Meeting report

Report

JMP Technical Task Force Meeting on Monitoring progress in water supply and sanitation – challenges in urban settings

6-9 June 2011
Nanyuki, Kenya

WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP)

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Executive Summary

A Technical Task Force established by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) met in Kenya from 7 to 9 June 2011, with the aim of discussing the challenges of monitoring in urban settings the progress towards the MDG target for drinking-water and sanitation.

The aim of the meeting was to explore the challenges specific to monitoring urban coverage and to identify the role that JMP can play in enhancing the overall picture of progress in urban settings. The meeting was structured around alternating sessions of presentations and discussions to allow for an overview and update of urban definitions, issues and trends, and gradually moving to the specifics related to monitoring. The following are the key issues that were to be discussed:-

- Review the characteristics of urban settings.
- Decide what aspects of water supply and sanitation in urban settings need to be measured for global monitoring.
- Agree how measurements can be done.
- Review the linkages between the different monitoring levels.
- Agree on the implications for the JMP and the next steps to be taken.

Before the meeting, a field visit to the Kibera slum area of Nairobi was made on 6 June 2011 to allow the participants to remind themselves of the realities of the subject of the meeting. The field visit entailed a briefing by the local implementing partners, as well as a walk within the slum with members of the community to observe conditions firsthand.

The meeting format primarily consisted of presentations and discussion in plenary. However during the afternoon of the second day the meeting split into groups for more detailed discussions around four topics, namely: 1) Water, 2) Sanitation, 3) Environment, and 4) Hygiene Behavior. The following questions were used to guide the discussions:

- what are the relevant linkages between the monitoring mechanisms at the various levels (global, national, provider)?
- How can these links be used to enhance the overall picture of urban progress, particularly at the global level?

The final half day session consisted of presentations of the group work followed by a wrap-up and proposed action plan for steps forward.

In reviewing the characteristics of water supply and sanitation in urban settings, some themes emerged which largely set the framework for subsequent discussions. These included: the recognition of the difficulties surrounding defining urban areas and the impact this has on monitoring; the importance in urban areas of taking a broader view of sanitation, including waste water and solid waste management, in terms of the impact on health; the importance of formalize service delivery it meeting the aspirations of urban

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dwellers and in enhancing the potential for monitoring and regulation; the need to consider the use and applicability of non-survey data to national and global monitoring.

It was recognized that the categorization of facilities simply into improved or unimproved did not allow the variations in services levels seen typically in poor urban areas to be properly reflected, for example facilities categorized as improved, such as protected wells, might be highly contaminated and therefore inappropriate in densely populated urban areas. This led to the idea of expanding the ladder approach to bring in a greater degree of differentiation in service levels.

Various examples of monitoring methods were reviewed, including inequity surveys and benchmarking. The persepctives of regulators and national statistical offices helped suggest the criteria needed to determine how monitoring could be done at the different levels.

In summary the issues discussed during the workshop were as follows:-

- Setting the stage: JMP overview/ladder approaches.
- Characterising urban water and sanitation: urban typologies and areas/health aspects/hardware context.
- Survey types and supporting methods: learning and using existing projects/cases studies i.e. Indian PAS project.
- What needs to be measured, as suggested by the working groups :
    - Sanitation: whole chain/standards/operational procedures.
    - Environmental Sanitation: spatial dimension/integrated risk management.
    - Hygiene: intrusive and expensive/can be targeted based on disease incidence/linkages with other sectors.
    - Water: global level/Water quality is part of access/reliability/cost affordability.
- How can progress be measured / data sources/ existing tools: DHS, MICS, UIS, IBNET, PAS, provider data—practical consideration on what can viably be done, adding more indicators to surveys has cost implications and it becomes increasingly difficult to manage and analyze data.
- Linking the global/national/local levels: global indicators and policy-making processes.
- Relevance/comparability/standardization & cost effectiveness of monitoring indicators.
- Roles and responsibilities to better define accountability: JMP, other partners.
- Knowledge-sharing and reducing duplication, i.e. benchmarking (WB), GiZ, AFDB have developed tools and need to coordinate with partners and governments that fund and promote reusing/adapting existing tools. Using same tools will increase comparability.

