



**“Monitoring and Reporting” progress of
access to water & sanitation**

An assessment by UNSGAB

Update 15 April 2008

Working document

“Achieving the goals of water policies requires adequate monitoring tools.
Assessing progress toward targets and reporting the results
is vital for managing action by all stakeholders.”

Hashimoto Action Plan, March 2006

Preamble

The UN Secretary General has found that monitoring and reporting progress of access to safe water and sanitation throughout the world is essential to achieve the Water & Sanitation Millennium Development Goals.

Two core missions that have been assigned by the UN Secretary General to his Advisory Board on Water and Sanitation [UNSGAB] are:

- “to assess progress made towards the water and sanitation goals,”*
- “to advocate for and encourage maintaining and upgrading the quality of data and statistics and the capacity of governments and the international system to monitor policies and actions in the water and sanitation sectors.”*

This report describes current challenges and develops recommendations. It has been written further to discussion within UNSGAB and exchanges of views with many experts, including the team in charge of the WHO-UNICEF Joint Monitoring Programme, WSP members, multilateral and bilateral agencies and contributors to the recent overview of sixteen African countries and governments’ representatives.

*This report has been written by Gerard Payen,
chair of the UNSGAB “monitoring & reporting” working group.*

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A. Reminder. Main UNSGAB's recommendations about monitoring and reporting on access to water and sanitation¹

- 1. Strengthening the WHO-UNICEF Joint Monitoring Programme (Objective 1)**
 - 1.1. increase financial support
 - 1.2. increase accuracy of data
 - 1.3. add information about service conditions
- 2. Convincing national governments (*resp. donors*) to report on an annual basis the number of people obtaining access to water/sanitation by access category in their country (*resp. through capital projects sponsored by them*) (Objective 2)**
 - 2.1. Countries
 - 2.2. Donors
- 3. Increasing effectiveness of global and national monitoring tools (Objective 3)**
 - 3.1. harmonization of various monitoring activities at the global level
 - 3.2. increase knowledge of water sector spending (at the global level)
 - 3.3. Monitoring tools to address operational needs of national governments, local governments and civil society
- 4. Miscellaneous**
 - 4.1. UNDESA to create a database on National Water Policies, IWRM and Water Efficiency Plans, inclusion of water in PRSPs²

¹ See detailed recommendations in Annex 3

² The current report does not assess progress about this objective.

B. Executive Summary

Two core missions that have been assigned by the UN Secretary General to his Advisory Board on Water and Sanitation [UNSGAB] are:

- “to assess progress made towards the water and sanitation goals,”
- “to advocate for and encourage maintaining and upgrading the quality of data and statistics and the capacity of Governments and the international system to monitor policies and actions in the water and sanitation sectors.”

The present report:

- analyses the availability, the validity and the meaning of the data that is available at the global level about the situation of domestic access to water and sanitation.
- clarifies the discrepancies that exist between the different sets of water / sanitation data that are available at country level.
- comments the situation regarding the recommendations on monitoring access to water / sanitation that were formulated in 2006 by UNSGAB in its Hashimoto Action Plan (see Annex 3).
- concludes by proposing recommendations for improving the current monitoring systems.

The main UNSGAB findings are the following:

Scarcity of global indicators

- at the global level, there is very little data available to describe the global situation for domestic access to water or sanitation. The only issuer of global data on the way individuals get access to water is the WHO-UNICEF Joint Monitoring Programme [JMP]. Therefore, there is no duplication, no need for harmonisation. The issue is the scarcity of available data since the JMP currently provides information on only 4 indicators:
 - o access to “improved” water,
 - o access to “improved” sanitation
 - o access to “piped water”.
 - o connection to sewer
- This is not enough to give a clear and understandable picture of the reality of access to water / sanitation in the world

Validity of the JMP methodology

- The WHO-UNICEF JMP uses a strong methodology that aims at and succeeds in providing valid global data to monitor progress on the water and sanitation Millennium Development Goals [MDGs].
- The results that are provided by the JMP are meaningful at global level. However, they are estimated without having a stable estimate of the 1990 MDG baseline. Every time a new assessment of the global position is made the 1990 reference data is re-estimated. This may be viewed as a political flaw in the methodology since the 2015 MDG targets that are deducted from the 1990 reference date keep changing.
- The accuracy of the JMP data improves over time. It is based on field surveys, which are more numerous every year. However there are still not very many: only 2.3 per country on average.
- The JMP compares its global data with the MDG requirements. This has allowed the UN to say in 2004 then in 2006 that the world was on track to achieve the “access to water” MDG. However, the criterion used for the comparison is too loose to be meaningful. A more stringent criterion should be used.

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Need to reconcile JMP and National data at country level

There are good reasons why JMP and government sector data differ. A key challenge is to reconcile the JMP country data with the national sector data, i.e. to identify and understand the discrepancies between them. This would raise the level of confidence in each set of data and would help to monitor action better.

- The JMP provides data at country level that are organised to build valid global data. Their goal is very different from the purposes of National Sector Information Systems that aim at operational measurements and decisions and need more practical details. In many countries, the definitions and the methodologies used by the JMP (and state statistical offices) and by the national Sector Information System differ and provide sets of data that have different meanings. One cannot be considered as superior to the others but differences must be explained. This issue is detailed below in paragraphs E2 to E5.
- In many cases water professionals use the same language when referring to the JMP data and the National sector data despite their different meanings. This creates confusion and misunderstanding at their level. At political level and in the general public the situation is even worse since politicians and journalists usually shorten their language to "access to water", a concept for which there are several levels of access and as a consequence several quantitative sets of data that measure different realities.
- There is great value in reconciling JMP and national data at country level. Such reconciliation allows water professionals to know the value of their data better, improves the validity of each set of data and avoids misunderstandings. However, it seems that many States do not make such reconciliation and stay with different data without understanding why they provide different numbers.

Governments and donors' monitoring of their contributions to the MDGs

- More and more countries are reporting information about coverage of water / sanitation services. Their Information Systems are improving and provide more and more reliable data. However, no attempt has been made to assess the effectiveness of the wide range of different systems used
- To date, very few donors report annually on their own contribution to the water/sanitation MDGs despite the clear requests of the Camdessus report, the G8 water plan and the Hashimoto Action Plan. The efforts of the African Development Bank and the French bilateral agency stand out.

Improvement of the JMP

- The international community should increase its support to the JMP in order that it provides more global data about the realities of access to water / sanitation in the world.
- An immediate improvement would be to fix the 1990 baseline by using the data collected over the first 14 years of the MDG programme. This would fix the MDG targets.
- Data collected by field surveys should be reconciled by country governments with their own data. This would enhance the validity and the credibility of JMP country data.
- A significant enhancement would be to report at global level on all the indicators that are measured through household surveys at field level (including about the multiplicity of water sources). This would give a far better picture of the reality and would allow a better understanding of the progress being made. A first step has been made in 2008 by the JMP when reporting to the AfricaSan conference on the situation of access to sanitation in Africa. They were able to report on a "3-step sanitation ladder" when at global level they have only reported on a one-step ladder in their 2006 release.
- There are too many unidentified people having access to "improved water" who are in a situation that no reader of the present report would accept for himself/ herself. The

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survey methodology should be refined to be able to assess, possibly in a simplified way, additional parameters that are essential for people such as reliability, availability, serviceability of the water source, cost to the end-user and quality of water.

Increasing knowledge of water sector spending

- The challenge of access to water/sanitation is to improve the situation of poorly served people. The weight of water/sanitation expenditures in a country GNP is a useful policy indicator. However, in many cases, this information is not easily available and in most countries such assessments are restricted to limited categories of expenses like those piloted by the national public budget. In such cases the economic reality of poorly served people, those who do not benefit or who only partially benefit from the public water services and have to spend private money to bring water to their homes is forgotten. UNSGAB has requested OECD that they “develop better knowledge of all water expenditures”.

Knowledge of global situation regarding access to water and sanitation

- Figure 5 (page 21) recaps the data available at global level.
- The available values provide a clear assessment of progress made since 1990 for access to “improved water” or “improved sanitation”. The results are widely known: achieving the water MDG requires a slight acceleration when achieving the sanitation MDG would require an improbable step change.
- They do not allow assessing with accuracy acceleration or deceleration of progress in the recent years. This will require data for more years.
- From 1990, the percentage of people connected to water and sanitation networks has increased. However, the number of people who are not connected has also significantly increased over the same period of time. In 2004, 2.9 billion people (46% of the world population) had no access to tapwater at home or in the immediate vicinity. This means that water and sanitation networks are expanding more slowly than demographic growth. In cities they cannot cope with the urban demographic growth and the connection ratio has even decreased.
- More will be known mid-2008 with the release of updated global data based on 2006 values by the JMP.

C. Objective 1. Strengthening the WHO-UNICEF Joint Monitoring Programme

The Joint Monitoring Programme [JMP] is a joint WHO-UNICEF Programme that reports on the status of access to water-supply and sanitation worldwide and aims at supporting countries in their efforts to monitor this sector.

JMP assessments were made in 1991, 1993, 1996, 2000, 2004 and 2006.

Initially, the JMP reports were based on questionnaires answered by countries. A new methodology shifting from service provider to service user information through household surveys was introduced in the 2000 report. This methodology is widely used in the 2004 and 2006 reports that cannot be compared with the reports of the nineties.

C.1. Increase financial support (Objective 1 – component 1)

C.1.1. Funding

According to WHO and UNICEF, funding has been obtained from:

?DfID (Rapid Drinking Water Quality Assessment + general JMP operations)
GBP 600,000

?EU Water Facility for country level projects in Ghana, Mozambique, and Nigeria (2006)
Euro 1,500,000

?BMZ (Germany) for general JMP operations: Euro 200,000 in 2006 and same committed for 2007

The JMP has drafted in 2007 a multi year multi donor proposal seeking an amount of US\$ 3 million per year for general JMP operations.

C.1.2. Staffing

The JMP staff is pretty small with very few full-time people.

In UNICEF, apart from the team head, 5 persons are involved with respectively 5 %, 10 %, 50 %, 40 % and 30 % of their time. In WHO, apart from the team head, 3 persons are involved with respectively 100 %, 80 % and 100 % of their time.

Recruitments have recently strengthened the JMP team.

UNICEF has recruited: 1 Sr. Statistics and Monitoring Advisor (Sept 07)
 1 Project Officer Monitoring (April 07)

WHO has recruited: 1 Statistician (July 07)
 + 1 expert seconded by France

C.2. Increase accuracy of JMP data (Objective 1 – component 2)

C.2.1 Why such a question about accuracy of JMP data?

Country data that is provided by the Joint Monitoring Programme is in many cases different from the sector data provided by the governments' own information systems.

In some cases, they are perceived as being very far from the reality in the field. In addition, the numbers for the 1990 baseline are changing from one JMP release to the next.

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As a result of all this the JMP has not yet gained the confidence it deserves from the decision-makers and the water community.

There are good reasons for differences between sets of data from JMP and governments that relate to the same country. These reasons are analysed in § E4 below.

This paragraph aims at assessing the validity of the JMP data independently from the mechanisms of other data providers.

