# Sanitation: on- or off-track? Issues of monitoring sanitation and the role of the Joint Monitoring Programme

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*The Joint Monitoring Programme (JMP) of WHO and UNICEF has reported progress in drinking-water and sanitation periodically since 1990 and is the United Nations mechanism for tracking MDG Target 10. This paper outlines a number of aspects of monitoring sanitation including different approaches and tools; it describes the way that JMP operates and considers both its strengths and limitations.*

**Keywords:** joint monitoring programme, sanitation coverage, millennium development goals

IN SEPTEMBER 2000, the 189 UN Member States adopted eight goals for promoting human development, the Millennium Development Goals (MDGs). These goals and their associated targets are based on the belief that a country will be able to sustain social and economic development only if resources are invested in the development of its citizens. The seventh goal is to sustain the human environment; its related target 10 is to: 'Halve, by 2015, the proportion of people without sustainable access to safe drinking-water and basic sanitation'.

Sanitation and hygiene are fundamental to all the MDGs and they deliver broad development outcomes. Target 10 is closely related to the earlier goals since sanitation and hygiene support and increase the effectiveness of other development-led investments. The interconnections of sanitation and hygiene with health, education, livelihoods and other domains make them a cornerstone of development. Evidence shows that sanitation and hygiene increase the impact of health, education and other development programmes and have a positive impact on the lives of poor women and children.

This internationally accepted target has been instrumental in driving the development agendas of national governments, international donor agencies and the UN family of organizations. Since 2000, there have been a number of reports that have focused attention on the progress towards the various targets including target 10

> Evidence shows that sanitation and hygiene increase the impact of health, education and other programmes

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above. Given the way in which MDG targets are such strong drivers for change and development, it is axiomatic to ask the questions:

- Where are we at a particular moment in time: on-track or off-track to meet the targets and by how much?

- When are we likely to get there? And what needs to happen to current rates of progress?

Over recent years, as the year 2015 fast approaches and perspectives for achieving the targets deteriorate, the Joint Monitoring Programme (JMP) has found itself increasingly in the spotlight – and occasionally crossfire – and also often challenged by expectations beyond its remit and resources. This paper explains what JMP measures in terms of sanitation, and how it can mesh with other monitoring instruments for drinking water supply and sanitation. Whilst the focus of this paper is on sanitation, by necessity reference is frequently made to 'drinking water and sanitation' as many of the issues discussed concern the approach to monitoring that the JMP as a whole adopts – which of course includes global monitoring of both drinking water and sanitation.

## The different purposes of monitoring

Monitoring of sanitation and hygiene plays a key role in providing the evidence base for a range of different interventions and actions at different levels, from global to local. For example:

- Global monitoring: how is the world doing in terms of the trajectory of progress towards MDG target 10?

- National Sector Performance Monitoring: how is a country progressing towards its own development objectives as described in its national planning documents? In less- and least-developed countries these are often in the form of a poverty reduction strategy or its equivalent.

- National Sector Resource Allocation: how are scarce national resources targeted towards the sector and within the different subsectors (water, sanitation, urban, rural) depending on need or potential impact?

*Monitoring can help in making decisions on resource allocation*

- Improving transparency and accountability: sustainable improvements in services require improvements in both accountability and transparency amongst the key stakeholders. Monitoring provides an important tool for this.

- Advocacy to different target groups: monitoring provides information for the evidence base around which advocacy arguments

can be constructed – for example in relation to the global burden of disease (WHO, 2006a) and the costs and benefits of different technical and policy interventions (Hutton and Haller, 2004).

- Programme level – measuring delivery and effectiveness of interventions. Monitoring data is also essential for post-programme evaluation of outcomes and impacts, including sustainability.

Different purposes for monitoring mean that different monitoring schemes look very different from one another and it is self-evident that no single monitoring tool will answer all of the above needs. It is therefore important to be clear about the purpose of monitoring activities and the use to which the information collected is to be put.

Monitoring is useful for post-programme evaluation of impacts

## International monitoring today

Monitoring MDG Target 10 requires the measurement of population coverage with basic sanitation. Approaches to sanitation – and the definition of what comprises 'sanitation' – can vary greatly between countries. This has significant implications given the need for indicators to be globally consistent for monitoring MDG target 10. Broadly speaking, this means that indicators tend to be either high level and robust, or more detailed but not readily transferable between settings (contexts). The official indicators for monitoring of progress against MDG target 10 are required to be disaggregated by urban and rural sub-sectors (both for drinking water and sanitation). This provides an additional layer of detail as compared with the other MDG targets.

