | • Monitoring Sanitation Marketing  
• UNICEF Guidance note 9  
• Sanitation Marketing guidelines (Ethiopia)                                                                                                                                                                                                                                     |
<table>
<thead>
<tr>
<th>Determinants</th>
<th>Examples of bottlenecks</th>
<th>Ideas for country-specific indicators</th>
<th>Links with monitoring tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to adequately staffed services, facilities and information</td>
<td>• Too few public and environmental health personnel</td>
<td>• Proportion of wards with access to at least one Environmental Health Technician (or equivalent) per ward</td>
<td>• Sector Performance Reviews</td>
</tr>
<tr>
<td></td>
<td>• Too few public and environmental health personnel trained on CATS or other ODF approaches</td>
<td>• Number of certified CATS facilitators</td>
<td>• Assessing service levels</td>
</tr>
<tr>
<td></td>
<td>• Insufficient good quality facilitators to support CATS</td>
<td>• Availability of pit emptying services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lack of services to support households once pit latrine is full</td>
<td>• Proportion of households with access to information on sanitation through various channels including health facilities, Community Health Worker or equivalent, media</td>
<td></td>
</tr>
<tr>
<td>Demand</td>
<td></td>
<td>• Number of trained CATS facilitators per 100 communities</td>
<td></td>
</tr>
<tr>
<td>Financial access</td>
<td>• The ‘culture’ of asking for subsidies (donor syndrome) still militates against self-reliance (even where people can afford to provide themselves with a toilet)</td>
<td>• Percentage of communities with at least one household with a self-initiated latrine</td>
<td>• Monitoring Sanitation Marketing</td>
</tr>
<tr>
<td></td>
<td>• Perceived and real high costs</td>
<td>• Number of microcredit schemes</td>
<td>• UNICEF Guidance note 9</td>
</tr>
<tr>
<td></td>
<td>• Few technically appropriate, attractive, low-cost options available in local markets</td>
<td>• Sanitation marketing strategy</td>
<td>• Sanitation marketing guidelines (Ethiopia)</td>
</tr>
<tr>
<td></td>
<td>• Difficulty saving up money and a lack of financing options</td>
<td>• Existence and selection of low-cost appropriate technology options</td>
<td>• Costing criteria (CATS and SanMark)</td>
</tr>
<tr>
<td>Socio-cultural practices and beliefs</td>
<td>• Social/cultural beliefs/practices are resistant to change</td>
<td>• Percentage of population ODF</td>
<td>• Elimination of ODF Protocol</td>
</tr>
<tr>
<td></td>
<td>• Time lag between triggering and action to achieve ODF status</td>
<td>• Community members report socio-cultural barriers to using toilets/latrines (e.g. sharing with in-laws, hole over hole, etc.)</td>
<td></td>
</tr>
</tbody>
</table>

UNICEF Sanitation Monitoring Toolkit
<table>
<thead>
<tr>
<th>Determinants</th>
<th>Examples of bottlenecks</th>
<th>Ideas for country-specific indicators</th>
<th>Links with monitoring tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuity of use</td>
<td>• Slippage: individuals/households returning to OD and/or not consistently using sanitation facilities</td>
<td>• Percentage use of latrines&lt;br&gt;• Percentage of population ODF&lt;br&gt;• Proportion of communities sustaining ODF after one year&lt;br&gt;• Proportion of communities that are ODF after one year and practicing handwashing with soap following defecation&lt;br&gt;• Proportion of communities that have upgraded their latrines</td>
<td>• Sustainability checks&lt;br&gt;• Assessing service levels&lt;br&gt;• MICS and DHS data&lt;br&gt;• Elimination of ODF Protocol</td>
</tr>
<tr>
<td>Quality</td>
<td>• Quality of facilitation for community-level triggering&lt;br&gt;• Lack of follow-up (post-triggering)&lt;br&gt;• Lack of timely OD certification and monitoring&lt;br&gt;• Sanitation facilities built by households do not meet JMP standards of ‘improved sanitation’</td>
<td>• Percentage of population ODF&lt;br&gt;• Post triggering follow up statistics&lt;br&gt;• Number of communities where verification process has taken place&lt;br&gt;• Number of communities where slippages rates are less than 5%</td>
<td>• Sustainability checks&lt;br&gt;• Assessing service levels&lt;br&gt;• Elimination of ODF Protocol</td>
</tr>
</tbody>
</table>

Note that data collected through the tools to assess the enabling environment (including WASH-BATS, marketing and service performance) can be used to monitor equity using the MoRES approach. MoRES hones in specifically on bottlenecks to equitable services delivery and enables a more detailed analysis of equity-related constraints and involves an analysis of the quality of services at subnational level.
Many countries, including Bangladesh, the Democratic Republic of the Congo, Ghana, Mozambique, Nepal, Zambia and Zimbabwe, have completed bottleneck analyses.