C.2.2 The JMP methodology

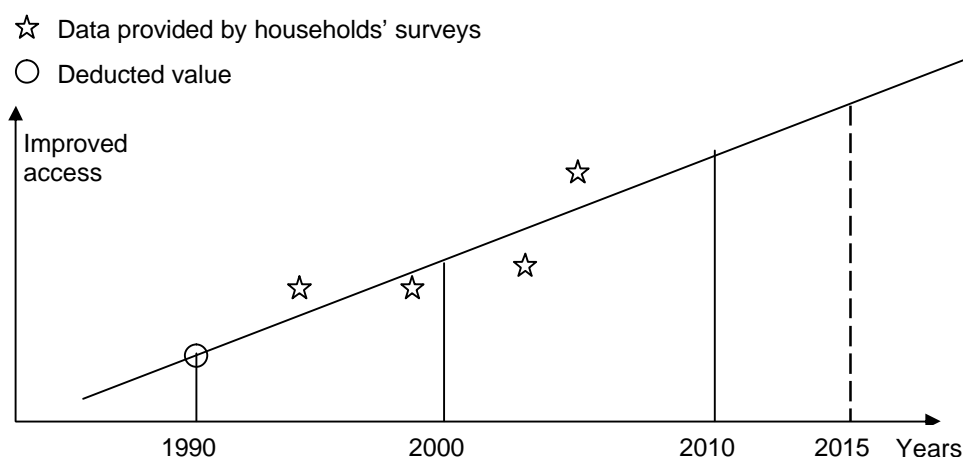
C.2.2.1. The basic methodology

The basic methodology of the JMP is as follows:

- Use of pre-set standard and stable indicators: “access to improved water supply” and “access to improved sanitation”. They have a precise definition and they draw a somewhat arbitrary line between people having access and the others. In some countries, this definition is perceived as rigorous when in others it may be the opposite.
- Counting people through using data from national censuses and nationally representative “household surveys”. Most of the data points used by the JMP are provided by Demographic and Health Surveys³ (DHS), Multiple Indicator Cluster Surveys⁴ (MICS), Living Standards Measurement Studies (LSMS) and World Health Surveys (WHS). These sample surveys are carried out by national bureaus of statistics and are nationally owned. National data is added together to obtain global or regional numbers.
- Making a linear interpolation to estimate some annual values. A key challenge for the JMP is to provide global data and to monitor progress towards the MDGs on a regular basis. In practice, the JMP team releases an update every two-years.

As a census is usually conducted in a country only once or twice a decade and as “household surveys” are made on an irregular basis, the JMP cannot use country surveys that provide simultaneously updated data for all countries. The JMP team has no other choice than to interpolate between the results of the few surveys available in each country.

In practice, they use the simplest way to interpolate which is to draw a straight trend line based on the least-squares method between the measured numbers (see figure 1 below an example of such linear regression line). This is hard to criticize if they have no external inputs about changing in trends.



³ [UN Figure 1. The linear interpolation mechanism used by the JMP](#)

⁴ UNICEF [Multiple Indicator Cluster Surveys](#)

C.2.2.2 The source of data: households surveys

This procedure provides numbers on the date of the survey that are meaningful for measuring “improved access” if the census and the household surveys are reliable. The survey methodology has improved with time. This may be discussed in some cases but the JMP coverage updates of 2002 and 2004 are widely believed to better reflect the actual coverage situation than the 2000 estimates.

The JMP team explains the advantages of household surveys:

“Since 2000 the JMP no longer reports on coverage estimates reported by governments. These calculated the incremental number of people gaining access based on the number of facilities constructed each year, and were thus not a good indicator of sustained use. Instead the JMP exclusively relies on national census data and information obtained through nationally representative household sample surveys which provide an objective, cross-sectional picture of what types of facilities people are using at the time when the survey was carried out. This way the JMP ensures that facilities which are no longer in use because they are malfunctioning are not reflected in the JMP’s coverage estimates.”

In the surveys the questions that relate to water / sanitation are mainly about the facilities that are used:

“What is your main source of drinking water?”

“What is your main source of water used for other purposes such as cooking and handwashing?”

“What kind of toilet facility does your household use?”

A list of various facilities is provided (see detailed questionnaire in annex 2).

C.2.2.3 The JMP indicators

The main goal of the JMP is to monitor progress towards the achievement of the water and sanitation Millennium Development Goals. These relate to “sustainable access to safe drinking water” and to “sustainable access to basic sanitation”

Unfortunately, these standards of living have not been defined in the 2000 Millennium Declaration. Therefore, the JMP has to use its own definitions and, in practice, uses two arbitrary proxies that are named “access to improved water sources” and “access to improved sanitation facilities” (see table 1 below).

In other words, although there are many different practical ways to get access to water / sanitation which provide different benefits to their users, the JMP disregards the related levels of service and aggregates them in order to only get two wide categories of people.

The table 1 details the “improved” and “not improved” categories.

It must be noted that the different facilities that are listed in table 1 are counted separately by DHS and MICS surveys. Therefore they can be aggregated separately at global level.

The “improved sanitation” indicator only measures access to private toilets. Unfortunately, it does not capture the other dimension of basic sanitation that is domestic wastewater management.

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<p>IMPROVED DRINKING WATER SOURCES</p> <ul style="list-style-type: none"> > Piped water into dwelling, plot or yard > Public tap/standpipe > Tubewell/borehole > Protected dug well > Protected spring > Rainwater collection 	<p>IMPROVED SANITATION FACILITIES^b</p> <ul style="list-style-type: none"> > Flush or pour –flush to: <ul style="list-style-type: none"> - piped sewer system - septic tank - pit latrine > Ventilated improved pit latrine > Pit latrine with slab > Composting toilet
<p>UNIMPROVED DRINKING WATER SOURCES</p> <ul style="list-style-type: none"> > Unprotected dug well > Unprotected spring > Cart with small tank/drum > Bottled water^a > Tanker-truck > Surface water (river, dam, lake, pond, stream, canal, irrigation channels) 	<p>UNIMPROVED SANITATION FACILITIES</p> <ul style="list-style-type: none"> > Flush or pour–flush to elsewhere^c > Pit latrine without slab or open pit > Bucket > Hanging toilet or hanging latrine > No facilities or bush or field
<p>^a Bottled water is considered improved only when the household uses water from an improved source for cooking and personal hygiene.</p> <p>^b Only facilities which are not shared or are not public are considered improved.</p> <p>^c Excreta are flushed to the street, yard or plot, open sewer, a ditch, a drainage way or other location.</p>	

Table 1. The JMP “improved access” definitions

C.2.2.4 The rationale for the JMP methodology

The goals of the JMP are:

- a) to provide global measures of people having access to safe water/basic sanitation
- b) to measure global progress of access to safe water/basic sanitation from 1990

Goal a). To be able to provide meaningful global estimates, the JMP has to add country values, i.e. populations served/unserved in each country. To do that, it is necessary to get country datasets that:

- have the same meaning and definition
- are measured with the same procedure
- are determined on the same dates.

This is this requirement of “comparable” country data that has led to the current methodology.

Goal b) In order to be able to measure global progress in a meaningful way it is necessary to have a methodology that is stable over 25 years (1990 to 2015).

C.2.3. The limitations of the JMP methodology

C.2.3.1 The scarcity of meaningful data per country

The most-recent JMP report was released in September 2006 and provides information for the time-span 1990 – 2004. The estimates that are presented in this report are “based on over 500 nationally representative surveys and censuses conducted over the past 20 years”. As 220 countries are studied, this means that in average only 2.3 surveys per country are available!

C.2.3.2 A 1990 baseline that is more theoretical than real

With such scarcity of meaningful sources, the linear interpolation seems unavoidable but it has important consequences:

- It provides estimates of changes in the current period that are based on past numbers and which may differ significantly from the reality of change in the field.
- As in many cases reliable household surveys were not conducted in 1990, the 1990 baseline was estimated afterwards by drawing the straight line back to 1990.

This is a methodological simplification that can provide figures for 1990 that are far from the reality of that year.

- This retroactive assessment of the 1990 baseline is calculated for each release of the JMP global assessment. The result is that successive issues of JMP reports may provide different values for the number of people not having “improved access” in 1990 in a specific country. See figure 2 below that recapitulates the successive trend lines for Bolivia as a result of more recent surveys.

This moving baseline is inherent to the methodology. It is not comfortable for users and has probably contributed to the perception of unreliability of the JMP methodology.

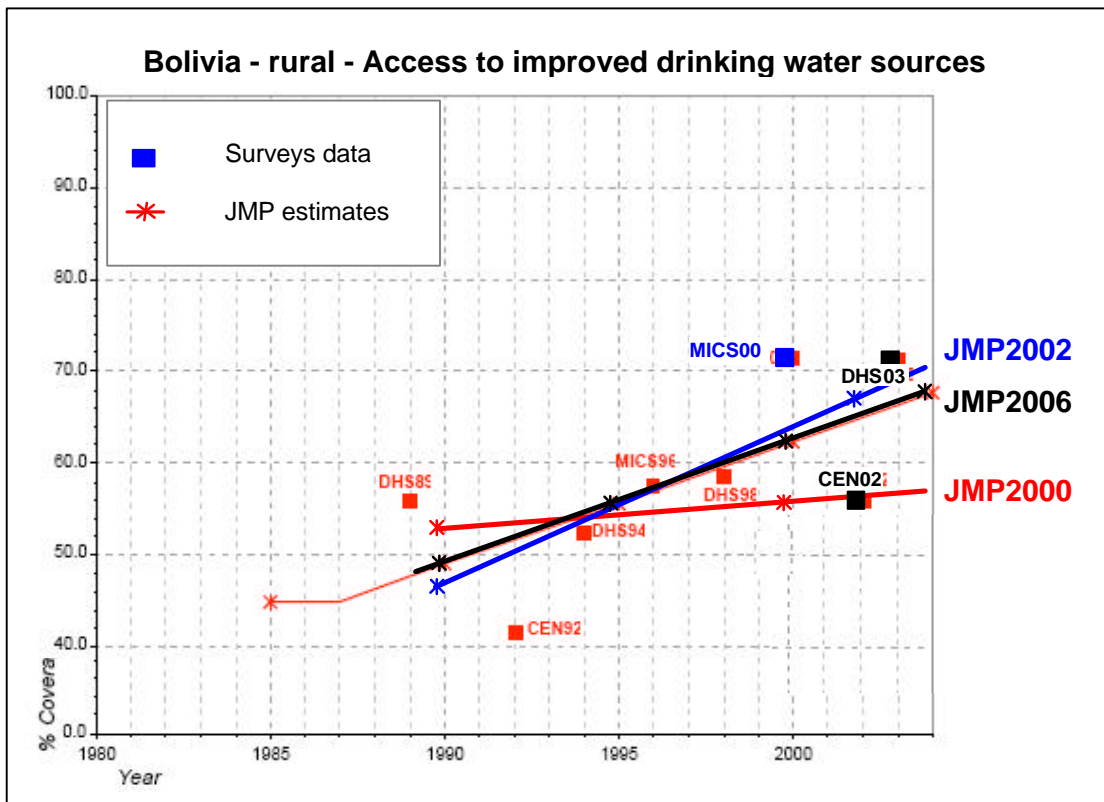


Figure 2. Successive JMP trend lines for Bolivia

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When the baseline moves for countries, it also moves for global estimates. In practice, the global estimates of the JMP for “access to improved water sources” have varied as follows:

Global JMP data WATER	Population without access to improved water sources in 1990		Resulting 2015 target
	Number	%	
JMP 2002 ("2000 report")	1 126 million people	21,4 %	10,7 %
JMP 2004 (Mid-term assessment)	1 210 million people	23 %	11,5 %
JMP 2006 (The urban and rural challenge of the decade)	1 187 million people	22,5 %	11,25 %

Table 2: the moving baseline and targets for water:

- the fact that the baseline is moving retroactively causes the 2015 global target to be modified at each release. The changes for water are not enormous but are significant: up to 0.5 basis point of coverage in 2015, i.e. a spread of about 40 million people at the global level. For sanitation the changes are more important (see Table 3).