Indicators tend to be either high level and robust, or more detailed but not readily transferable between contexts

In addition to understanding the different purposes of monitoring it is also important to set in context the range of different monitoring activities that take place at national level. In many countries there are at least four different data collection approaches that run in parallel. For example:

- Nationally consolidated data from service providers including government line departments, ministries and utilities, which provide a 'supply side' assessment.

- Independent census and household surveys at national and provincial level that provide an 'actual use' perspective.

- Participatory assessments at community level, often facilitated by NGOs and local government and involving more qualitative assessments to obtain users' perspectives on the adequacy of services.

- In-depth studies commissioned for specific purposes, for example social inclusion/exclusion, value for money.

These different perspectives often lead to apparently contradictory results: the overwhelming amount of data relating to water and sanitation often results in an inconsistent view of performance. Figure 1 from Uganda shows the problem of inconsistent data when measuring 'improved sanitation', which appears to vary between 55 and 85 per cent for 2003. Thomson et al. (2005) report that 'this discrepancy highlighted the fact that many respondents in most of the national household surveys did not like to admit that they did not use latrines, or the surveys did not consider the usability of the latrines. However the health workers in the HIASS (i.e. household) survey were able to identify households with unusable latrines, which accounted for the lower latrines usage figures. When such inconsistencies are identified, further in-depth studies can be commissioned to provide a clearer understanding of service levels and coping strategies.'

Whist this illustrates problems of consistency between monitoring data sets, it does not necessarily mean that some instruments give 'right' answers whilst others are 'wrong'. A key lesson is that different results, once investigated, are often not contradictory but reflect different perspectives. Understanding these perspectives and why they exist becomes critical in making best use of the available information. There are a range of different and complementary monitoring tools and it is a case of choosing the right 'tool for the job', depending on the purpose of the monitoring that is to be undertaken. These different approaches require and use different instruments that are set up in different ways and often measure different things.

Even so, conflicts can arise when definitions are different – e.g. differences between reported coverage figures from the Joint Monitoring Programme (JMP) of WHO and UNICEF and governments' own estimates. As we shall see in the following section, this is often due to differences in the nature and source of the data used.

## A short history of global monitoring

While international monitoring of status and trends in water supply and sanitation was begun by WHO in the 1960s, the first real impetus followed the United Nations Water Conference at Mar del Plata in 1977 in Argentina which established an International Drinking Water Supply and Sanitation Decade to run from 1981–1990 with the stated aim to provide safe water and sanitation for all by 1990. National Governments produced 'Decade Plans' to show how the aims were to be achieved. These national plans were based on a
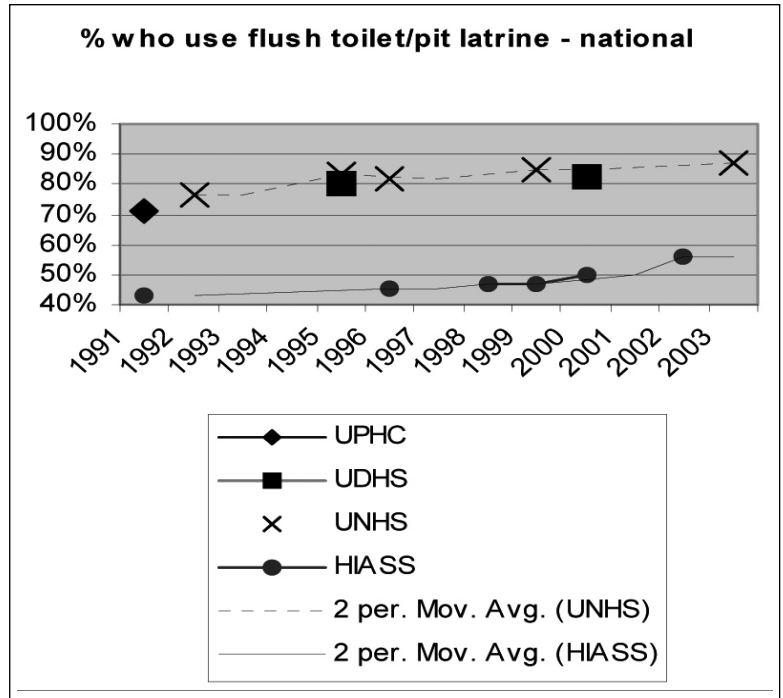
**Figure 1:** An example of inconsistent data sets: sanitation coverage in Uganda, measured by the agencies HIASS, UPHC, UDHS and UNHS (MoWLE, 2003).

government's own estimates of the situation at the start of the decade, and progress was reported through a similar self-estimation at intervals during and at the end of the decade.