**Lessons learnt so far**

- The MoRES determinants framework has proved useful in developing a structured analysis of problems and weaknesses in the service delivery pathway.
- The outcomes of bottleneck analyses have been used as the basis for developing funding proposals.
- The flexibility to develop country-specific indicators and build on existing monitoring systems and adapt MoRES determinants is fundamentally important.
TOPIC 5
MONITORING SUSTAINABILITY AND SECTOR PERFORMANCE

1 Joint Sector Reviews

Level: Country and subnational

Public sector performance monitoring is part of a global thrust towards improved accountability, transparency, results-based management and evidence-based decision and policy making. It is an important element of public sector reform and aims to answer key questions such as:

- Is the delivery of public services improving?
- How does performance compare to similar public sector bodies?
- Are performance targets being met?
- Should more or fewer resources be allocated to certain areas or specific public sector bodies?
- How sustainable are the operations of public sector bodies?

As noted in the background paper for the Monitoring Sustainable WASH Service Delivery Symposium (April 2013), sub-sector performance monitoring requires a common monitoring framework that combines data from various sources at different levels, including asset inventories, service delivery characteristics, budgets and finance.

Sector performance monitoring is by definition a country-led process in which a dedicated country entity takes the lead in coordinating regular updates, engages civil society and other stakeholders in analysis and sense making, makes performance reviews accessible and feeds into global monitoring processes.

Uganda is a good example of joint performance monitoring where the government, through its Ministry of Water and Environment (MWE), takes the lead with the involvement of civil society organizations, local government and development partners, who contribute to data collection and the joint analysis and reflection.

Interesting summaries and lessons from Uganda’s water and sanitation sector performance monitoring and review are available at <www.mfdr.org/sourcebook/6-5Uganda-AssessingPerformance.pdf> and <www.lboro.ac.uk/well/resources/Publications/Briefing%20Notes/WELL%20BN71%206pages%20No%20Crops.pdf>.

Summary of Uganda’s Joint Sector Review success factors and lessons

- Incentives for improved national sector monitoring and evaluation (M&E) have been enhanced in Uganda because the government is genuinely interested in reviewing sector performance.
- A sector monitoring and evaluation group that includes representatives from major stakeholders is key to coordinating performance M&E.
There is national sector performance monitoring and evaluation in Uganda. A gradual process of the transfer of responsibility for data analysis and performance reporting from consultants to sector government agencies has worked well. A set of 'golden' performance indicators for water and sanitation enables tracking of performance against a manageable number of key indicators to inform key decisions. National household survey data has been invaluable as a means of independent assessment and it enables the review of service levels by income group. The use of a variety of data sources provides a more comprehensive and balanced picture. Production of good quality annual performance reports enables key M&E information to be used for the government's annual planning and budgeting.

(Source: Briefing Note 7.1, WEDC)

Summary of how Uganda’s Performance Measurement Framework embodies the principles of Management for Development Results

- At all phases – from strategic planning through implementation to completion and beyond – the dialogue focuses on results for partner countries, development agencies, and other stakeholders.
- A sub-group of partners has been specifically established to oversee the implementation of the Performance Measurement Framework.
- Dialogue with stakeholders takes place through regular consultation and formal sector stakeholder meetings, such as the Joint Sector Review.
- Actual programming, monitoring, and evaluation activities are aligned with the agreed expected results.
- The Performance Measurement Framework has been specifically designed around the goals of the water and sanitation sector.
- The results reporting system is kept as simple, cost-effective, and user-friendly as possible.
- An annual Sector Report is produced that uses existing data sources wherever possible.
- The framework manages for results by arranging resources to achieve outcomes.
- The Performance Measurement Framework has been specifically established to address Management for Results. Thus the golden indicators have been developed to focus on sector outcomes and impacts rather than the traditional outputs of water points constructed.
- Results information is used for management learning and decision making, as well as for reporting and accountability.
- The Sector Report has become the presentation at the annual Joint Sector Review, which is the main policy-level decision-making body for all sector stakeholders.
- The Performance Measurement Framework plays a key role in all the main planning tools and documents related to the role of the water and sanitation sector in poverty eradication.

(Source: Pinfold, n.d., pp. 95–100.)

Sustainability checks (SCs)
Concerns about the sustainability of sanitation are shifting. In the past, household sanitation programmes offering subsidized facilities were often plagued by demand-related issues that resulted in abandoned or under-used toilets. Newer Community Approaches to Total Sanitation (CATS), in which households build their own toilets as part of community-wide campaigns to eliminate open defecation, are successfully overcoming these issues.

Sustainability problems persist even in successful CATS programmes, for example in the ‘depth’ of behaviour change, the longevity of self-built latrines and the capacity of local markets to meet demand for new or upgraded facilities.