Global JMP data SANITATION	Population without access to improved sanitation in 1990		Resulting 2015 target
	Number	%	
JMP 2002 ("2000 report")	2361 million people	45 %	19 %
JMP 2004 (Mid-term assessment)	2685 million people	51 %	25 %
JMP 2006 (The urban and rural challenge of the decade)	2711 million people	51 %	25 %

Table 3: the moving baseline and targets for sanitation:

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C.2.3.3 A Programme that is designed for global purposes and not for country needs

The methodology that is used by the JMP has been designed to achieve its global mission. A standard procedure has been set up in order to get country numbers that can be added together. The result is that the estimates provided by the JMP are probably more meaningful at the global level than at the national level.

The national JMP estimates are not very useful for global and national decision-makers since:

- the progress of a specific country that can be derived from JMP data has no reason to be representative of the short-term reality. It is only meaningful over a long period of time.
- The aggregation of different levels of service to make a single category makes that comparisons between countries are uneasy. The populations of two countries with identical ratios of "improved" access may experience very different lives.

In practice, the JMP provides information at country level that is a more useful and more detailed than the one that is published in their printed reports. The data used and the trends lines are made public by the JMP for every individual country (but are difficult to find on their website so that most users probably ignore these details). This detailed data can be very useful for country decision-makers.

C.2.3.4 The standardised levels of "improved" access are not perceived as representative of the ambition of the MDGs by many experts

Some ways to get access to water / sanitation that are categorised as "improved" by the JMP such as protected wells may be satisfactory in some areas but unsatisfactory in newly urbanised dense areas where the protection can be more theoretical than real.

The constraints of life differ between rural, urban and newly urbanised areas. Using the same criteria to assess the sustainability of access to safe water in all these various habitats is a simplification that may look excessive. However, usually, the distinction between urban and rural areas in statistics is more administrative than real and introducing different criteria in the methodology could bring more problems than advantages⁵.

Furthermore, the JMP methodology only differentiates between "main sources of drinking water" without using criteria that are essential to users such as:

- the quality of the water
- the reliability , availability , serviceability of the source
- the cost to the end-user
- the time requirement (although available in surveys)
- the distance to source

These limitations are discussed in § C.3. below.

Another limitation comes from the fact that poorly served water-users often use multiple sources to get water which is not captured by the JMP that only reports on the "main source".

The 2006 Human Development Report has highlighted this limitation of the current JMP methodology and provides the example of Jakarta (see figure 3): "*The distinction between improved and unimproved is clear-cut and convenient for international reporting*

⁵ GTZ reports in its 2007 document on MDG monitoring in Sub-Saharan Africa that "in Zambia urban areas are defined as settlements where public services such as water, electricity, schools and hospitals already exist". No wonder that coverage ratios are good in such "urban areas".

purposes. It is also a deeply misleading guide to reality on the ground. In the real world of water-insecure households the simple border between improved and unimproved water is illusory. For millions of poor households, daily water use patterns combine recourse to improved and unimproved water". (HDR2006 p.81)

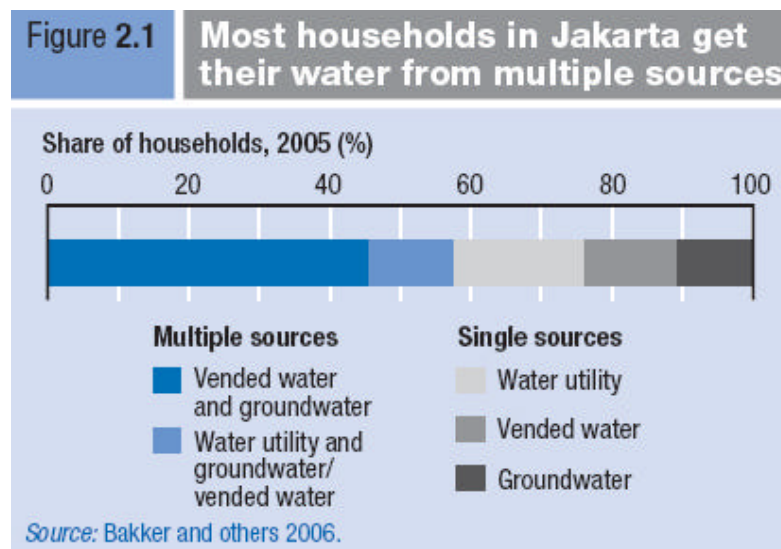


Figure 3. Multiple sources in Jakarta / Excerpt from HDR2006 page 81

All global statistics simplify the world in which we live and we should accept that. However, the MDGs are about poorly served populations that are not easy to identify especially in newly-urbanised areas. It is essential to capture their needs and constraints. Statistics can oversimplify the reality and hide their problems.

C.2.4. "Accuracy" is not the right issue

C.2.4.1 Validity of JMP global estimates

The JMP data results from a well-established procedure. They provide useful information at the global level about an arbitrary threshold, the "improved" level of access.

Global progress measured by the JMP for this indicator is probably meaningful and measures real progress for people.

The "accuracy" of JMP global estimates is not the priority issue although their precision is not high because:

- the number of household surveys that are used is small.
- the validity of some surveys seems questionable (for some countries, there are discrepancies of more than 10 basis points between two successive surveys⁶)

C.2.4.2 Validity of JMP country estimates

The country estimates provided by the JMP should be understood as building blocks to get global numbers.

They should not be used locally without detailed interpretation (which is available on the JMP website). The validity of these estimates varies according to the countries:

- some countries benefit from many household surveys that provide data that is very close to the JMP regression line. In these cases, the JMP estimates are meaningful (Ex: urban water in Senegal).
- some countries have their regression line that derives from one or two surveys. The resulting JMP estimates must be used with care since the reliability of the surveys is

⁶ see figure 2).

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not certain (Ex: water in Guyana, Angola). In these cases the JMP often caps the estimates by caution.

- some countries benefit from many household surveys but the recent data is far from the JMP regression line. The resulting JMP estimates must be used with care. (Ex Bolivia, cf figure 2).

C.2.4.3 Oversimplification

The main issue that makes many experts uncomfortable is that **the JMP data provides an oversimplified picture of a complex reality**. These simplifications are appropriate to raise the media attention on the global water challenges. However, where the JMP is perceived by water professionals as non-representative of the reality in the field they are not very helpful to local decision-makers.

An interesting example of such lack of trust is given by the African Economic Outlook that was released by OECD in 2007 (see excerpt below). It criticises the “lack of accuracy” of JMP data and builds on the existence of discrepancies between various sets of data to give preference to “alternative figures” although the validity of many of these figures for “assessing the probability to achieve the MDGs” in the related countries is debatable. This issue is detailed further in chapter E.

The Quality of the JMP Data and Initiatives to Improve Information and Comparability

Data collection and treatment in Africa is generally poor and in some cases distorted for political use. It is consequently difficult to assess the progress made to extend coverage but also to draw comparison across countries. For example, in Angola the national UNICEF MICS survey of 2001 estimated the percentage of population with access to safe water at 62 per cent. A later UNICEF estimate however suggests that just 34 per cent of urban population has access to safe water, this figure rising to 39 per cent for rural areas. Since almost 70 per cent of Angolans are urbanised, it is unlikely that the national coverage could be higher than 35 per cent. Meanwhile, the joint monitoring programme provides a global estimate of 53 per cent for 2004. Similarly, in Mozambique, current official figures report both urban and rural water coverage rates of about 40 per cent. According to the latest household survey, however, rural water access is only 27 per cent while urban water access is much higher at 64 per cent.

The data collected by the Joint Monitoring Programme and meant to monitor the progress of countries towards the water related MDGs, have been criticised for lack of accuracy. To help improve the monitoring, some donors have supported the development of alternative figures based on wider consultation. Recently, AMCOW, the AfDB, the EUWI, UNDP, WSP and the UNDP have collaborated with local sources to produce MDG Country Status Reports for 16 SSA countries (Benin, Burkina, DRC, Ethiopia, Ghana, Kenya, Madagascar, Malawi, Mauritania, Mozambique, Niger, Rwanda, Senegal, Tanzania, Uganda and Zambia), assessing the probability to achieve the MDGs for rural and urban areas respectively, not only looking at past trends in coverage extension, but also at investment gaps and quality of institutional arrangement to ensure sustainability.

Box 9 of the OECD 2007 African Economic Outlook-

C.3. add information about service conditions

C.3.1 Comments:

Currently the JMP printed reports provide useful information country by country and at global level. However, for water supply they only provide global estimates for a two-step ladder ("improved or not improved water supply", connection or not to water network) and for sanitation for a one-step ladder ("improved or not improved sanitation" that is more or less access to toilets without contact", see table 1). The "improved" indicators are used as a proxy to measure progress towards the MDGs. However, these indicators are too simplified to monitor the global progress in water supply & sanitation in a way that suits the various local operational needs.

For example, if there is a water tap in the household they put it in the "good" water category even if running tapwater is only available for 4 hours a week.

Worse, in light of the 2008 Sanitation Year, it is not satisfactory to measure progress towards the sanitation MDG by only measuring toilets and ignoring governments' efforts in building sewers and rainwater drains that are essential to ensure sustainable "basic sanitation" in dense urban areas. Happily, the JMP program also estimates the number of people who are connected to a sewerage network. The results are available online on the JMP website. However, as they do not appear in the printed reports their existence is unknown to many.

- The 2006 Human Development Report has highlighted several limitations of the current JMP data: *"What emerges from research across a large group of countries is that patterns of water use are far more complex and dynamic than the static picture presented in global reporting systems. Real-life patterns constantly adjust to take into account concerns of water quality, proximity, price and reliability."* (HDR2006 p.81)

It would be useful to build and report global aggregates about access to water that are more numerous than the 2 steps and the single step of the water supply and sanitation ladders. As long as estimates that take into account

- the quality of the water
- the reliability , availability , serviceability of the source
- the cost to the end-user
- the time requirement
- the distance to source

are not available at the global level, the global picture will be perceived as more theoretical than real by field practitioners.

Furthermore, the challenge of basic sanitation (Johannesburg Plan of Implementation) is hindered by an oversimplified sanitation indicator. Providing toilets does not reflect the realities of urbanisation where the needs of collecting greywater and rainwater as well must be met for sanitation to be meaningful and sustainable.

C.3.2. Potential information improvements

Improvements to the current situation should be looked at in the following ways:

C.3.2.1. Better marketing

The availability of data used for each country and of the related linear interpolation should be better promoted and explained.

C.3.2.2. Fixing the 1990 baseline

The 1990 baseline should now be fixed. After 17 years, the new surveys cannot provide information that is statistically relevant to update the 1990 estimates. A possibility could be to fix the 1990 figures as would result from regression lines that use all the information anterior to 2002.

C.3.2.3. Reporting by JMP of all available meaningful data

The JMP reports on 4 indicators (3 in printed reports and 4 online) that are proxies for measuring global progress towards the MDGs. However, more global indicators could be extracted from the household surveys that are collected by the JMP.

- Why not also report the detailed numbers about the various types of facilities used as provided by the surveys (see annex 2)?
- Already available data such as the number of people connected to sewers is useful and could be published even if this is not the key criterion for basic sanitation. For accurate reporting about connections to sewers, it would be necessary to split the numbers of people connected (data available online) into improved or unimproved categories.
- the time that is necessary to fetch water could also be used in the global reporting.
- the number of people using multiple sources of water could also be reported.

Thus, without changing the survey methodology, the 2-step water ladder and the 1 to 2-step sanitation ladder that are used by the JMP at the global level could be detailed by adding a few more steps.