Before 1990, a report on the global status of the water-supply and sanitation sector was issued regularly by the World Health Organization (WHO), using information provided by country water-supply and sanitation agencies and by ministries of health. The information was obtained through questionnaires that included an exhaustive set of questions that not only dealt with water-supply and sanitation coverage, but also with institutional, financial and management issues. In reviewing the progress achieved during the decade 1981–1990 (WHO, 1992; UNDP, 1990) the reliability of the data used to assess progress was criticised at the international consultation held in New Delhi. UNDP (1990) noted that the quantitative comparative analysis of service coverage was based on information provided by national governments, who also defined what constituted 'adequate water and sanitation services'. The report goes on to state that '..there is a natural tendency to estimate higher coverages than actually exist in the field' and that '.. accuracy and

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comparability have been limited by definitional problems….a series of optimistic errors have compounded, resulting in significantly higher numbers being reported than is actually the case' . The report recommended that 'monitoring in the next decade must improve' and that there is a need for 'baseline surveys incorporating representative population samples'. It further exhorted improved global coordination in monitoring progress towards agreed targets.

Following the end of the International Drinking Water Supply and Sanitation Decade in 1990 and in response to the recommendations of the international review of the Decade, WHO and the United Nations Children's Fund (UNICEF) established a Joint Monitoring Programme for Water Supply and Sanitation (JMP), the main objective of which was to strengthen the monitoring capacities of national agencies. The first three reports of the JMP (published in 1991, 1993 and 1996) continued to present coverage data provided by governments, as well as progress in national monitoring capacities.

The fundamental concern of the decade review (UNDP, 1990), namely that too much trust was placed in country reporting with insufficient focus on user-based monitoring, was addressed in the Global Water Supply and Sanitation Assessment Report 2000 and its subsequent update in 2001. Household survey data were used extensively to estimate coverage figures. Using consumer-based verifiable data sources marked an important departure from previous reports that relied solely on data provided by governments. This was made possible by the initiation of a series of large-scale national surveys starting in the mid-1990s so that it was possible to systematically collect data on where interviewees (heads of household) said that their water came from and where their family members went to the toilet.

This addressed the main concerns of the decade review, as it moved away from data provided by governments and water agencies. These concerns included differences in the definition of access from country to country and within the same country over time; and that experience showed significant differences between what outside agencies reported as having been constructed and supplied as opposed to what communities reported was actually used. Another reason is that while governments and water utilities can estimate access through household connections fairly well, they may be unable to determine access through other types of improved services, especially those from individual household and community initiative.

Today, JMP bases its estimates on data sets from regularly conducted national household surveys. These include the Demographic and Health Survey (DHS), the Multiple-Indicator Cluster Surveys (MICS) carried out under the auspices of UNICEF, the World Bank's Living Standards Measurement Surveys (LSMS), the World Health Surveys (WHS) supported by WHO, national census reports, and

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other reliable country surveys that are nationally representative, conform to JMP criteria and allow data to be compared.

As a result of the change in approach there are two global series of monitoring data: government reports from the 1960s until 1990 and household survey-based results from 1990 onwards. Comparing the different results for 1990 is interesting (see Table 1).

There are large differences between the estimates by each method for 1990, for instance, in rural sanitation and urban water. It is difficult to attribute specific reasons as the differences are not consistent. However, it is tempting to infer that the differences in urban water (and also urban sanitation in Uganda) could be explained by the large number of household-initiated efforts not captured in supply-side reports whilst rural sanitation figures for both countries reflect an over-estimation in government reports which did not adequately account for failures in the infrastructure constructed. The high supply-side figures for urban sanitation in Ghana may reflect the use of communal latrines; these would not be counted in the household based surveys. These and other definitional issues are described in the following section.