The Task Force concluded be agreeing the following as the activities as the next steps required in moving the urban monitoring agenda forward
- *Development / confirmation of list of issues to be monitored at global level*
- *Development of expanded ladder concept to show levels of improvement*
- *Explore sources of data and suitability for incorporation at global level – a) further mining of surveys b) provider data*

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- *Urban topologies, delineation of low-income areas (UN-HABITAT)*
- *JMP communication strategy, identification of target audience and data requirements*
- *Interagency partners for strengthening global monitoring (JMP, UN-Habitat, IB-Net, etc.)*—there was a suggestion for JMP to develop a portal/clearinghouse where existing tools for monitoring could be available.

In addition Task Force members suggested specific actions that they could contribute to further the process in the coming months. It was noted that there is a series of opportunities arising in the period leading up to 2015 in which the issue of monitoring in urban settings can be raised and discussed with a broader sector audience. Finally, it was proposed that the JMP produce a thematic report on monitoring in urban settings in 2013, in which the challenges and opportunities reviewed during the workshop can be examined in more detail, as an indication of how future global monitoring might be presented.

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Introduction

A Technical Task Force established by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) met in Kenya from 7 to 9 June 2011, with the aim of discussing a number of technical issues that relate to monitoring progress towards the MDG target for drinking-water and sanitation in urban settings. The Task Force was made up of 15 international technical experts, complemented by members of the JMP teams from UNICEF and WHO, UN-Habitat staff, and two temporary advisers who served as rapporteurs. The meeting agenda is presented in Annex A and the list of participants in Annex B.

The meeting took place at a venue near the town of Nanyuki, Kenya. The meeting was jointly organised by members of the WHO/UNICEF JMP team and colleagues from UN-HABITAT, who were particularly involved in making the logistical arrangements in Kenya, including organising the field trip to Kibera on Monday 6 June 2011.

The aim of the meeting was to explore the challenges specific to monitoring urban coverage and to identify specifically the role that JMP can play in enhancing the overall picture of progress in urban settings. The meeting was structured somewhat differently to the previous two task force meetings on sanitation and water quality. In those meetings specific issues of concern were selected, discussed and a task force recommendation prepared. However for this meeting a broader approach was necessary, starting with an overview and update of urban definitions, issues and trends, and gradually moving to the specifics related to monitoring. The meeting was thus organized around the following issues:-

- Review the characteristics of urban settings
- Decide what aspects of water supply and sanitation in urban settings need to be measured for global monitoring
- Agree how measurements can be done
- Review the linkages between the different monitoring levels
- Agree on the implications for the JMP and the next steps to be taken

Prior to the meeting, a visit took place to the Kibera area of Nairobi, to allow the participants to remind themselves of the realities of the subject of the meeting. The technical task force was briefed by the local implementing partners, followed by a walk within the slum with members of the community, to observe the conditions and ask questions.

Proceedings

The majority of the meeting presentations and discussions were held in plenary, however one session of group discussion was used to help shape the final conclusions. A Chair was

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appointed for each day - Roland Werchota (GIZ) chairing day 1, David Bradley (London School of Hygiene and Tropical Medicine) on day 2, Robert Bos (WHO) on day 3. A facilitator was designated for each session. Rania Elessawi (independent consultant) served as the rapporteur for this meeting, assisted by Rose Alabaster (invited observer).

Each of the sessions began with a presentation(s) on aspect of the main topic, after which the floor was opened for clarifications, comments and debate by the technical experts and members of the Task Force. The final day of discussions focused on agreeing on an action plan for the Task Force.

The following sections of the report provide a summary of the main elements of the discussions, as well as the recommendations and action points relevant to the specific meeting objectives, as mentioned above.

Session: Setting the Stage

Introductory remarks (Robert Bos)

It was noted that this meeting was the third in a series of recent JMP Technical Task Force meetings. The previous two Task Force meetings had focused on sanitation and methodological issues (New York, USA, July 2010) and monitoring drinking-water quality (Villiers-Morgon, France, November 2010). In addition, a Consultation on post-2015 targets and indicators for water supply and sanitation had recently taken place in Berlin Germany, at which the framework for post-2015 monitoring was discussed particularly in the light of the recent recognition of the right to drinking-water and sanitation. Reference was also made to the World Health Assembly Resolution 64/24 on drinking-water, sanitation and health.