A first move in this direction has been made by the JMP for reporting about sanitation in Africa in the AfricaSan 2008 conference⁴. See figure 4 in which the “Unimproved” category is split into 3 components. Table 4 compares the global and African sanitation ladders that are used by JMP reports for sanitation and shows the potential additional steps that are easily accessible.

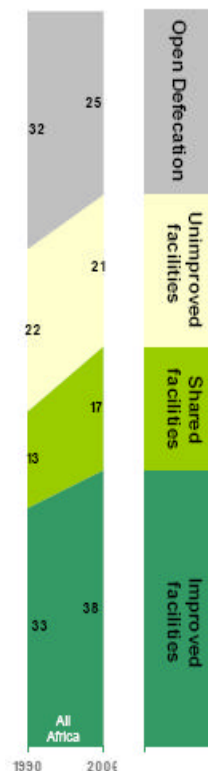


Figure 4 : Sanitation in Africa, source JMP

Requesting the JMP team to report on multiple-steps ladders would mean that the JMP has its mission broadened. Today the JMP assesses progress towards the MDGs by reporting on “improved” levels of access. **To-morrow, if it reports on more access levels it would become the issuer of global data about water supply and sanitation services.**

Such an evolution seems necessary since currently there is a terrific void. Global information on water and sanitation services is very scarce today and restricted to the JMP oversimplified data (See § E.1.1).

Monitoring and reporting progress of access to water and sanitation

“Sanitation ladders”		DHS-MICS surveys	JMP 2006 World report	JMP 2008 Africa ⁷ report	
Sanitation facilities		17 steps	1 step	3 steps	
Private facilities	Flush or pour-flush to: piped sewer system	X	Improved	Improved	
	Flush or pour-flush to: septic tank	X			
	Flush or pour-flush to: pit latrine	X			
	Ventilated improved pit latrine	X			
	Pit latrine with slab	X			
	Composting toilet	X			
Shared or public facilities	Flush or pour-flush to: piped sewer system	X	Unimproved	Shared facilities	
	Flush or pour-flush to: septic tank	X			
	Flush or pour-flush to: pit latrine	X			
	Ventilated improved pit latrine	X			
	Pit latrine with slab	X			
	Composting toilet	X			
Flush or pour-flush to elsewhere (street, yard or plot, open sewer, a ditch, a drainage way or other location)		X			Unimproved (excl. shared facilities and open defecation)
Pit latrine without slab or open pit		X			
Bucket		X			
Hanging toilet or hanging latrine		X			
No facilities or bush or field		X		Open defecation	

Table 4: Current and potential global sanitation data

C.3.2.4. Enhancement of household surveys through more-detailed questionnaires.

As the JMP team remarks, unambiguous information about many characteristics of services is not systematically collected and hence no information on this can be reported. The Technical Advisory Group of the JMP is working on potential improvements.

⁷ [A Snapshot of Sanitation in Africa](#), a special tabulation for AfricaSan based on preliminary data from the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, Durban, 18 - 20 February 2008

C.4. Assessment of the global progress towards the MDGs

C.4.1. A global progress that should be monitored with more stringent compliance criteria

In September 2006, WHO-UNICEF released a report on progress towards the MDGs based on 2004 data.⁸ The JMP team is said to be updating data before the 2008 CSD. The 2006 report is excellent in terms of methodology and provides very useful information.

However, strangely, the two UN agencies have published an overoptimistic conclusion on access to water. The first sentence of the report states: "*The world is still on track for reaching the MDG drinking water target, etc*". This affirmation is inconsistent with the figures contained in the report that provides on page 40 figures that induce a need for a 35% acceleration of the current pace:

Drinking Water Coverage at the world level		Required coverage to be on track to reach MDG Target	MDG target (Halving the proportion of unserved)	Average annual increase Figures printed on JMP2006 report	
				In population actually served	Required to reach MDG target
1990	2004	2004	2015	1990-2004	2005-2015
78 %	83 %	85 %	89 %	81.9 millions	110.5 millions

Table 5: On track or in need for acceleration?

Need for a 35% acceleration !

It should be noted that the required acceleration of 35% relates to average numbers over two long periods.⁹ Step changes are not probable. These averages do not represent the incremental progress to be made on a specific year.

In the 2006 JMP report (2004 data), 'not on track' is defined as coverage being more than 10 per cent below the coverage required to be on track. Using this definition, the world has been considered as on track for the drinking water target. This is questionable since 10% is an enormous figure. The world target is to increase global coverage from 77.5% in 1990 to 88.75% in 2015 (see table 2). If the JMP criterion is applied in 2015, this would mean that a 79.9% (88.75 minus 10%) coverage would be declared as satisfactory for the world having achieved its access to water goal although the world would have made less than one fourth of the road!

To assess the overall progress we need a more stringent criterion for compliance than the target plus or minus 10 basis points.

C.4.2. The current knowledge of access to water and sanitation at global level

Figure 5 recaps the data available at global level. This is for 1990 (retroactive estimates), 2000, 2002 and 2004. The comparison between the 1990 and the 2004 values provides an estimate of progress over 14 years. The comparison between the 2002 and 2004 values shows some progress over 2 years but the magnitude of this progress is not really known. Indeed, the differences between the 2002 and the 2004 values result from additional field surveys in a minority of countries and extrapolation of previous trends in the remainder. The progress that is estimated over 2 years has no reason to be representative of the real global progress. Therefore, the more assessments are made over time the more accurate our knowledge of progress will be.

⁸ "*Meeting the MDG water and sanitation target , the urban and rural challenge of the decade*" www.wssinfo.org/en/welcome.html

⁹ It seems that these numbers have been erroneously calculated on two periods of 15 and 10 years. With 14 and 11 years the annual figures differ but there is still a need for acceleration.

Monitoring and reporting progress of access to water and sanitation

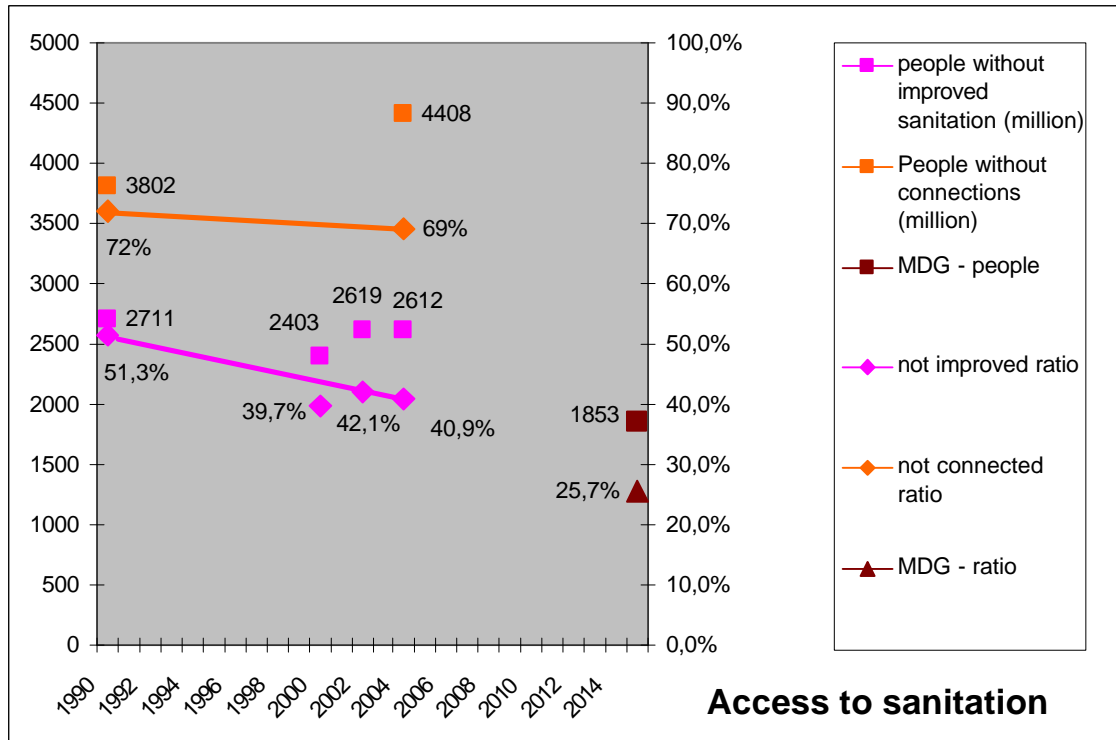
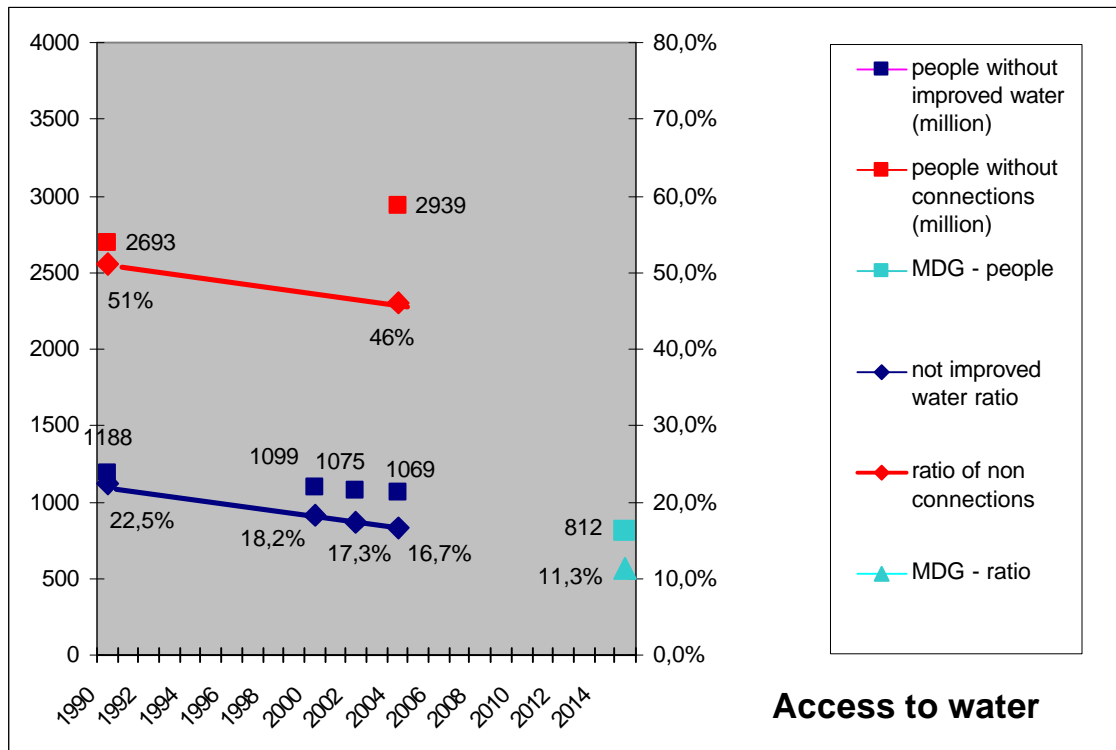


Figure 5 Available global data – Source : WHO-UNICEF Joint Monitoring Programme¹⁰

¹⁰ 1990 values are JMP estimates updated in 2006 with the 2004 data

Monitoring and reporting progress of access to water and sanitation

For access to “improved” water, progress since 1990 is significant. However, the number of people that do not benefit from improved water decreases slowly. At the current pace it is hard to believe that the MDG target will be met.

For access to private toilets (improved sanitation) progress is too slow and without a step change the MDG will be missed. The number of people without access to private toilets is static.