To better understand and address sustainability problems, UNICEF introduced the use of sustainability checks into WASH projects funded by the Government of Netherlands in six countries in East and Southern Africa. By the end of 2012, 14 sustainability checks were complete or underway in these countries.

Sustainability is a multi-faceted issue, and solutions must be holistic in nature, encompassing not only technology choice or community management arrangements, but the entire range of factors that affect sustainability. These include the policy context, management and institutional arrangements, financial issues, community and social aspects, technologies and supply chains. Most importantly, issues of sustainability must be mainstreamed into the design and execution of WASH programmes.

### Table: Indicator groups used in sustainability checks: Mozambique example

<table>
<thead>
<tr>
<th>Indicator Group</th>
<th>Indicators (selected)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical</td>
<td>Water point functionality and use, breakdown frequency and repair time, knowledge of spare parts location and cost, distance to spare parts</td>
</tr>
<tr>
<td>Social</td>
<td>Water committee meeting regularity, clarity of committee roles and responsibilities, proportion of women, routine maintenance capacity, availability of local artisans for repairs</td>
</tr>
<tr>
<td>Financial</td>
<td>Household contributions, tariff and financial management, financial records</td>
</tr>
<tr>
<td>Institutional</td>
<td>Water point database existence and functionality, frequency of database updating</td>
</tr>
<tr>
<td>ODF status</td>
<td>Evidence of open defecation, latrine infrastructure assessment, existence of handwashing station with water and soap or ash</td>
</tr>
</tbody>
</table>

Source: Sustainability Checks the UNICEF Experience in ESAR Case Study

### Sanitation criteria – Mozambique example

- Latrines should have a durable and easily cleanable slab.
- There should be a well-fitting lid to cover the latrine/toilet.
• The latrine should provide privacy (with a door or curve).
• A handwashing system should be in place.
• Soap or ash for handwashing should be present.
• The backyard should be clean.

ODF status is maintained if:

• 100 per cent of inspected households have a latrine;
• 100 per cent of latrines have a slab;
• 100 per cent of households have a handwashing system;
• 100 per cent of handwashing systems have soap or ash;
• there is no visible faeces in the environment;
• 0 per cent of subjects report OD by themselves or others in the last 3 days.

Questions used for sustainability check in Madagascar

There are three sections to the questionnaire:

• Had the community been declared ODF? If so, who was the triggering agency, when was the triggering undertaken, and was it ODF now?
• Were households in the community rising up the sanitation ladder?
• Had the community received sensitisation to HWWS?

The visual inspection also has three elements:

• Was the community visibly practising ODF (i.e. did every household visited by the enumerator have and/or use a latrine)?
• What was the condition of the latrines visited by the enumerator?
• What proportion of households visited by the enumerator was practising HWWS?
Questions for WASH committee and CLTS leaders

1. What is the population of this community?
2. How many households are there?
3a. Has this community been declared ODF?
3b. If yes to question 3a, when was the community declared ODF?
3c. Who made the declaration that the village was ODF?
4. Who was the triggering agency?
5. Was a prize given for the award of ODF?
6. If yes to question 5, was the prize i) cash or ii) other?
7. Has the community adopted a regulation declaring that all who live and visit there must not practice open defecation?
8. Does the WASH committee/community police monitor adherence to this regulation?
9. Does the community build latrines for those unable to do so in order to ensure ODF?
10. Is the community ODF now?
11. How many latrines are there in the village?
12. How many latrines are shared by more than one family?
13. Since the community was declared ODF, how many latrines have collapsed?
14. Of that number, how many have been rebuilt and are being used again?
15. Since the community was first declared ODF, how many households have made replacements to the latrines (not after collapse)?
16. What replacements have been made?
16a. Replacements of same quality
16b. Better latrine sanplats
16c. Better superstructures
17. Is there a seller/are there sellers of sanitary wares in the locality?
18. Has the community had sensitisation on handwashing with soap?
19. Who was the triggering agency?
20. When did this take place?

ODF confirmation: Questions to fill in after a visual inspection around the community

21. What proportion of the homes you visited have functioning and used latrines? (Refer particularly to the guidance below.)
22. What is your assessment of the quality of the sanplats and superstructures, especially to last periods of rough weather etc. Will they last?
23. What proportion of houses had very clean toilets?
24. What proportion of houses had a handwashing point within around ten paces of the latrine?
25. What proportion of houses had water available at that handwashing point (e.g. a functioning tippy-tappy; you can get a household member to indicate how to use it to confirm their use)?
26. What proportion of houses had soap or other cleaning agent present at the handwashing point which is clearly being used?
Monitoring ODF sustainability

Experiences and challenges

The CATS approach for eliminating OD has expanded rapidly in ESAR in recent years, and is now widely practiced in many countries in the region. The Directorate-General for International Cooperation, Ministry of Foreign Affairs, the Netherlands (DGIS)-UNICEF projects have been modified to include CATS and, by 2011, five of the six countries had incorporated OD monitoring into their sustainability checks.