> The supply-side reports may underestimate the large number of household-initiated water systems

## JMP's method for estimating sanitation coverage

Definitions: are you 'covered'? 'safe'? 'adequate'? High-level political statements and commitments usually – and of necessity – include terms that give a qualitative description of a service. This is relatively easy to do: what is much more difficult is to pin down precise definitions of such qualitative descriptions in terms of readily measurable indicators.

In assessments prior to 2000, the coverage figures referred to 'safe' water supply and 'adequate' sanitation. However, there is a lack of consistent definition and measurement on the safety of water and the adequacy of sanitation. The WHO/UNICEF Global Water Supply and Sanitation Assessment Report 2000 observes:

'Population-based surveys do not provide specific information on the quality of the drinking-water, or precise information on the adequacy of sanitation facilities. Therefore, this assessment assumed that certain types of technology are safer or more adequate than

> It is difficult to pin down precise definitions of qualitative descriptions in terms of readily measurable indicators

**Table 1.** Comparison of coverage data for Ghana and Uganda in 1990

|        | Coverage in 1990         | Urban sanitation | Rural sanitation | Urban water | Rural water  |
|--------|--------------------------|------------------|------------------|-------------|--------------|
| Ghana  | Government reported       | 63%              | 60%              | 63%         | Not reported |
|        | Household survey (JMP)    | 23%              | 10%              | 86%         | 37%          |
| Uganda | Government reported       | 32%              | 60%              | 60%         | 30%          |
|        | Household survey (JMP)    | 54%              | 41%              | 80%         | 40%          |

others and that some of them could not be considered as 'coverage'. The terms 'safe' and 'adequate' were replaced with 'improved' to accommodate these limitations. The population with access to 'improved' water supply and sanitation is considered to be 'covered'

The definition of coverage is based on technology type, as shown in Table 2. JMP currently defines access to water supply and sanitation in terms of the technology and the levels of service afforded. For water, the technologies include household connections, public standpipes, boreholes with handpumps, protected dug wells, protected springs and rainwater collection. Water sources such as tanker trucks and bottled water are not included in the definition of 'improved' access, since they give neither reasonable nor ready access to sufficient water for domestic hygiene purposes. 'Reasonable access' is broadly defined as the availability of at least 20 litres per person per day from a source within one kilometre of the user's dwelling.

'Improved' sanitation is defined to include a house connection to a sewer or septic tank, a pour-flush latrine, a simple pit latrine and a ventilated improved pit latrine. The excreta disposal system is considered adequate if it is private and if it hygienically separates human excreta from human contact.

Why? Fundamentally it was because this is the information that is consistently collected at a large scale. While there are many and better indicators of what constitutes a 'safe' drinking water (WHO 2006b) there was no real body of information available to support a global assessment other than through using what was known by and could be reported by heads of household – who know where they get their water but not whether it is safe.

The Global Water Supply and Sanitation Assessment Report 2000 goes on to justify the pragmatic logic of this approach: 'Essentially,

*JMP currently defines access to water supply and sanitation in terms of the technology and the levels of service afforded*

*The indicators are shaped by what is known by and could be reported by heads of household*

**Table 2.** Classification of technologies as 'improved' or 'not improved'

*The following technologies are considered to be 'improved'*

| Water supply | Sanitation |
|---|---|
| household connection | connection to a public sewer |
| public standpipe | connection to a septic system |
| borehole | pour-flush latrine |
| protected dug well | simple pit latrine |
| protected spring | ventilated improved pit latrine. |
| rainwater collection. | |

*The following technologies are considered to be 'not improved'*

| Water supply | Sanitation |
|---|---|
| unprotected well | service or bucket latrines (where |
| unprotected spring | excreta are removed manually) |
| water provided by a vendor | public or shared latrines |
| bottled water | open latrines. |
| water provided by tanker truck. | |

technology is used as an indicator of improved water and sanitation. Like all indicators, it can allow only an approximate description of water and sanitation coverage. The coverage figures produced by technology indicators do not provide information about the quality of the water provided or about its use. Furthermore, factors such as intermittence or disinfection could not be taken into account in the coverage figures.'