Some discussions had already taken place involving the WHO/UNICEF JMP team, UN-HABITAT and some other sector partners, on the subject of monitoring in urban settings. The present meeting therefore needed to take that work forward with clear purpose.

Following the introductory remarks the participants introduced themselves and adopted the proposed agenda.

Presentation: Current approach in global monitoring of progress in water supply and sanitation in urban settings by the JMP (Rolf Luyendijk)

This presentation provided a general overview and introduction about the JMP and the progress that has been made over the years with respect to better defining "sustainable access", indicators, and the methodology. The data sources used for the global monitoring basically come from national surveys and censuses, mainly Multiple Indicator Cluster Surveys (MICS), Demographic and Health Surveys (DHS) and other types of surveys, i.e. Living Standard Measurement Studies (LSMS), Core Welfare Indicators (CWIQ), World Health Surveys (WHS) and (Household Budget Surveys (HBS) which collect water and sanitation data as a background variable. Specific reference was made to the definition of

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sanitation standards. For example, a number of governments have proceeded with the expansion of shared facilities which, in the JMP context, are not distinguishable from public facilities and therefore not considered as "improved" facilities. There remain several such discrepancies between the ideal definitions of "sustainable access to safe drinking-water and basic sanitation" and what is measurable. Other examples of indicator discrepancies include:

1- Lack of global definitions of reliability of services (24/7); affordability; minimum quantity; accessibility (30/15 minutes round trip).
2- Defining "safe" drinking water through incorporating water quality information; a follow-up to the second Task Force meeting recommendations.
3- The MDG Task Force definition of basic sanitation includes 24 parameters—ideal definition—but what can actually be measured is the challenge.

In the current JMP methodology urban figures are national averages and therefore do not reflect the disparities between different urban areas, for example between wealthy areas and slums. This is, in fact, the same for rural areas. Household surveys are also not normally designed specifically to enable disaggregation of informal and slum areas from the urban data, although it can be done.

Some suggested issues for the Task Force to consider included: additional indicators which can be measured; adequacy of pit latrines in urban areas; maximum numbers of households for sharing sanitation; adequacy of public toilets as an alternative to household latrines.

Presentation: Background paper for the meeting (Paul Edwards)

This presentation posed a number of key guiding questions/issues for the task force to address in regards to urban monitoring. These specifically included:

- Key characteristics of urban settings: what is urban? What are the environmental health concerns? What are the characteristics of W&S services and facilities in these areas? What are particular issues/challenges in the poorest urban settings?
- What needs to be measured and at what levels: levels (community, system, sub-national, national, global); facilities (availability, functionality); services (quantity, quality, cost); practices (use of facilities, services); location (classification)?
- How can measurements be done that can facilitate linking the levels and painting the global picture—reconciliation between global and national data collection and monitoring systems?
- Implications for the JMP—short-term (up to 2015); medium-term (beyond 2015); how can innovations be introduced while maintaining consistency; what are the general implications of an increasing focus on urban measurements?

A key consideration throughout the meeting should be that the abovementioned topics be discussed realistically and practically, in regards to how JMP data is interpreted at the

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country level (specifically by ministerial or sector partners), and how this data could be better used for decision- and policy-making processes. MDG targets are very focused on technology-specific coverage options: this meeting needs to examine other options for measuring progress.

Session: Characteristics of water supply and sanitation in urban settings

Presentation: Characteristics of the Urban Landscape: Urban, Peri-urban, Slums, Small Towns (Eduardo Moreno)

The presentation focused on data taken mainly from the UN-HABITAT *State of the Worlds Cities Report* [1]. Urban populations continue to grow, especially in developing countries. Within the next eight years, the urban population in Africa will exceed that in Europe or Latin America. However, 51.7% live in 'small' cities (100,000 – 500,000 population) with only 9.2% in mega-cities with population above 10 million There is no universally adopted definition of 'urban'. Definitions change over time. Most are based on administrative boundaries, some on population size, some on the type of work done by the labour force (i.e. non-agricultural). Classifications include: city proper, urban agglomeration, metropolitan area, peri-urban area, slum conditions. Slums conditions are defined based on levels of deprivation from basic conditions, such as access to improved water/sanitation; durability of housing; sufficient living area; access to secure tenure. Yet in most slum areas perhaps 20% of the population is not deprived of any of these.