In an ideal scenario, monitoring the sustainability of efforts to eliminate OD in communities would use the same comprehensive toolset used for the certification of ODF status. These include techniques such as visiting all previous known OD sites, conducting transect walks with community members, rigorously checking footpaths and other signs to determine if latrines are actually being used, and extensive community consultation. However, due to time and resource constraints, the annual sustainability checks use more limited monitoring protocols.

These protocols vary from country to country. Some OD monitoring includes a wide observation radius (including in nearby fields), some limit observation to the immediate area surrounding household latrines, and some use focus group discussions in addition to observations. In Mozambique, for example, a focus group of nine people selected at random in each survey community are asked whether or not they defecate in the open and whether or not they've seen anyone else do it. Since handwashing with soap or ash is a criterion for ODF certification in some countries, the sustainability checks are also beginning to incorporate tools to assess this (using the proxy indicator of the existence of washing stations with the presence of soap/ash).

A key challenge for ODF sustainability monitoring through the sustainability checks is finding tools nuanced and flexible enough to assess defecation and hygiene practices and behaviour change patterns within the quick in-and-out visits typical of sustainability checks. This involves a careful mix of proxy observation indicators and community consultation tools, and the fielding of teams that can effectively use these tools. In addition, there is a need to move towards the kind of predictive indicators that are being used for water supply sustainability monitoring, such as the existence of local sanitation markets, supply chains and the reach of marketing campaigns (Source: Downs, K., 'The Sustainability Check: A rural water supply and sanitation monitoring tool', presentation at the University of North Carolina Water and Health Conference, 2012).

In spite of these challenges, the sustainability checks are already contributing to the body of knowledge of the elimination of OD in the region. In both Zambia and Mozambique, the sustainability checks have chronicled some relapse in ODF communities, while the latest Malawi sustainability check is documenting the impact of sanitation promotion in CATS communities that have been triggered but not yet certified.
Key learning points from sustainability check experience so far

**Multivariate monitoring:** Findings so far highlight the importance of moving beyond technical criteria to addressing the complex causes of poor sustainability by monitoring key indicators in the institutional, social, financial and behavioural spheres.

**Special tools for ODF sustainability assessment:** New methodologies may be needed for monitoring ODF sustainability that strike a balance between the comprehensive ODF assessment toolkits used during certification exercises and the more limited set of tools that are used in the context of the sustainability checks.

**Predictive vulnerability monitoring:** Predictive monitoring indicators that pinpoint vulnerabilities likely to have an impact on long-term sustainability are an essential component of the sustainability check toolkit. The use of such indicators allows the sustainability checks to predict future problems at the early stages of the project cycle, when infrastructure is still new.

**Balancing continuity with the need to modify monitoring toolkits:** Because the sustainability checks cover a long period of time (e.g. 8 years in Mozambique), a balance must be achieved between the need to modify sustainability check indicators and methodologies – reflecting improved monitoring practices, changes in project parameters or changes in the programming context – with the need to maintain multi-year comparability.

**Multiple tools for assessing sustainability:** Sustainability checks are the centrepiece of the sustainability monitoring effort, but they are not the only tools. Evaluations and other components of the project-monitoring package also yield important information on sustainability, and the sustainability checks are complemented by special studies on specific sustainability issues, such as the drilling practices study in Malawi.

**Sustainability accountability:** As the sustainability check initiative grows there is a need to refine sustainability accountability frameworks. Since UNICEF implements all projects jointly with government partners within the formal country programme agreement, responsibility for the sustainability of outputs is shared and accountability mechanisms must take this into account. Sharing accountability with national counterparts in this way will also help to promote the institutionalization of sustainability within government policies and planning.

2 Assessing service levels

**Level: Service-provider and community**

Service-level assessments are aimed at defining and measuring the actual service levels received by users. The 'sanitation service level tool' aggregates and benchmarks sanitation based on service levels rather than technology-related or behaviour-related indicators and takes the full delivery chain into account from containment to disposal of faecal waste.
The tool was developed to assess the disaggregated life cycle costs of net service levels received. Although the tool uses a ladder metaphor to illustrate net service levels received and applies similar terminology, service levels do not correspond to the JMP sanitation technology access ladder.

Service levels assessment parameters that are used are:

- accessibility (number of toilets per household and distance of toilets from household);
- use (are the latrines used?);
- reliability (household maintenance and availability of pit-emptying services and support);
- environmental protection (toilets constructed at least 15 m from water sources, safe disposal of latrines contents and safe re-use).