The excreta disposal system is considered adequate if it is private and if it hygienically separates human excreta from human contact. At the other end of the spectrum, this leads to potential questions about sewered systems that have no treatment and discharge raw sewage directly into the environment. It can be conjectured that this would affect both the coverage and trajectories of some middle- and high-income countries. Famously in Brussels, where water and environmental legislation is made for the countries belonging to the European Union, there has been no wastewater treatment, and construction of the city's first wastewater treatment plant began only recently (International Water Association, 2006).

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## Estimating coverage

JMP's reports therefore provide a consistent and internationally comparable data set that can be used to determine trends and trajectories of national, regional and global progress toward specific targets. This recognizes that whilst the indicators are not accurate measures of safety and adequacy, they are good indicators of them. The following summarises the methodology adopted by JMP and compares and contrasts the approach with that commonly used for data supplied by national governments

- JMP estimates for coverage are based on a linear regression combining household survey data points, censuses, and other national data sources (including administrative data, whenever survey data are not available). Linear regression is used to estimate the coverage for a particular reporting year. For example, the JMP mid-term review report on progress towards MDG Target 10 (WHO UNICEF, 2006a) reports coverage for all countries for 2004; the values are obtained by extrapolating the linear regression line drawn through the data points i.e. the results are not based on a single survey point. In this respect JMP is both statistically rigorous and consistent (see Figure 2)

> The JMP results are not based on a single survey point

- Note that national estimates often come from a single data source for a given year. For example, these may be the numbers from a specific survey, census or administrative data-source

(often the latest to have taken place). Alternatively, they may be based on reported figures from a mix of different sources.

- JMP's uses the definitions of 'improved' and 'unimproved' facilities as described in Table 2; these may be different from countries' own definitions.

- JMP uses population estimates for urban and rural areas provided by the UN Population Division, based on medium growth rates. Note that data from national governments may use different population estimates.

## Stock take: where are we now ?

The headline global reporting format of the JMP is categorized according to four sub-sectors: urban and rural water supply and sanitation, showing the percentage of the population that is 'covered' (for example see page 28 ff. in 'WHO UNICEF Joint Monitoring Programme MDG Assessment Report 2006'). Following the links to 'sanitation data' on the JMP website (http://www.wssinfo.org/en/ 35_san_dev.html) gives the detailed survey results for each country including a breakdown of technology type. In summary, JMP estimates address the following

- absolute levels of coverage;
- trend lines compared to MDG target;
- comparison between countries and regions;
- comparison between rural and urban situations.

The latest JMP report (WHO UNICEF, 2006a) highlights that sanitation is seriously off-track to meet the 2015 target. The potential exists for some noticeable discrepancies with respect to the 'technology proxy' indicators for sanitation. For example, there are situations where differences are driven by the distinction between 'households' and 'community' and to what extent an 'open latrine' could be constituted as being satisfactory. This has been previously referred to in the discussion of the data in Table 1.

*Sanitation is seriously off-track to meet the 2015 target*

From the earlier discussion it is clear that no single monitoring tool can give a full picture of the sanitation sector: JMP fulfils a particular niche in that it produces longitudinal (time) data from which the trajectories of progress can be identified. It needs to be complemented and nuanced by the use of other national and programme-based survey instruments.

*JMP produces longitudinal data from which the trajectories of progress can be identified*

How confident can we be in the trajectory of progress reported by JMP? Figure 2 indicates the consistency of the data sources used to estimate rural sanitation coverage in Ghana (all other country data is

available on the JMP website). The web-based country reports also show the data available from government-reported sources that have not been used in the JMP regression analysis to estimate coverage. These have a wider spread than the household survey data (WHO UNICEF 2006 b). For example, to take an extreme case, the International Drinking Water Supply and Sanitation Decade Review of National Progress (as at December 1990) reported rural sanitation coverage for Ghana to be 60 per cent, whereas the JMP estimate from regression analysis is 10 per cent. This illustrates the potential problems (described above) of using a single data point.