Regarding access to water and sewerage networks there is noticeable progress in global coverage ratio. However, the number of people having no connection to tapwater or to a sewer is increasing quickly. **This means that water and sanitation networks are expanding more slowly than demographic growth. In cities they cannot cope with the urban growth and the connection ratio has even decreased.**

C.4.3. Progress towards the MDGs: JMP country estimates:

- The available JMP data suggests that many countries are not on track to achieve their own part of the water or sanitation MDGs. This must be assessed by checking national data. In many cases it depicts a reality that is even less optimistic than what is suggested by the JMP. Examples are detailed in § E4.
- JMP provides worrying information such as:
 - ? South Africa which is a model for developing access to drinking water is a bad performer for access to sanitation with a decreasing coverage ratio for toilets;
 - ? Officially India which has already succeeded in achieving its own contribution to the Drinking Water MDG is mainly creating public standpipes / wells. Only 19% of Indian people benefit from water at a tap in the immediate proximity of their household. This coverage ratio has not increased since 1990.

D. Convincing national governments (resp. donors) to report on an annual basis the number of people obtaining access to water/sanitation by access category in their country (resp. through capital projects sponsored by them) (Objective 2)

Comments:

- The goal is to make sure that national and international decision-makers are setting targets and using tools that provide them with the necessary knowledge to progress at an appropriate pace in their own field of action.
- There is often a tendency to concentrate on measuring inputs in preference to measuring achievements. Many organisations measure money allocated but do not measure sustainable results achieved.

D.1. Countries

Progress:

More and more countries are reporting information about coverage of water / sanitation services. Their Information Systems are improving and provide more and more reliable data.

(An assessment of the diversity of situations should be made)

D.2. Donors

D.2.1 Multilateral Financial Institutions:

The African Development Bank has measured the impact of the projects already funded by the Rural Water Supply and Sanitation Initiative:

- 32 million African people will get access to water by 2010¹¹

- 31 million African people will get access to sanitation by 2010¹².

This is great. During the AfDB-UNSGAB meeting in Dec.2006, verbally they agreed to split these estimated impacts in annual values.

The World Bank has written in October 2006 to Michel Camdessus that "sustainable WSS access is not easy to measure" and their estimate of the results of their "dedicated to water" projects that closed over the period 2000-2004 is that improved WSS services were provided to roughly 40 million people".¹³ They confirmed in August 2007 that "Between 2000 and 2005, the bank has directly financed access to improved water supply and sanitation services for at least 40 million people world wide through self standing sector projects."¹⁴ Details are not available;

Comment: the World Bank has still to release figures annually. They also have to detail the corresponding levels of service, i.e. to break them down by access categories.

D.2.2. Bilaterals

¹¹ AfDB press release on March 22, 2007

www.businessactionforafrica.org/documents/2007_03_21DraftPRWorldWaterDay2007_Revised_Final_2.pdf

¹² As reported by AfDB in the UNSGAB meeting in Tunis in December 2006

¹³ Letter by Jamal Saghir, dated October 31, 2006

¹⁴ Letter by Jamal Saghir to Bassary Touré, dated August 13, 2007

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France reports annually on the impact of its bilateral aid detailing the number of people (see table 6):

The results of operations Financed by the AFD¹⁵	2001	2002	2003	2004	2005
People who obtained access to water	1 011 476	865 723	437 221	501 500	712 694
People who obtained access to sanitation	379 090	148 914	206 821	345 500	12 500
People whose water service has been improved	6 391 000	2 712 960	250 000	902 000	2 087 500
People whose sanitation service has been improved	1 060 000	45 000	170 000	320 000	2 074 300

Table 6. Annual AFD reporting

The Netherlands have estimated (prorata their funding share) the future impact of the various multilateral, bilateral, private and NGOs programs to which they contribute and that are under implementation¹⁶. They have not reported yet about their current annual contribution.

Other countries: no information could be obtained.

D.3. OECD

As agreed with OECD in July 2006 their statistics about international aid should include the number of beneficiaries.

¹⁵ <http://www.afd.fr/jahia/Jahia/lang/en/home/NosProjets/Eau/pid/920>

¹⁶ According to a governmental communication to the parliament, 26 million people will get access to "improved drinking water sources" and 28 million people will get access to "improved sanitation" thanks to the Dutch share of the various programs financed from January 2004.

E. Increasing effectiveness of global and national monitoring tools that count people (Objective 3, component 1)

E.1. Harmonization of various monitoring activities at the global level

The Water Monitoring Alliance initiated by the World Water Council provides a useful list of all existing monitoring tools in the water sector. They have identified 105 Programmes in the water sector out of which 35 are international. Altogether they provide data about 300 indicators. 9 Programmes are dedicated to drinking water and sanitation⁶.

A similar exercise was made in 2007 by FAO on behalf of UN-Water¹⁷

E.1.1. Global monitoring activities

There are a number of global organisations and Programmes that release data about access to drinking water and sanitation at the global level with country or regional details (UNESCO-WWAP, UNDP-HDR, UNICEF, WHO-UNICEF, World Bank, IFIs, OECD, Water Monitoring Alliance¹⁸, etc).

As shown in the table 7 below, all these Programmes report the same global data which is the JMP data.

There is only one exception, IBNET that provides country estimates based on data provided by utilities. These estimates cannot be compared to the JMP data since they do not relate to whole countries and are not independently assessed; they only take into account data that is voluntarily submitted by voluntary utilities.

This situation makes that the JMP is the only global issuer of global data on water supply and sanitation coverage.

The only other global data that is available about the water supply and sanitation sector is:

- the quantity of water used by the domestic and industrial sectors (FAO-Aquastat)
- the quantity of waste water produced and treated ([FAO wastewater database](#))
- indications on quality of water (WHO, UNEP)

Two conclusions can be derived from this situation:

- **there is no need for harmonising global statistics. They already are with the JMP as the single source of data for access to water supply and sanitation,**
- **except the 4 indicators reported by the JMP, there is no global data available about the various ways and conditions of access to water supply and sanitation**

¹⁷ "Water monitoring, Mapping existing global systems and initiatives", background document prepared by FAO on behalf of UN-Water Task Force on Monitoring, Stockholm, 21st August 2006

¹⁸ WMA : www.watermonitoringalliance.net/

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Global Water Monitoring Initiatives that report on water supply / sanitation coverage data	Acronym	Responsible institution	Origin of coverage data
Joint Monitoring Programme for Water Supply and Sanitation (JMP)	JMP	WHO-UNICEF	Country Surveys
Water Monitoring Alliance	WMA	WWC	JMP
Millennium Development Goals Indicators website	Millennium Indicators	UNDESA	JMP
United Nations Common Database water statistics	UNCDB	UNDESA	JMP
Global Resource Information Database	GEO GRID	UNEP	JMP
Millennium Project Task Force on Water and Sanitation	MTF	Millennium Project	JMP (2002 data)
World Water Development Report	WWDR	UNESCO	JMP
MDG Monitor	MDG Monitor	UNDP	JMP
Human Development Report	HDR	UNDP	JMP
Earth Trends – World Resources Institute	Earth Trends	WRI	JMP
International Benchmarking Network for Water & Sanitation Utilities	IBNET	WB	Utilities
World Bank Development Data and Statistics	Wbdata	WB	JMP
Global Monitoring Report	GMR	WB	JMP

Table 7: Sources of global data on water supply / sanitation coverage

Progresses in global monitoring:

- UN agencies and donors are working together to harmonize their methodologies. In particular, a meeting took place in Stockholm on January 31, 2007 to discuss donor activities in Monitoring and Evaluation. The same topic was discussed by donors in Washington on February 26, 2007. They identified the need to have different tools at the project level and at the sector level since their uses are different. They also concluded that in addition to improving the JMP global mechanism, the key challenge is to build effective monitoring systems at the country level.
- In its global action plan the UK government is proposing that a single global report is produced annually by UN-Water “to monitor progress towards achieving the water and sanitation MDG targets”¹⁹.

E.1.2. National monitoring activities

- Countries produce and use different sets of data. Information provided by national surveys and censuses is usually published by State Statistical Offices. This information is used by the JMP. The Water Supply & Sanitation [WSS] sector provides other data which comes mainly from water operators. This data feeds the national Sector Information Monitoring Systems [SIM] that are used to monitor detailed progress. These SIM systems use indicators that fit the local needs.

¹⁹ www.dfid.gov.uk/pubs/files/global-action-plan-water.pdf

- JMP data may differ from sector data used by Countries. This is normal and should be better understood since the objectives are not the same.

An example is provided by the “Status Overview of sixteen African Countries” entitled “Getting Africa on Track to meet the MDGs on water and Sanitation²⁰” that was jointly released in December 2006 by AMCOW, WSP, EUWI, AfDB and UNDP and is based on data provided by national sector systems..

For example, according to national data, the drinking water coverage ratio in urban areas has decreased from 74% to 70% in Burkina-Faso between 1990 and 2005 when the JMP finds an increase from 61% in 1990 to 94% in 2004 in the same country.

- In its 2007 African Economic Outlook²¹, the OECD has preferred the data collected by the “Status overview of sixteen African countries” to the UN data. This choice was made because of JMP limitations but without explaining the different meaning of the “alternative data” chosen (see § C.2.4.3 above).
- There are methodological issues that have to be publicly clarified. Indeed, the discrepancies between datasets bring confusion to data-users, in particular to international donors. It is common interest that the various data issuers measure the same improvements and that on a jointly funded project the same numbers of beneficiaries are targeted by the different sponsors.

It is also necessary for decision-makers to not only know the number of people who “get access” in the meaning that is used by the JMP for the MDGs but also know the various concrete improvements that are not captured by the MDG simplified indicators but are often detailed in National Information Systems.

Many governments are improving their WSS Sector Internal Information Systems.

The discrepancies between JMP and national Sector Information Systems data and their respective rationale are detailed in the following paragraphs.

E.2. The rationale for global data (JMP)

The JMP estimates are designed to monitor the water and sanitation Millennium Development Goals at the global level. They do it with some arbitrary simplifications and provide data that seems credible at the global level.

However, they do not meet the expectations of many water professionals and decision-makers because:

- at the global level they are not detailed enough to give a satisfactory picture of the world situation regarding access to drinking water and sanitation
- they are not designed to provide data that can be locally used for operational purposes

The governments need far more detailed national data. The rationale for their national Sector Information Systems is detailed in paragraph E3 and table 9.

For the sake of comparison, the main characteristics of the JMP data are mentioned in the table 8 below.

²⁰ www.wsp.org/filez/pubs/319200725615_312007101903_MDGs_All_final3_high.pdf

²¹ AEO - Table 15 – Access to services <http://www.oecd.org/dataoecd/37/22/38570654.pdf>

Table 8. The WHO-UNICEF JOINT MONITORING PROGRAMME
Main characteristics

Purpose

- Global measure of people having access to safe water/sanitation
- Assessment of global progress of access to safe water/sanitation from 1990

Methodology

Constraints

? In order to be able to add country indicators, i.e. populations served/unserved in each country, and to build the global estimate, it is necessary to get country datasets that:

- have the same meaning and definition
- are measured with the same procedure
- are determined on the same dates.

? In order to be able to measure global progress in a meaningful way it is necessary to have a methodology that is stable over 25 years (1990 to 2015).

Indicators

Facilities used as declared by the population

Reduction of answers to 3 categories for water supply and 2 categories for sanitation

Source of information

Household surveys

Estimates on non-surveyed years

Linear interpolation over more than a decade

Achievements

Provides an assessment of global progress that is credible

Provides apparently simple information that makes it attractive to media

Weaknesses and limitations

Methodology

- Only a small number of surveys per country.
- Moving 1990 baseline
- Oversimplifying linear interpolation unable to provide short-term trends
- functionality/availability/serviceability/quality/cost/time/distance not taken into account

Communication

- Discrepancies with country data create perception of unreliability
- Definition of indicators unclear to public ("improved sanitation" is not better than "basic sanitation"!)
- Year to year linear changes may significantly differ from local perception.