The sanitation service-level ladder covers excreta and urine management and comprises four levels, two of which represent different types of acceptable service and two represent a limited or below-standard service, which does not meet basic norms and does not properly merit the description of a service. The two levels of acceptable service are described as ‘basic service’ and ‘improved service’.

**Basic service**: At this level, all households have reasonable access to at least one safe, relatively robust, private sanitation facility, available handwashing 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 handwashing facilities, where minimal effort is required for desludging and long-term maintenance, and there is re-use as well as safe by-products and non-problematic environmental impacts.

**Table: The sanitation service-level ladder**

<table>
<thead>
<tr>
<th></th>
<th>Accessibility</th>
<th>Use</th>
<th>Reliability</th>
<th>Environmental protection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Improved service</strong></td>
<td>Each family dwelling has one or more toilets in the compound Easy access for all family dwellings</td>
<td>Facilities used by all household members</td>
<td>Regular or routine operation and maintenance (O&amp;M) service (including pit emptying), requiring minimal effort Evidence of care and cleaning of toilet</td>
<td>Non problematic environmental impact Safe disposal and re-use of safe by-products</td>
</tr>
<tr>
<td><strong>Basic service</strong></td>
<td>Cement or impermeable slab at national norm distance from</td>
<td>Facilities used by some household members</td>
<td>Unrealiable O&amp;M (including pit emptying) requiring high level of user</td>
<td>Non problematic environmental impact Safe disposal</td>
</tr>
<tr>
<td></td>
<td>households (per household or shared)</td>
<td>effort Evidence of care and cleaning of toilet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------</td>
<td>-----------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Limited service</strong></td>
<td>Platform without impermeable slab separating faeces from users</td>
<td>No or insufficient use</td>
<td>No O&amp;M (e.g. pit emptying) taking place and no evidence of cleaning or care for the toilet</td>
<td>Significant environmental pollution, increasing with increased population density</td>
</tr>
<tr>
<td><strong>No service</strong></td>
<td>No separation between user and faeces (e.g. open defecation)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOPIC 6
MONITORING SANITATION MARKETING

Level: Country, subnational and community

Matching demand with supply

Community Approaches to Total Sanitation (CATS) and developing local markets (Sanitation Marketing) are complementary. Both demand and supply are needed to trigger and sustain long-term safe latrine usage for all (see Guidance Note 10 Sanitation Marketing and CATS: How do we link approaches?).

As people become motivated to change their sanitation behaviours, they must have access to durable, affordable sanitation solutions. Sanitation Marketing (SanMark) uses market-based approaches to stimulate demand and private sector supply that can, under the right conditions, address the need for sustained local supply of affordable, desirable sanitation products and services. SanMark focuses on reaching low-income households currently underserved by markets (see Guidance Note 1 Situation Analysis: How do I know if Sanitation Marketing will work in my country?).

Goals and indicators

Sanitation Marketing has two main goals:

1. to increase household investment in, and sustained usage of, improved latrines;
2. to increase market availability of affordable, desirable, improved latrine products and services.

To measure success, both demand and supply indicators need to be monitored over time, together with indicators of the enabling environment for market growth and sustainability.

Demand-side indicators:

- Track changes in household improved latrine purchase, ownership, and usage over time using existing monitoring tools.
- May need additional monitoring to help guide programme implementation related to product/service awareness, access to local supply, intention to purchase and post-purchase satisfaction.

Supply-side indicators:

- Monitor businesses to measure changes in private sector supply of household sanitation services explicitly.
• Involve measuring sales growth and other attributes of success and business sustainability to track expansion and identify evolving supply-side barriers.

Enabling environment indicators:

• Monitor the roles of market facilitators, particularly local government, but also government at other levels as well as others, such as NGO partners who are helping to facilitate the market.
• Can help to assess the sustainability of SanMark interventions and when external support can be phased out.
• Include equity indicators by disaggregating household results from the start, which makes it easier to assess uptake among different sub-groups, including the poorest and other vulnerable populations.

**Total Sanitation and Sanitation Marketing (TSSM)**


National level:

• Does the national sector policy or strategy include a component, such as improving the availability of affordable sanitation goods and services in local markets, for all classes of consumer?
• Are budgets allocated for national/regional market research (e.g. formative research with consumers, supply-chain assessment with providers, marketing strategy development, capacity-building of private sector providers to implement marketing strategy developed or Behaviour Change Communication campaigns)?
• Are management skills made available to utilize these allocations?