Inspection of this and similar data sets available on the JMP website implies that the household data provide more reliable trend prediction lines with a lower error bound than do government-reported data and gives confidence to the conclusions of JMP's estimates and inference of the predicted trajectories towards achieving both MDG Target 10 and other nationally defined goals.
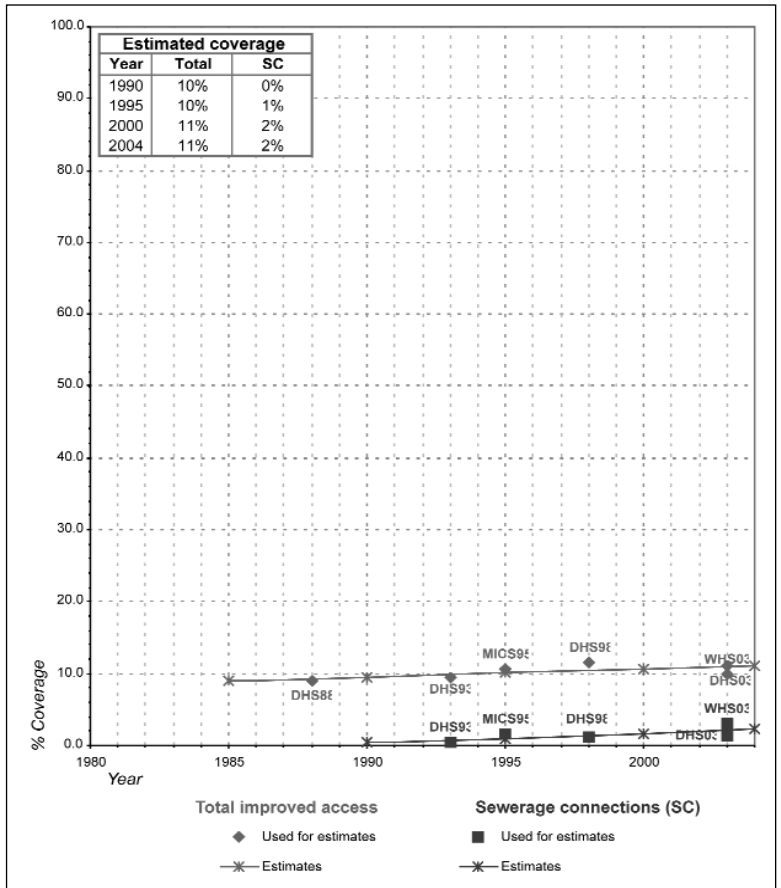
> The household data provide more reliable trend prediction lines with a lower error bound than do government-reported data



**Figure 2:** Rural Sanitation Coverage for Ghana

## Looking ahead: building on the JMP

Improved health and economic performance justify prioritizing allocation of resources to sanitation

Included in the list of 'reasons for monitoring' above is one that is very common – national sector resource allocations, both to and within the sector. The implication of this is the need for advocating for investments in drinking water and sanitation as a social and economic imperative. It is the benefits through, for example, improved health and economic performance that justify prioritizing allocation of resources to sanitation above other competing sectors.

The benefits of sewerage are reduced if the sewage is discharged to pollute other communities

Health-related benefits are an outcome that arises from people making use of the improved sanitation services to which they have access. The benefits are greater when people wash their hands with soap after defecation and at other times such as prior to preparing food. Benefits are also greater when sanitation is community-wide where everyone uses the latrine and where the technologies used prevent environmental pollution. Note that the corollary is that the benefits of sewerage are reduced if the sewage is discharged to pollute other communities. Finally, safe community-wide use needs to endure with time.

What does this imply for monitoring? It implies that we would ideally focus on use rather than access; assess hygiene as well as sanitation; ensure that the technologies used truly protect health; and ensure that they are sustainable (both in the sense of used in the long term and also in the sense of environmental sustainability). Different monitoring approaches go into these aspects to a greater or lesser extent with local-level monitoring typically being richer in detail and more central monitoring relying on a smaller indicator set. For a global monitoring effort such as JMP which has to rely on few robust indicators that are relevant in very different economic, social and environmental circumstances, choosing the 'right' indicators is especially important. JMP does measure the use of facilities. However experience has failed to identify a robust indicator of hygiene behaviour that could be readily integrated into large-scale household surveys (although some such as observation of soap or washing facilities are potentially applicable). JMP addresses health protection by a simple categorization of technology types into classes of greater or lesser health protection. While it cannot separately assess 'sustainability' (which is a complex concept that ideally requires to be assessed through an in-depth case study approach), the 'use' statistics do imply that elements of sustainability are captured in the data.