Presentation: Environmental Issues in the Urbanisation Process (David Bradley)

This presentation examined how considerations of the impact of poor water supply, sanitation, hygiene and environmental conditions in the urban context might lead to different conclusions regarding what is necessary to monitor from a country and global perspective than is currently the case. The various water-related disease classifications were reviewed and examples given of the particular threats in urban settings. It was suggested that some of the concepts and rules designed for rural settings, such as safe distances between pit latrines and wells, broke down in a more urbanised setting. And while current monitoring focused on the household level, there was a case to be made for expanding both to the personal level, in terms of hygiene, and the community level, in terms of waste water management and waste disposal. From the human rights perspective there were also interesting implications in terms of both rights and responsibilities of individuals and communities. The 'One Water' concept was introduced, making a crude analogy with the 'One Health' concept. The need for longitudinal studies was emphasized, which could be facilitated by taking advantage of the new technologies for monitoring (M-Water).

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[1] State of the World's Cities 2010/2011 - Cities for All: Bridging the Urban Divide, UN-HABITAT

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Presentation: Water Supply and Sanitation Facilities and Services in Urban Settings (Timyin Uwejamomere)

This presentation began with the premise that current monitoring data do not adequately reflect the reality of water supply and sanitation in urban settings and that this was a major concern since it led to wrong policy and investment decisions concerning urban water supply and sanitation. The differences between and within urban settings were illustrated by various examples, showing that the level of services enjoyed by householders can vary considerably even when falling under a single classification in a household survey. The case was argued that monitoring needed to capture more parameters in terms of quality of service, such as, for water: quality, reliability, cost, location; and for sanitation: facilities, services, location. Further suggestions were made towards the need for improving monitoring in urban settings:-
- Establishing good baselines.
- Improve indicators to enhance pro-poor targeting of interventions.
- Improve and harmonise existing frameworks.
- Improve communication and advocacy about urban poverty.

Presentation: Water Supply and Sanitation in Urban Slums in India (Meera Mehta)

This was a comprehensive presentation about the Performance Assessment System (PAS) project that is currently being implemented in Gujarat and Maharashtra with an explicit focus on slums through practical application of an equity approach. The key implementing partners are state governments and local service providers. The project aims to establish a sustainable statewide performance assessment system for improving access to the poor and un-served, and achieve financial sustainability. A framework for equity assessment has been developed. The project has used a combination of service provider surveys and household surveys that incorporate indicators for access and coverage, on water, sanitation, as well as solid waste; levels and quality of service, consumer grievance response, and household expenditure. The first round of the project has been completed, and currently is undergoing a data validation phase that could also provide key lessons learned for the next round of implementation. Sampling framework for household survey provides separate estimates for slum and non-slum areas and by size class of cities. Preliminary results showed, for example, that while on average water supply coverage as per JMP definition was around 98%, and there was no significant difference in coverage between slum and non-slum areas, but there was considerable difference in terms of quantity of water consumption. For sanitation there was significant difference in coverage between slum and non-slum areas – ranging from 23-54% in slums and 84-93% in non-slum areas. Key lessons to emerge so far include:-
- The need to look at all cities and slums, from large to small, and to have an explicit focus on slums through appropriate sampling.
- Data quality will improve gradually if it is seen that data are being used.
- Household survey instruments should be simplified.
- Local and global needs should be balanced in defining key indicators.

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Discussion

The discussions revolved around the following main areas—harmonizing definition/classification of urban areas; improving monitoring systems; incorporating additional indicators/characteristics and inclusion of non-survey data; human rights approach to achieving progress in water and sanitation; and transparency and accountability mechanisms.