Local government level:

• Is local government aware of the marketing strategy developed, including product options, price and payment options, place (Who will deliver to consumers and where?) and promotion (Who will inform consumers about options and how?)?
• Are post-triggering follow-up providers equipped with communication aids and training for informed-choice facilitation in communities?
• Are a sufficient number of trained sanitation service providers available in the district or community?
• Are a sufficient number of sanitation improvement options available to poorer segments of consumers in the district?
• Are local government mechanisms in place to facilitate an interface between triggered communities and trained service providers?
UNICEF’s SanMark Guidance Note 9 Monitoring and Evaluation – How do we measure sanitation marketing progress? sets out:

- common indicators for measuring progress in Sanitation Marketing;
- how to design monitoring frameworks and data collection tools;
- practical tips for integrating SanMark monitoring into existing sanitation programme monitoring.

The Guidance Note suggests indicators and mechanisms for monitoring SanMark against the key questions below (see indicators and mechanisms columns in the tables on pages 2, 4, 5, and 7 of the UNICEF Guidance Note 9: Monitoring and Evaluation).

**Outcome: Increase in improved latrine uptake and usage among target populations**

- How are SanMark interventions accelerating access to improved sanitation services?
- Who can access improved services?
- Are interventions increasing access and use for the poor and poorest?

**Objective 1: Increase ability to facilitate and regulate the sanitation market**

- Are national and subnational governments increasing capacity to monitor, facilitate and regulate new markets?
- How do government and other partners support businesses to expand services to low-income households?
- Is external technical support to government and the private sector demand driven? Is there an exit strategy?

**Objective 2: Improve market supply of affordable, desirable products**
• How well do products and services meet the needs of low-income consumers?
• Are supply-chain businesses increasing availability of products and services to low-income households?
• How financially sustainable and viable are sanitation business activities? What is the likelihood that activities will continue over time?
• What are characteristics of high-performing businesses? What are incentives for businesses to enter and expand sanitation service provision?

Objective 3: Increase consumer demand for, and investment in, improved sanitation

• How are SanMark interventions increasing household awareness, intention and motivation to invest in sanitation improvements?
• How effective and sustainable are demand-creation and promotional activities?
• How are financial barriers to investment being addressed through the market and/or complimentary financing mechanisms?

Tips for expanding monitoring frameworks

The Guidance Note gives a summary of three tips for expanding monitoring frameworks.

Tip 1: Build on and harmonize with existing monitoring efforts

Monitoring household access and behavioural outcomes should be part of broader efforts to improve and systematize community-level monitoring systems, particularly at post-triggering and post-ODF stages of the CATS process. Avoid duplicating efforts: if different agencies are supporting implementation of SanMark and CATS, UNICEF can support the development of a common national framework and procedures. Consider how community-level data will be fed into the government’s regional and national databases. This may include exploring the role that Information and Communication Technology (ICT) tools, such as mobile phones, might play in monitoring systems.

Tip 2: Budget and plan for the development of a sales and business database

Since market supply-side and business monitoring may be a fairly new area, consider recruiting technical input from small business development service providers to help to design and test sales and business monitoring tools at the start of your SanMark programme.

This can be done as part of business development and training activities (see Guidance Note 4). Local government staff or other partners can do on-going collection of sales-monitoring data. However, it is probably best to avoid the use of natural leaders or CATS facilitators in this sort of supply-side monitoring, which happens at a much wider geographic scale and requires specific business development skills. Where possible, consider entering SanMark supply-side data (e.g. on sales) into existing central databases to enable trend and spatial analysis.

Tip 3: Budget and plan to measure equity
Whether through community mapping or household surveys, the impact of sanitation interventions – including CATS and SanMark – on the lives of the poor must be tracked. Access and usage by wealth quintile or other poverty classification system should be measured over time to ensure that gains made in achieving ODF are not lost and that the poor are not left on the bottom rung of the sanitation ladder.

Tracking equity will involve extra steps and resources, so budget additional resources for baseline and follow-up monitoring. This includes building equity monitoring into WASH sustainability checks.
Topic 7
MONITORING WATER, SANITATION AND HYGIENE (WASH) IN SCHOOLS

Level: Country, subnational and community

What is WASH in Schools?

WASH in Schools refers to water, sanitation and hygiene education and washing facilities in schools. WHO/UNICEF (2009) Guideline on Water, Sanitation and Hygiene Standards for Schools in Low-cost Settings’ describes the standard for WASH in Schools as follows:

A school with adequate WASH has a functional and reliable water system that provides sufficient water for all the school’s needs, especially for handwashing and drinking. The school must also have a sufficient number of toilet facilities for students and teachers that are private, safe, and clean and gender segregated. The school should have several handwashing facilities, including some that are close to toilets to facilitate handwashing after defecation. Facilities should cater to the needs of the entire student body, including small children, girls of menstruation age and children with disabilities. Hygiene education should be included in the school curriculum to instil good hygiene, sanitation and water-handling practices, and students should be encouraged to transmit hygiene knowledge to their families and communities.