Experience has failed to identify a robust indicator of hygiene behaviour that could be readily integrated into large-scale household surveys

## Monitoring at the national level

JMP uses consistent definitions globally for access and coverage parameters, so that comparisons can be made between countries

within the boundaries of the data collected and range of indicators measured. At national level, however, many other data sources are used in government plans and reports (for example, see Figure 1, and Ministry of Water, Lands and Environment, 2003) not least coverage data from government agencies and utilities. A wide array of definitions is adopted for key indicators such as 'access' and 'safe source'. A recent report (Water and Sanitation Programme – Africa, 2005) identified 22 definitions of access within a study of water sector monitoring systems in as many countries. There is a similar lack of inter-country consistency in definitions of access to sanitation.

It has already been noted that different survey instruments using different indicators will yield different results; this means that in many cases, nationally generated data measuring the status of sanitation will differ from that reported by the JMP. The point at issue is that there is no 'right' or 'wrong' value.

National definitions of coverage may also change with time with the possibility of criteria becoming stricter as progress is achieved. As WSP Africa have noted, measuring changes in access is more important than defining what constitutes access. In other words, a monitoring system should identify the type and level of service that most people have access to and the trends in coverage, use, quality and reliability. This enables users to see the trajectory which a country is on.

The headline reporting by JMP of 'covered or not covered' – which responds to the MDG Target 10 formulation – can also give rise to problems of perception: there is a sense in which it can be interpreted as 'good or bad' in a somewhat binary fashion. Readers and users may well be unaware of the richer data that are available via the country reports on the JMP website. However, this binary division is one of the limitations of the MDG Target formulation and means that stakeholders at the country level may not see JMP as relevant for their sector planning: for example, where a country already has a high level of use of 'improved' technologies' and the national objective may be to progressively upgrade these.

As part of the response to this, JMP has started to disaggregate water use into three categories (unimproved, improved community level and improved household level) and will extend this disaggregation further and into sanitation in its forthcoming reports. This greater richness of detail better reflects the stepwise nature of real-world improvements in drinking-water and sanitation, and highlights the limitations of simplistic indicators such as those defined for the MDGs.

However, this is not to advocate for all countries to adopt consistent definitions of coverage merely for international comparisons.

**Measuring changes in access is more important than defining what constitutes access**

**JMP has started to disaggregate water use into unimproved, improved community-level and improved household level**

National definitions
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are to be encouraged

National definitions are there to serve national needs, in support of national planning, sector resource allocation and implementation and are to be encouraged. The important issue is to recognize the differences and appreciate the complementary roles that different monitoring tools can play.

Of more concern than the difference in the definition of key indicators at national level is that in the 22 country study in sub Saharan Africa by WSP, only South Africa included hygiene behaviour change as a key measure.

An important recommendation of the assessment of the 1981–1990 water decade (UNDP, 1990) was the need to build national capacity to improve monitoring. This is one of JMP's objectives, on which a start has been made. A good example of capacity building of national monitoring and reporting capacity is shown in Box 1.

## Assessing sector status

It is arguable as to
whether it makes
sense to lump water
supply and sanitation
together

Beyond data on infrastructure coverage and access, an optimal monitoring system would reveal what the situation in a country is like and how it is changing. This requires a broader view of the sector. Service coverage and its trajectory towards achieving specific development targets is important but does not give insights into the national development context which is clearly crucial in determining progress. The concept of a 'sector' is widely used, but is quite complex with respect to water supply and sanitation. It is arguable as to whether it makes sense to lump water supply and sanitation together, particularly given the importance of hygiene behaviour change as a

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**Box 1.** A national capacity-building process

An incremental process of support to national sector monitoring and evaluation has proved effective in Uganda. Initially, the Ministry of Water, Lands and Environment (MoWLE) requested a team of WELL consultants to draft and coordinate the 2003 water and sanitation sector performance report in conjunction with government staff. Training and support of about 40 sector officials was undertaken. Over a period of three years, responsibility was gradually handed over to sector government agencies, which by 2005, with limited consultancy support, took the lead on producing the annual report.

This process of providing effective skills transfer and capacity building has been successful in Uganda due to the Sector Wide Approach whereby central and donor funds are pooled and dispersed through government channels. Government therefore has an incentive to ensure value for money. In addition, involvement and participation of key staff strengthened the perceived value and demand for M&E and sector reporting.

Source: WELL Briefing Note 7.1
http://www.lboro.ac.uk/well/resources/Publications/Briefing%20Notes/BN%207%201%20Sector%20performance.htm

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key component in the delivery of sanitation objectives. In many countries, institutional roles and responsibilities for water and sanitation are in practice quite different.