E.3. The rationale for National Sector Information Monitoring Systems

Governments have Sector Information Systems about water supply and sanitation that are often based on the service they offer to their population and customised to the peculiarities of their water sector. Although they are not all the same, they have some typical characteristics that are detailed in the table 9

**Table 9. National Sector Information System
Main characteristics**

Purpose

- measuring of people having access to safe water/sanitation throughout the country
- measuring progress of access to safe water/sanitation in the country
- guiding national and local decision-makers and monitoring implementation of water policies = the “operational goal”.

Methodology

Requirements

The “operational” goal requires:

- to measure several levels of service and not only two ones
- to use the most-accurate and most recent estimates, therefore welcoming refinements of the methodology over time even if comparability over time is not perfect
- to link the levels of service with the operational components of the water policy
- to take into account the geographical, institutional and social diversity of habitat throughout the country.

Comparability with other countries is not a requirement.

Indicators

Most of the time the system counts the numbers of each type of facilities then estimates the population supplied by each type.

Source of information

Number of facilities as counted by water service providers + surveys to assess the number of people supplied by one facility

Annual Estimates

Usually, the number of facilities is updated every year. The number of people using one facility is less often assessed.

Achievements

Updates are released every year which allows to measure progress on a short-term basis

The Sector Information System can keep track of all types of access and therefore allows for assessing progress on a multiple-step ladder

Serviceability and availability can be monitored.

Weaknesses

- often based on infrastructure with rough estimates of people benefiting from each kind of infrastructure.
- The link between “supply” and “use” is often weakly documented.
- Difficulty to accurately link people with infrastructure components.
- Information about people supplied by formal operators is more reliable than the estimates of people supplied by informal means. This may lead to underestimates of unserved people.

E.4. Discrepancies between JMP and National Sector Information Systems

Numerous people are interested in data about coverage ratios or numbers of unserved people in a specific country. For one country and one date, they can find data issued by the United Nations or by governmental agencies and, in a few cases, by one-shot research projects.

The UN data about access to water and sanitation is released by several UN agencies reports including the Human Development Report and the World Water Development Report. They all come from the same origin that is the WHO-UNICEF Joint Monitoring Programme. This JMP uses data collected by countries in surveys and censuses.

It is not rare that different governmental agencies that collect data through different channels release incompatible values on access to water services in their country. Since the rationale for the UN data (see § E2. above) differ from the rationale and goals for the sector data that is used by the government to monitor the WSS sector (see § E3 above), most of the time the UN and the government use different criteria and count different populations.

The result is that “access to water” values publicly released by a national government and the UN for the same country or for the urban/rural parts of a country are different. This is absolutely normal if they do not measure the same levels of service and do not use the same criteria.

Furthermore, the methodologies usually differ; the UN uses household surveys when usually the government water administration makes estimates that are linked with the actual status of water infrastructure.

A good example of such discrepancies is presented in table 11 below. This table presents official JMP values and governmental sector values for drinking water coverage in 16 African countries. The government data has been collected in a report named “Getting Africa on Track to meet the MDGs on water and sanitation, a status overview of 16 African countries” that was released in December 2006 by several institutions (AMCOW, AfDB, EUWI, WSP, UNDP).

This table also presents the 2015 MDG targets that can be derived from JMP data and the 2015 governmental targets.

E.4.1. Actual access to water coverage ratios

For some countries, JMP and governmental sector values for the current years are very close to each other. This is the case of Senegal or Kenya. For most countries, however, there are huge discrepancies for the present year:

2004 drinking water coverage	Spread between JMP And government numbers		
	Percentage points		
	Rural	Urban	TOTAL
Benin		+ 21	+ 19
Burkina-Faso		+ 24	
Congo RDC		+ 45	+ 23
Ethiopia			- 17
Ghana		+ 27	+ 19
Madagascar	+ 19		+ 15
Mozambique		+ 45	-
Niger			- 13
Uganda		+ 20	

Table 10

Monitoring and reporting progress of access to water and sanitation

These differences are normal in all cases where the definitions of indicators are not identical. For example, in Uganda, the maximum distance of a water source is 0.2 km in urban areas for the access to water being qualified as “improved”. There is no distance criterion in the JMP methodology.

In other cases, these differences show the difficulty of making accurate estimates of unserved people, who in many cases are not official residents or live in precarious habitats.

These differences in definitions are probably the first cause for data discrepancies. However, there are probably other reasons such as:

- the difficulty to make accurate estimates of unserved people who are in many cases not official residents, difficulty which exists both for “household surveys” and for “infrastructure-based estimates”.
- the difficulty to make accurate estimates of populations in peri-urban areas when national census only occurs one or twice every decade.
- the difficulty to link people with different types of water infrastructure when national census does not provide appropriate detailed information.
- the uncertainties and weaknesses of many monitoring systems. The “Getting Africa on track” report indicates that many African countries are currently strengthening their Sector Information Monitoring systems.

E.4.2. Discrepancies for 1990 baseline data

The same table 11 provides data for 1990. Huge discrepancies appear:

1990 Drinking water coverage	Spread between JMP and government data		
	Percentage points		
	Rural	Urban	TOTAL
Benin			+ 26
Burkina-Faso			- 15
Congo RDC		+ 22	
Madagascar	+ 18		+ 12
Niger	- 16		- 14
Rwanda			+ 10
Senegal		+ 18	+ 7
Uganda			+ 18

Table 12

In addition to the difference in definitions and to the other reasons detailed above for the actual discrepancies (see § E41), the discrepancies for 1990 probably result from:

- very weak National Management Information System about access to water in 1990 (seventeen years ago).
- Over simplification of JMP methodology for determining 1990 data (see § E2).

E.4.3. Discrepancies for 2015 Targets

The 2015 targets calculated by the JMP methodology and the 2015 targets fixed by national governments usually differ very significantly (see table 11). This is the result of the combined effect of:

Monitoring and reporting progress of access to water and sanitation

- political choices since government are fully enabled to fix their own targets. In most cases, they do not name them “MDG targets”. In other cases such as in Senegal, they clearly want to outperform the MDGs and fix more ambitious targets.
- differences in definitions of “access to water”
- other methodological differences that create discrepancies for actual data (see § E41)
- additional reasons that create discrepancies for the 1990 baseline (see § E42).

The consequence is that comparisons between 2015 JMP targets and 2015 governmental targets are not relevant.

Clarifying and understanding their differences does not seem a priority. However, when they provide different numbers for the same “improved” indicators it probably means that the link between “supply” and “use” is incorrect. Therefore analysing the discrepancies is a must to better understand the reality.

E.4.4. Conclusion on apparent data discrepancies

The table 13 on next page recaps the main methodological differences between global and national sector indicators.

There are so many methodological differences that JMP and governmental estimates of current drinking water coverage in a country often differ from one to another.

This is absolutely normal if the definitions of indicators used are not the same, which is the case in many countries.

This is less normal if the discrepancies result from uncertainties in the information system. However, it must be acknowledged that in developing countries,

- with often multiple water sources for each individual during a year (because of shortages, different locations during daytime and night time, etc)
- with important parts of the population that are considered as illegal residents
- with census methodologies that are not structured to get useful data for water service,

it is very difficult to make precise estimation of people not having “improved water supply”.

Furthermore, there are methodological uncertainties. For example:

- when a family collects water at a public standpipe, it is usually counted as having access to “Improved water supply” by the JMP and the government. However, if the same family buys the same water from a reseller that fills his own jerry-can at the standpipe and transports it to the doorstep of the household, the access may be counted as “not improved” by the household survey used by the JMP and as “improved” by the government because the water come from a controlled standpipe.

All these findings tend to suggest the following conclusions about discrepancies of “access to water” data:

- **there are good reasons why JMP and government sector data may differ, the most important ones are that their definitions may differ and that they pursue very different goals.**
- **therefore, one cannot be considered as superior to the others.**
- **As significant unexplained discrepancies damage confidence in each set of data and therefore impede action, it is indispensable for each government to analyse and understand the nature of the discrepancies for the data provided about its own country, either by the JMP methodology or by its internal Sector Information System or by others.**

Monitoring and reporting progress of access to water and sanitation

Table 13. Basic differences between global and national indicators

	GLOBAL INDICATORS JMP		NATIONAL INDICATORS SIM	
Number of categories of people for urban/rural areas - Water - sanitation	3- (not improved/improved/connected) 2- (not improved/improved) 4 in report for Africa to AfricaSan		Several (with differentiation of types of water sources: standpipes, resellers, wells, etc.) Several (public toilets are numbered)	
1990 baseline	Moving at each survey since determined by linear interpolation		Often unknown or estimated with outdated methodology	
Differentiation according to: - functionality, serviceability, availability - cost to users - distance of water source - type of water source	<i>Thresholds used within Indicators</i> No No No 2	<i>Multiplicity of indicators according to criterion</i> No No No 3	<i>Thresholds used within indicators</i> Rarely, depends on country Indirectly when differentiating types of water sources May differ from JMP criterion depends on country = 2 depends on country. Thresholds may differ from JMP ones even when indicators bear the same names.	<i>Multiplicity of indicators according to criterion</i> Necessary Indirectly when differentiating types of water sources Yes in rural areas in some countries = 3 depends on country

E.5. The communication challenge

E.5.1 Simplification by the media

Quick readers and media tend not to pay attention to the detailed definitions of indicators and to name them with simplified names.

For example, media use to disseminate “access to water” data. This may measure “access to improved water sources” if it comes from the JMP or “access targeted by the governmental policy” or even “access to piped water” in some cases.

This may result in serious confusion about the real situation

E.5.2. Controversies in the water community

Quite strangely, in most cases where JMP data and Government data differ from each other, nobody makes the effort to understand the discrepancies and to reconcile the different values. The result is a widely spread lack of confidence in all sets of data. The methodologies are often blamed without identifying that they may not measure the same levels of service. **Even water specialists do not understand the situation.**

F. Increase knowledge of water sector spending (at the global level). (Objective 3, component 2)

F.1. The current lack of knowledge:

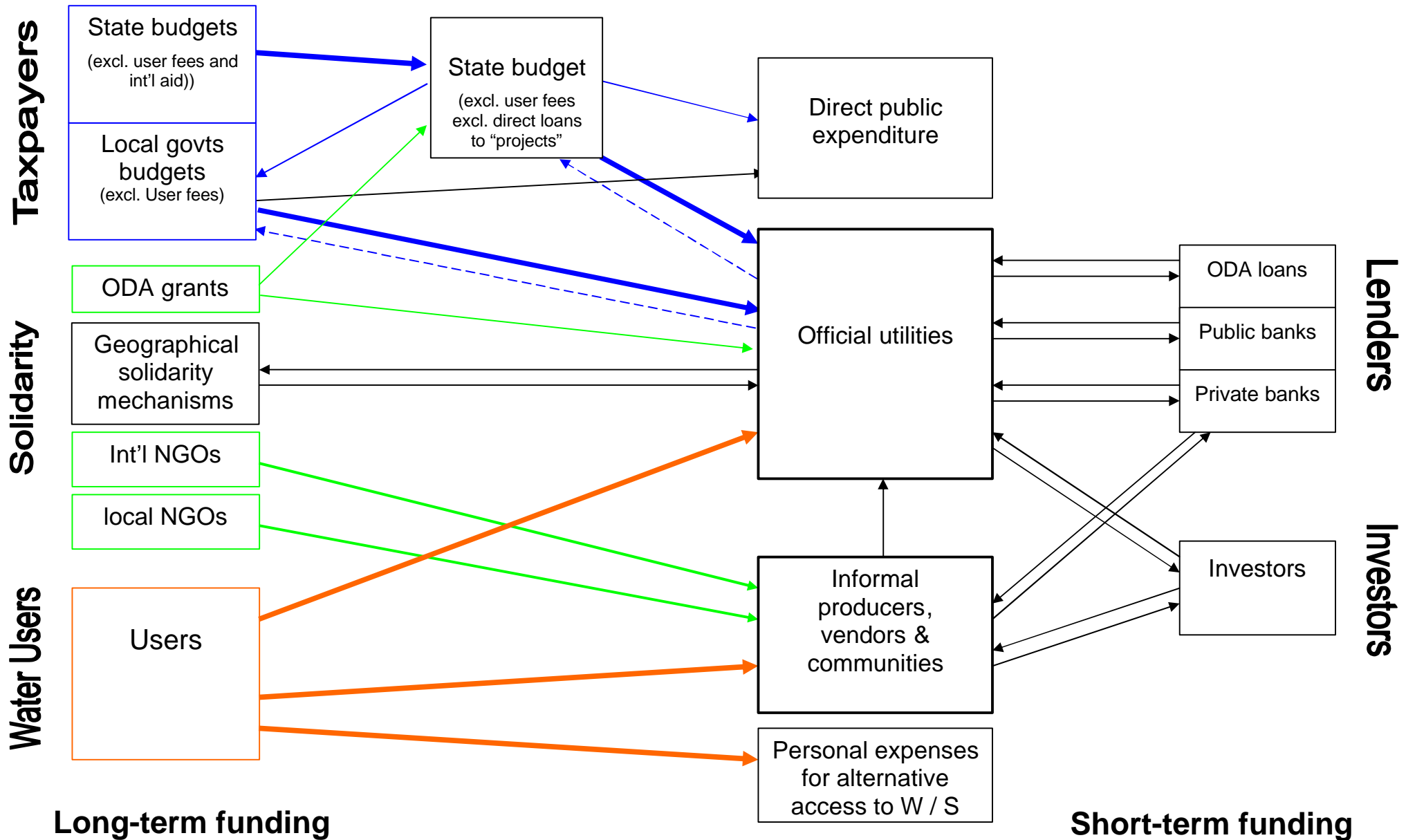
- In many countries, current expenses for drinking water and sanitation are not precisely known. In many cases only expenses piloted by the national public budget are known while local governments' expenditures and all expenses incurred by users to get water where there is no public service are ignored. A better knowledge would entail better decisions. Poorly served people often have high monthly expenses to get water from non-official sources and this capacity to pay services is often underestimated.

- The weight of the water sector in a national GNP is a good indicator of the priority given to drinking water & sanitation by decision-makers in this country. However, this is not easily available information in many countries. In most cases only the weight of the expenses financed by the state is known.

- the sketch on next page shows the various financing flows that need to be known in order to assess the economics of water supply and sanitation in a country.

National economics of the water sector

G.Payen
13 November 2007



F.2. Progress on identifying the economics of the water sector

- UNDP-HDR2006 has compared public spending for water versus GNP in several countries. They found enormous variations and concluded that a public expenditure of 1% of GNP is a minimum when many countries only allocate half of this amount to their water sector (see figure 6).

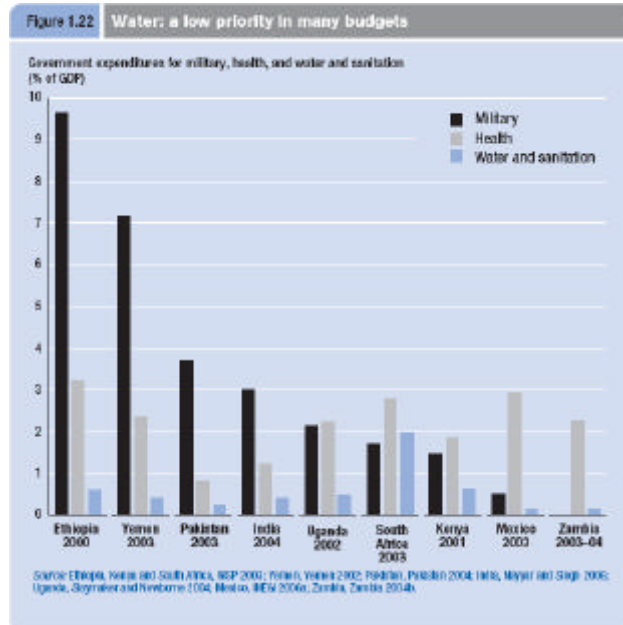


Figure 6. Weight of the water sector versus GDP
Source: Human Development Report 2006

- The OECD 2007 African Economic Outlook provides a lot of useful information about water services in Africa. However, it does not estimate water expenditures.
- The UK government is requesting that the proportion of developing country public budgets going to water and sanitation is detailed in the “annual report to monitor progress towards achieving the water and sanitation MDG targets” that they propose UN-Water should produce⁸.
- UNSGAB has requested OECD that they “develop better knowledge of all water expenditures including public and private infrastructure investment, operation and maintenance, and household expenditures”. The idea is that they initiate estimates of the weight of the water sector in some national GNPs in order that their methodology is widely replicated. At this stage, their intent is still unclear.

G. Monitoring tools to address operational needs of national governments, local governments and civil society (Objective 3, component 3)

Comments: National governments and local authorities need more details than what is useful at the global level. Therefore, it is key that their own monitoring systems address their needs prior to the needs of the global community.

Progress

(To be collated)

H. Miscellaneous

UNDESA to create a database on National Water Policies, IWRM and Water Efficiency Plans, inclusion of water in PRSPs

Progress: In practice UNDESA is working with the other UN agencies within UN-Water to build a comprehensive reporting system on global water data.

The current report does not comment this process.

I. Synthesis – Main findings and challenges

I.1. Clarifying the situation of WSS monitoring at the global level

I.1.1. No need for harmonisation

There are only a few global statistics available that relate to water supply and sanitation and there is no duplication of effort.

The WHO-UNICEF Joint Monitoring Programme [JMP] is the single source of data for access to water supply and sanitation. All global reports and databases (Human Development Report, World Water Development Report, World Bank, Aquastat, MDG-Monitor, etc) replicate the JMP data (see § E.1.1).

Therefore, there is no need for harmonisation of global data.

I.1.2. Scarcity of global indicators relating to water supply or sanitation

Except the 4 indicators reported by the JMP, (“improved water source”, “piped water”, “improved sanitation”, “connection to sewer”) there is no other global data available about the various ways and conditions of access to water supply and sanitation. The only other data available relates to domestic and industrial consumption, waste water production, waste water treatment and water quality (see E.1.1).

This means that the global picture for water supply and sanitation is simplified and not detailed. In particular, there is no global indicator that takes into account:

for access to water:

- the quality of the water
- the reliability , availability , serviceability of the source
- the cost to the end-user
- the time requirement
- the distance to source
- the multiplicity of water sources

for access to sanitation:

- the removal of waste water from the household
- the removal of pollution from waste water produced

At the global level an increased effort to build additional access to drinking water /sanitation statistics would be helpful. The WHO-UNICEF JMP seems to be best placed for this enhancement of the global monitoring activities.

Requesting the JMP to report on more indicators would mean that the JMP would have its mission broadened to become the main issuer of global service data about “water supply and sanitation” and not only about “improved” levels of access.

I.1.3. The essential value of the Joint Monitoring Programme

The Millennium Development Goal Programme [MDGs] has been enthusiastically decided in 2000 by governments. It seems that the decision was made without defining either “sustainable access to drinking water” or “basic sanitation” and without defining the baseline.

Later it was decided to base the Programme on a 1990 baseline and not on the 2000 baseline as would have been politically consistent. This was a mistake because reliable data consistent with the MDG Programme was not available in 1990.

Monitoring and reporting progress of access to water and sanitation

The JMP tries to cope with this defect by making retroactive assumptions of the 1990 situation. Unfortunately the procedure chosen re-estimates the 1990 baseline for each JMP release. This moving baseline has fed a perception of unreliability.

As there was no definition available, proxies were defined by using the data available. This led to the definition of “improved water supply” and “improved sanitation”.

The JMP monitors carefully the progress of the world regarding “improved access”. Information comes from users that declare which facility they use.

The JMP aims at measuring global progress towards the water & sanitation Millennium Development Goals. It is designed to provide meaningful data at the global level. To build this global data it provides comparable country datasets that can meaningfully be added to build global estimates.

The result fits with the JMP purpose: the JMP provides a meaningful assessment of global progress on 4 indicators: access to “improved” water, access to “improved” sanitation, connection to water supply and connection to a sewerage network. The 2 first indicators are used as proxies for measuring progress towards the MDG.

With this methodology the JMP has been able to assess the global situation at the end of 2000, 2002, 2004. An update with more recent data is under preparation.

I.1.4 JMP limitations

Although the JMP methodology provides meaningful global data there are several limitations that handicap its precision and the usefulness of the data it provides. These are:

- the absence of reliable country and global data for the 1990 baseline. The result is that the 1990 values and the MDG targets for 2015 are regularly re-estimated. This creates a moving baseline that fuels the perception of unreliability.
- The very small numbers of household surveys that are available (2.3 per country in average) which means that the precision of the estimates is unknown.
- The fact that in some countries household surveys and censuses are conducted with procedures that are still unreliable. More generally, JMP country data is only rarely reconciled with national information systems. This is a pity since such reconciliation would reinforce the credibility of both systems.
- The arbitrary definition of the two “improved” thresholds. They are effective to build valid global data but their use as a proxy for “sustainable access to safe water” or “sustainable access to basic sanitation” is debatable in some practical cases. They are perceived as an oversimplification that allows for assessing progress without having a clearly understandable meaning.
- The fact that the JMP methodology captures long-term trends only and cannot detect short-term changes.
- If the global data seems reliable, the “urban” and “rural” data may be less accurate since the household surveys use administrative definitions to distinguish urban and rural areas. In fast-growing cities the administrative limits are often obsolete. This makes it difficult for the JMP to measure the situation of peri-urban areas with precision despite their crucial situation for the water & sanitation MDG challenge.
- The precision of surveys based on “representative” sampling techniques need to be validated for the wide range of situations presented in reality. The conditions of habitat and access to water vary widely from one area to another. This report does not assess if these differences are given sufficient consideration in setting up the sampling criteria.

Furthermore, there are some communication issues that lead to JMP global data being misunderstood or not trusted by many.

- The JMP “improved” data fuels confusion when politicians or media use it for assessing “access to water” or “access to sanitation”, which are different concepts.

- Country estimates provided by the JMP often differ from values provided by national information systems. This is absolutely normal but not understood by most potential data-users.

I.2. Clarifying the situation of WSS monitoring at the country level

Governments have operational challenges and must have data for operational use by decision-makers. They maintain national Sector Information Monitoring systems that monitor the water and sanitation services. Usually, these systems give preference to infrastructure data (“supply” data) and derive from it the number of people that use each type of access. This is normal since governments have to measure what they can change.

In many cases, access values provided by the JMP and by governmental sector information systems are significantly different. This creates a lot of misunderstandings but does not mean that one set is better than another since their purposes are different (comparability and stability for JMP, operational for government) and since in many cases the indicators used are different.

However, there is great value in understanding the discrepancies and in reconciling the datasets provided by the national information system and the JMP. In many cases indeed, it is probable that JMP data is too simplistic and does not reflect the reality of users when “supply-oriented” data provided by national governmental systems is weak in the assessment of the number of people using one specific facility.