Why WASH in Schools?

WASH in Schools has a significant positive impact on child health and on education outcomes. Safe, adequate water and sanitation facilities in schools, coupled with hygiene education:

- reduces the incidence of diarrhoea and other hygiene related diseases;
- can have a significant impact on school enrolment, girl/boy enrolment ratios, absenteeism, and school performance;
- can influence the hygiene practices of the children’s parents and siblings as children act as agents of change in their households and communities.

UNICEF’s ‘Raising Even More Clean Hands’ report notes that WASH in Schools creates a cycle of opportunity.
The challenge

However, as noted in the ‘WASH in Schools Monitoring Package’, in UNICEF’s 60 priority WASH countries, for example, fewer than half the schools have adequate water and sanitation facilities. In reality the situation is almost certainly worse: monitoring data is limited, often of poor quality, and often doesn’t take into account the functionality of facilities or key basic standards, such as separate toilets for girls and boys.

UNICEF’s ‘Raising Even More Clean Hands’ (2012) report notes that of the surveys of low-income countries with available data, almost half of all schools do not have access to WASH facilities.

Points of Action

‘Even More Clean Hands’ identifies six points of action for WASH in Schools.

1. Set minimum standards for WASH in Schools
   Adopt national, regional and local standards for WASH in Schools, based on UNICEF-World Health Organization guidelines. The minimum standards for WASH in Schools should be specific to each context. These standards should be the basis for national action plans that aim to reach all schools within a concrete time frame and should allow for gradual improvements to facilities and hygiene practices.

2. Monitor WASH in Schools coverage through Education Management Information Systems (EMISs)
   Advocate for the inclusion of WASH in Schools indicators in EMIS. Analyse data annually and use the findings for advocacy and better resource allocation. Support the compilation of data on coverage and practices at the global level to attract attention and funding to WASH in Schools.

3. Engage with at-scale WASH in Schools programmes
   Contribute to the bigger picture by bringing individual or small-scale projects into cooperative initiatives that effectively reach more schools. Gradual improvements to facilities and hygiene practices require less investment in operation and maintenance and can be sustained with local resources. Steady progress is key to establishing sustainable, at-scale programmes for WASH in Schools. These programmes include budget lines for capital improvements, operation and maintenance of WASH facilities, and recurrent costs, such as purchases of soap and materials for personal cleansing.

4. Involve multiple stakeholders to support WASH in Schools programmes
   Community members, civil society advocates, members of the media, students, school staff, local and regional authorities, non-governmental organizations, faith-based groups, public–private partnerships, and ministries of education, water, health and finance, as well as donors, can all support planning and action for WASH in Schools.

5. Contribute evidence to the impact of WASH in Schools programmes
   Local and global academic communities have expertise that can support the design of WASH in Schools programmes and chart their impact. Generating and sharing evidence will provide WASH in Schools advocates with a powerful tool to attract attention and funding to the sector.

6. Raise the profile of WASH in Schools programmes
   Adapt global and regional publications, advocacy materials and knowledge for the local context and disseminate them widely. Encourage members of the community to participate in customizing global WASH in Schools experiences to local settings. The process can begin with translating ‘Raising Even More Clean Hands’ into multiple languages. Local organizations can join the advocacy by endorsing a customized publication with their logos.
WASH in Schools Monitoring Package

The ‘WASH in Schools Monitoring Package’ was developed as a tool to promote and guide WASH in Schools monitoring initiatives at national, subnational and project/community levels.

Component modules

The package is comprised of three modules.

- **The EMIS module**: a set of basic monitoring questions on WASH in Schools to be incorporated into national Education Monitoring Information Systems (EMIS), usually administered annually.
- **The survey module**: a more comprehensive set of questions, observations and focus group discussion guidelines for use in national WASH in Schools surveys as well as for subnational, project level or thematic surveys.
- **The children’s monitoring module**: a teacher’s guide and tool set for the monitoring of WASH in Schools by students, including observation checklists, survey questions and special monitoring exercises.

Table: The three modules can be used in different ways at different levels

<table>
<thead>
<tr>
<th>Module</th>
<th>National level</th>
<th>Subnational/Provincial level</th>
<th>Project/Community monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMIS module</td>
<td>As an integral component of national EMIS (main intended use)</td>
<td>Can be modified for use as a questionnaire for school principals to supplement other monitoring efforts</td>
<td></td>
</tr>
<tr>
<td>Survey module</td>
<td>As a national baseline, and for cross-checking of EMIS results</td>
<td>For district and project baselines and periodic progress monitoring</td>
<td></td>
</tr>
<tr>
<td>Children’s monitoring module</td>
<td>Parts of the module can be incorporated into thematic studies that include surveys conducted by children</td>
<td></td>
<td>As part of ongoing WASH in Schools projects (main intended use)</td>
</tr>
</tbody>
</table>


Use of data

Data from the monitoring tools in this package have many uses at the global, national, subnational, project/community and school levels.