Nevertheless, it is necessary to look beyond measures of service coverage in order to build up a more complete picture of the context in which service delivery is taking place – and also to be clear about where measurements of coverage 'fit' within the larger picture of how well a particular sector is performing. Earlier WHO and JMP surveys did collect information about institutional, financial and management issues in addition to coverage: however, over recent years there has been more widespread acceptance nationally and internationally of the role of coherent national sector financing and planning. Work by the Water and Sanitation Programme-Africa (2006) goes some way to addressing both these issues and the development of national processes for sector assessment.

> There is a need for a global annual assessment that sets out the state of the water and sanitation sectors

A proposal for single global annual assessment on drinking water and sanitation was initiated at 12th meeting of the United Nations Commission for Sustainable Development (CSD12) in 2004 and reinforced at its 13th meeting (CSD13) in 2005. There is emerging consensus around the need for a comprehensive assessment that sets out the state of the water and sanitation sectors on a global basis. This needs to be succinct yet authoritative, and draw attention to progress being made in-country and by external support agents on the main parameters that need to be addressed in meeting the MDGs and moving towards universal coverage. UN Water has been tasked to produce this global annual assessment which is being led and coordinated by WHO and goes some way to addressing the issues raised in the preceding paragraphs.

The global annual assessment will complement the JMP by incorporating information that goes beyond service coverage information and provides insights into wider issues that relate to sector performance and preparedness to achieve MDG target 10 and related national goals. The global annual assessment will provide insights into wider issues that relate to sector performance. Tables 3 and 4 indicate the different elements that can be used to characterize the status of the water and sanitation sectors that will be picked up by the assessment. Taken as a whole, the elements of this simple framework can provide an overview or snapshot of the sectors in a country and enable inter-country comparisons to be made. Elements 4 and 7 relating to coverage are provided through the JMP country data.

Obtaining representative information on levels of service (elements 5,6,8,9) is data intensive; however, this is a 'do-able'

**Table 3.** Sanitation sector status

| *General status of sector (sanitation)* | | |
|---|---|---|
| 1 | 2 | 3 |
| Policy and strategy | Institutional arrangements | Sector financing and planning (MDG Roadmap) |
| *Level of sanitation service* | | |
| 4 | 5 | 6 |
| Coverage (JMP) | Usage of different sanitation systems | Implementation of hygiene behaviour change |

**Table 4.** Water supply sector status

| *General status of sector (water supply)* | | |
|---|---|---|
| 1 | 2 | 3 |
| Policy and strategy | Institutional arrangements | Sector financing and planning (MDG roadmap) |
| *Level of water supply service* | | |
| 7 | 8 | 9 |
| Coverage (JMP) | Access to sources: quantity, reliability and usage | Drinking water quality |

> How would the framework be used to help stimulate progress and avoid stigmatizing some countries as lost causes?

proposition achievable through undertaking national case studies to obtain snapshots of progress.

When considering the proposed list of parameters it becomes immediately apparent that a number of African countries – particularly those undergoing or emerging from prolonged conflicts or other emergencies – would score badly against governance-related factors as reflected through elements 1, 2 and 3. An important issue to consider here is how use of the framework could help to stimulate progress and avoid relegating some countries to the status of a lost cause. It might, therefore, be appropriate to adopt alternative criteria for countries saddled with such constraints.

## Concluding remarks

Considerable progress has been made in the processes and approaches to monitoring sanitation. At the global level, the Joint Monitoring Programme of WHO and UNICEF has developed a consistent and rigorous approach to analysis and reporting based on household surveys.

At national level, many different data sources are used by governments in their national planning processes and there is a wide range of definitions for key terms such as 'access' and associated indicators. This in itself is not a major issue: it is measurement of the change over time in order to define the trajectory of progress that is important. However, developing national capacity building processes for

monitoring is essential, and is an area which requires increased support from the international community.

Consistent reporting of coverage and progress towards the MDG targets is essential. Nevertheless, this does not by itself give particular insight into the national development context and how the sector is developing. This requires a monitoring and reporting framework that takes into account *inter alia*: policy and strategy; institutional arrangements; sector financing and planning. This is in addition to the coverage and usage data that can be abstracted from JMP reports. The forthcoming Global Annual Assessment from UN Water will address a number of these issues.

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