It seems that this reconciliation is rarely done.

- **There are good reasons why JMP and government sector data may differ, the most important ones are that their goals are very different and that their definitions of indicators may be different.**
- **Therefore, one cannot be considered as superior to the others.**
- **As significant unexplained discrepancies damage confidence in each set of data and therefore impede action, it is indispensable for each government to analyse and understand the nature of the discrepancies for the datasets provided about its own country, either by the JMP methodology or by its WSS sector or by others.**

I.3. Global progress in development of access to safe water and sanitation

The figure 5 (page 21) shows the data available at global level.

It provides a clear assessment of progress made since 1990 for access to “improved water” or “improved sanitation”. The results are widely known: **achieving the water MDG requires a slight acceleration, however to achieve the sanitation MDG would require a significant step change.**

The available data does not allow assessing with accuracy acceleration or deceleration of progress in the recent years. This will require values for more years.

From 1990, the coverage ratios of water and sanitation networks have increased. However, the number of people who are not connected has significantly increased over the same period of time.

In 2004, 2.9 billion people (46% of the world population) had no access to tapwater at home or in the immediate vicinity. This means that water and sanitation networks are expanding more slowly than demographic growth. In cities infrastructure development cannot cope with the urban demographic growth and the connection ratio has even decreased since 1990.

Annex 1: Documentation

a) Global Monitoring

WHO-UNICEF Joint Monitoring Programme

- [“Meeting the MDG Drinking Water and Sanitation target, the urban and rural challenge of the decade”](#), WHO-UNICEF, Sept 2006.
- [Water for Life, Making it happen](#), WHO-UNICEF, 2005
- [“Meeting the MDG Drinking Water and Sanitation target, a mid-term assessment”](#), WHO-UNICEF Joint Monitoring Programme, 2004.
- [WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, Policies and Procedures](#), Version 4, April 2004
- [“Global Water Supply and Sanitation Assessment, 2000 Report”](#), WHO-UNICEF-WSSCC, 2000
- US-AID [Demographic and Health Surveys](#)

Global tools replicating JMP estimates

- [MDG Monitor](#) (operated by UNDP)

Mapping global monitoring initiatives

- “Water monitoring, Mapping existing global systems and initiatives”, background document prepared by FAO on behalf of UN-Water Task Force on Monitoring, Stockholm, 21st August 2006.
- [“Interlinking Monitoring Actions, Making monitoring Work for Development”](#), WWC with WWF4, France and Water Monitoring Alliance, 2006.
- Water Monitoring Alliance database www.watermonitoringalliance.net
- [“Making Progress on Environmental Sustainability, Lessons and recommendations from a review of over 150 MDG country experiences”](#), UNDP Oct 2006

b) Regional Monitoring

- [“Getting Africa on Track to meet the MDGs on Water and Sanitation, a status overview of Sixteen African Countries”](#), WSP with AMCOW-AfDB-EUWI-UNDP, December 2006.
- [African Economic Outlook 2006/2007](#), OECD - AfDB, 2007
- [“Asia Water Watch 2015, Are countries on track to meet Target 10 of the Millennium Development Goals?”](#), ADB, UNDP, ESCAP, WHO, Dec 2005
- [“Saneamiento para el desarrollo, Como estamos en 21 países de America Latina y el Caribe?”](#), Latinosan, WSP with WB, COSUDE, UNICEF, BID, Nov 2007
- [“MDG monitoring for urban water supply and sanitation: catching up with reality in Sub-Saharan Africa”](#), GTZ, Nov 2007.
- [“A Snapshot of Sanitation in Africa](#), a special tabulation for AfricaSan based on preliminary data from the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, Durban, 18 - 20 February 2008

c) National Monitoring

- «Government of Uganda, Water and Sanitation sector. Performance Report 2007, September 2007.

Annex 2

MICS and DHS surveys - Questions relating to water / sanitation

<p>1. WHAT IS THE MAIN SOURCE OF DRINKING WATER FOR MEMBERS OF YOUR HOUSEHOLD?</p>	<p>Piped water Piped into dwelling..... <input type="checkbox"/> Piped into yard or plot..... <input type="checkbox"/> Public tap/standpipe <input type="checkbox"/> Tubewell/borehole <input type="checkbox"/> Dug well Protected well <input type="checkbox"/> Unprotected well <input type="checkbox"/> Water from spring Protected spring <input type="checkbox"/> Unprotected spring <input type="checkbox"/> Rainwater collection <input type="checkbox"/> Tanker-truck..... <input type="checkbox"/> Cart with small tank/drum <input type="checkbox"/> Surface water (river, stream, dam, lake, pond, canal, irrigation channel) <input type="checkbox"/> Bottled water <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/></p>
<p>2. WHAT IS THE MAIN SOURCE OF WATER USED BY YOUR HOUSEHOLD FOR OTHER PURPOSES SUCH AS COOKING AND HANDWASHING?</p>	<p>Piped water Piped into dwelling..... <input type="checkbox"/> Piped into yard or plot..... <input type="checkbox"/> Public tap/standpipe <input type="checkbox"/> Tubewell/borehole <input type="checkbox"/> Dug well Protected well <input type="checkbox"/> Unprotected well <input type="checkbox"/> Water from spring Protected spring <input type="checkbox"/> Unprotected spring <input type="checkbox"/> Rainwater collection <input type="checkbox"/> Tanker-truck..... <input type="checkbox"/> Cart with small tank/drum <input type="checkbox"/> Surface water (river, stream, dam, lake, pond, canal, irrigation channel) <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/></p>

Monitoring and reporting progress of access to water and sanitation

3. HOW LONG DOES IT TAKE TO GO THERE, GET WATER, AND COME BACK?	No. of minutes <input style="width: 50px;" type="text"/> Water on premises <input type="checkbox"/> Don't know <input type="checkbox"/>
4. WHO USUALLY GOES TO THIS SOURCE TO FETCH THE WATER FOR YOUR HOUSEHOLD?	Adult woman <input type="checkbox"/> Adult man <input type="checkbox"/> Female child (under 15) <input type="checkbox"/> Male child (under 15) <input type="checkbox"/> Don't know <input type="checkbox"/>
5. DO YOU TREAT YOUR WATER IN ANY WAY TO MAKE IT SAFER TO DRINK?	Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
6. WHAT DO YOU USUALLY DO TO THE WATER TO MAKE IT SAFER TO DRINK? Record all items mentioned.	Boil <input type="checkbox"/> Add bleach/chlorine <input type="checkbox"/> Strain it through a cloth <input type="checkbox"/> Use water filter (ceramic, sand, composite, etc.) <input type="checkbox"/> Solar disinfection <input type="checkbox"/> Let it stand and settle <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> Don't know <input type="checkbox"/>

7. WHAT KIND OF TOILET FACILITY DO MEMBERS OF YOUR HOUSEHOLD USUALLY USE?	Flush / pour flush Flush to piped sewer system <input type="checkbox"/> Flush to septic tank <input type="checkbox"/> Flush to pit (latrine) <input type="checkbox"/> Flush to somewhere else <input type="checkbox"/> Flush to unknown place/not sure/Don't know where <input type="checkbox"/> Ventilated Improved Pit latrine (VIP) <input type="checkbox"/> Pit latrine with slab <input type="checkbox"/> Pit latrine without slab / open pit <input type="checkbox"/> Composting toilet <input type="checkbox"/> Bucket <input type="checkbox"/> Hanging toilet/hanging latrine <input type="checkbox"/> No facilities or bush or field <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/>
8. DO YOU SHARE THIS FACILITY WITH OTHER HOUSEHOLDS?	Yes <input type="checkbox"/> No <input type="checkbox"/>
9. HOW MANY HOUSEHOLDS IN TOTAL USE THIS TOILET FACILITY?	No. of households (if less than 10) <input style="width: 50px;" type="text"/> Ten or more households <input type="checkbox"/> Don't know <input type="checkbox"/>

Annex 3

Hashimoto Action Plan, March 2006

Excerpts relating to “monitoring and reporting”

5. Monitoring and Reporting

Achieving the goals of water policies requires adequate monitoring tools. Assessing progress toward targets and reporting the results is vital for managing action by all stakeholders.

Monitoring & Reporting Objective 1

Strengthen the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP), which is vital to achieving accurate monitoring on progress toward the MDG target for water and sanitation.

Your Action

- Recognizing the importance of the JMP in achieving MDGs and JPOI on water and sanitation, WHO and UNICEF to urgently increase their own financial and human resources to strengthen the JMP unit;
- Donors to strengthen the support for JMP activities which are directly linked to improving the output of JMP;
- WHO and UNICEF to organize workshops to improve the accuracy and methodologies employed in the current system;
- UN Water to support the JMP by ensuring access to its members' networks and expertise, especially at field level.

Our Action

- Strongly urge WHO's Director-General and UNICEF's Executive Director to implement the points above;
- Discuss with the Secretary-General more resources for the JMP;
- Request donors to increase their support for the JMP in concrete manners according to findings of the workshops;
- Review the progress made to improve the JMP and publicize the findings

Monitoring & Reporting Objective 2

- (a) Concerted efforts by national governments, supported as necessary by UN and donors, to monitor the delivery of water and sanitation services.
- (b) Allocate more resources to monitoring to improve the delivery of water and sanitation services.

Your Action

- National governments are urged to give higher priority to monitoring the performance of the water and sanitation sector;
- National governments are urged to measure and report on an annual basis the number of people obtaining access to water/sanitation by access category in their countries;
- Countries with Poverty Reduction Strategy Papers (PRSPs) are urged to incorporate in them a target for the number of people who will be provided with access to water services in a specific timeframe;
- OECD is urged to create a water domain on its Web site;
- Donors to report on:
 - the number of people who have been provided with access to water and sanitation through capital projects sponsored by them;

- concrete measures to support Integrated Water Resources Management in their partner countries;
- UN DESA to create a database on National Water Policies, IWRM and Water Efficiency Plans, and the inclusion of water in PRSPs.

Our Action

- Take up the above issues on monitoring in high-level dialogues with national governments and regional governmental bodies;
- Communicate with the media to help ensure that the public understands monitoring problems and to build support for efforts to solve them;
- Request that all monitoring mechanisms are improved by including information about service conditions; in particular, improvements in the JMP are required.

Monitoring & Reporting Objective 3

- At the global level, effort to harmonize existing monitoring and reporting activities in the water sector in order to increase their effectiveness.
- At the national level, develop and strengthen monitoring tools to facilitate action by governments and other stakeholders and to bring about consistency with global mechanisms.
- At the global level, increase knowledge of water sector spending.

Your Action

- UN-Water to take the lead in creating a platform to enable global agencies to compile and share consistent data on water. UN-Water as a first step should organize a workshop to share information on global monitoring initiatives;
- The UNSG to work with UN agency heads to increase the priority accorded to the JMP in resource allocations;
- National governments to support all efforts in their respective country to improve water- and sanitation-related monitoring tools so that they better meet:
 - the goals of their water policies;
 - the needs of the various stakeholders including local governments and civil society.

- UNICEF and WHO, to provide support to governments to enhance national monitoring systems and make sure they are consistent with global mechanisms;
- OECD to develop better knowledge of all water expenditures including public and private infrastructure investment, operation and maintenance, and household expenditures in coordination with IFIs.

Our Action

- Review with UN-Water progress made in gathering global water data;
- Review with WHO-UNICEF the progress made in developing national monitoring mechanisms for water supply and sanitation;
- Discuss with OECD its Programme to develop economic data for the water sector.