In many countries, the most urgent need is for basic national-level data on WASH coverage, ideally gathered annually through the national EMIS. With this kind of basic data, UNICEF and partners can effectively advocate for WASH in Schools, and governments can make informed
choices on policy and resource allocation. As countries begin to compile basic data sets, the global picture will also become clearer, with implications for funding allocation decisions at the regional and global levels.

More comprehensive data on WASH in Schools – such as the data that can be gathered through the survey module – is needed for establishing baselines, for tracking progress, for determining accountability, for evaluating project effectiveness, for learning and advocacy, and to inform planning, resource allocation and policy development. For example, detailed data on the functionality of WASH facilities can influence decisions on budgeting for operation and maintenance, while data on project progress can lead to adjustment in the design of national guidelines and standards.

The tools in both the survey module and the children’s monitoring module are designed to evaluate the knowledge and opinions of children and will help policy makers and managers to analyse the success of programmes in meeting the needs of beneficiaries.

**EMIS module**

While surveys and studies have their place, only a national routine monitoring system can provide periodic and consistent data on the status and progress of WASH in Schools.

The most appropriate, cost effective and sustainable institutional home for any routine WASH in Schools monitoring system is within the monitoring department or unit in the Ministry of Education (and/or other ministries responsible for education).

The questions in the EMIS module are designed specifically to be included as a module within existing national EMIS. Where this isn’t possible, the module may be administered as a stand-alone questionnaire.

The module includes a set of core questions and a set of supplementary questions for countries where there is interest among education officials to have a larger set of WASH in Schools questions in the EMIS questionnaire (see UNICEF’s ‘Wash in Schools Monitoring Package’, 2011; 16–31).

Part 1: School information (includes contextually relevant demographic school data)

Part 2: Water
- Indicator (core questions): a functional water point is available at or near the school.
- Indicator (core plus expanded questions): a functional water point is available at or near the school that provides a sufficient quantity of water for the needs of school, is safe for drinking, and is accessible to children with disabilities.

Part 3: Sanitation
- Indicators (core questions): the number of functional toilets and urinals for girls, boys and teachers that meet national standards.
• Indicator (core plus expanded questions): the number of functional toilets and urinals for girls, boys and teachers that meet national standards and are accessible to children with disabilities.

Part 4: Hygiene
• Indicator (core questions): functional handwashing facilities and soap (or ash) are available for girls and boys in the school, and hygiene is taught.

Part 5: Waste Disposal
• Indicator (core questions): solid waste and sludge is regularly disposed of.

Survey module (see UNICEF’s ‘WASH in Schools Monitoring Package’ (2011; 33–61))

The survey module is designed to address a larger set of indicators at a greater level of detail than the EMIS questionnaire. To do this, it uses more questions, adds observations, and provides the option of using focus group discussions to explore particular subjects in more depth.

This module consists of a set of instruments designed to form the basis of national and subnational surveys on WASH in Schools. Such surveys will provide a comprehensive set of data for establishing a baseline for use in programme design and policy formulation and for informing advocacy and resource allocation decisions.

Conducted periodically, these surveys can also be used as a quality assurance system to assess the quality of data from the EMIS monitoring mechanism.

This survey module can also be used to develop systematic baselines for WASH in Schools projects and to conduct periodic progress monitoring.

The questions, observation checklists and focus group discussion tools can also be used to help design special surveys on specific thematic areas or more intensive general studies in smaller geographic areas.

Unlike the EMIS questions, which are designed to be completed by school principals, the tools in the survey mode are administered by surveyors who have a background in the WASH sector (and/or have been trained to administer the survey).

Children’s monitoring module (see UNICEF’s ‘WASH in Schools Monitoring Package’, April 2011; 63–88)

There are various methods and tools for involving children in WASH in Schools monitoring. This module provides detailed guides and examples for two key tools – observation checklists and child-to-child discussion guides – as well as suggestions for additional tools, such as school mapping and transects walks.

Resources for monitoring WASH in Schools

There are a range of excellent resources for monitoring WASH in Schools, including:
• WASH in Schools mapping < http://www.washschoolsmapping.com>
• UNICEF WASH in Schools posters < http://www.unicef.org/wash/schools/>
• The UNICEF WASH in Schools Monitoring Package
• The WASH in Schools website contains links to useful resources for monitoring WASH in Schools < http://www.washschoolsinfo>
• The Field Guide to the Three Star Approach to WASH in Schools Error! Hyperlink reference not valid. also includes guidance on how to develop and implement a monitoring and certification scheme for One, Two and Three Star Schools.

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