Harmonizing definition/classification of urban areas and slums
- There was a general consensus, as presented by UN-HABITAT, that it is extremely difficult for any country to change their definition of urban areas. UN-HABITAT has tried to advocate for adding questions in census data for slums and this was refused by UN Member States. Experience from the recent 2011 census in India of separate classification of enumeration blocks that have slums could be reviewed in this respect.
- Segregation of strata could be considered — deprived vs. un-deprived, slum vs. non-slum through use or application of a deprivation index that can identify urban development indicators for people living in slums to characterize deprived conditions. UN-HABITAT has applied this index for about 40 countries to date, and this index classification can be used to facilitate a clear direction for investment policy.
- There is a need for between one and three basic characteristics to better analyse and classify urban areas beyond using population size definitions.
- Governments do follow international guidelines and harmonization will facilitate classification of urban areas at the country level—as well as facilitate discussions between sector professionals and statisticians. In addition, Governments need the technical guidance of the international community to improve the implementation of the guidelines. They also need to strengthen related definitions to support national level monitoring systems as well as effectively guide policy development.
- There is growing evidence that though all slum dwellers are not necessarily the poorest economically, yet their living conditions are worse than those of non-slum dwellers. Again, this suggests the potential usefulness of a deprivation index to classify slum areas. Such a deprivation index could be derived using information from the household surveys to avoid discrepancies.

People in slum areas are exposed to worse environmental health conditions than people in the same economic conditions living in other poor areas. The relevance of slum specific data is most important for the slum area itself rather than to complete the broader picture of national level indicators or processes.

Improving monitoring systems
- As we improve monitoring systems to show a more detailed picture, we have to be prepared for downward adjustments in overall coverage figures. In going beyond the single improved/unimproved approach it is important to adopt an incremental (ladder) approach.

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- In addition, new techniques that could be used for data collection purposes in different types of surveys could be explored for further use beyond 2015, e.g. geo-referencing.
- There was an extensive discussion on giving consideration to shifting from simple coverage monitoring to incorporate efficiency and quality of service delivery, such as service continuity (days of supply per month and hours of supply per day), micro-metering, user satisfaction with services. A list of key sector issues to be addressed in urban water and sanitation was shared by Antonio Rodriguez and is presented in Annex D.
- Enumerators require training to be able to observe types of facilities during data collection for surveys on improved and unimproved water sources and sanitation facilities. Their skills should be developed so they can account for "safety" of facilities and have a better general understanding of what is acceptable and what is not.

Incorporating additional indicators/characteristics and non-survey data
- In urban areas, having access to services through formalised service provision is an important criterion for monitoring and an important indicator of progress.
- There is a need to shift from simple coverage to efficiency and quality of service delivery.
- Suggestions were made to future possibilities of incorporating behaviour change outcomes at the global level, yet it was recognized that the types of indicators that are likely to be identified are difficult to monitor.
- In urban settings it is necessary to go beyond the household level and look at the private/public domains and their relative impact on health. Consider, for example, the difference between monitoring open defecation and estimated faecal load per square kilometre.
- Indicators for measuring related diseases could be considered as well, but it would have to be decided which would be most relevant and directly linked to be able to measure progress in water and sanitation.
- Other indicators that could be identified include environment-related aspects, i.e. recycling or reuse of wastewater, solid waste management, etc.
- In addition, there are recognized direct health benefits that could be monitored in relation to water and sanitation, as well as other measurements such as time and social status.
- Introduction of questions in national surveys is a difficult and costly process. Consideration should be given to using sector-specific surveys that are managed and monitored by national institutions. This would allow adding appropriate details as well as generate separate estimates for slum and non-slum areas.

Human rights (HR) approach to achieving progress in water and sanitation
- The rights-based approach has not been traditionally used to advocate for water and sanitation progress, yet recent developments with respect to the human right to water and sanitation make this approach more valid, guided by UN level processes.

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- There are various countries using the existing human rights framework of international instruments as a guide for sector development, e.g. Nigeria, Kenya, incorporating these rights into national legislation, including national constitutions.
- There are proposed parameters, criteria and indicators for the practical implementation of this approach at different levels (national, local stakeholder level) that enable establishing accountability mechanisms for the progressive realization of the right to water and sanitation; these criteria go beyond just access levels, i.e. availability, quality/safety, affordability, acceptability.
- Emphasis needs to be on working with governments to understand the practical implementation, including monitoring and mechanisms to meet the rights obligations.
- Monitoring processes provide guidance for action, learning, progress management and accountability: Who is responsible for monitoring? Who is responsible for advocacy for action? Who is accountable? What type of data should be collected, and who should this data be shared with to move forward on actions that would benefit the populations in the urban areas?

Transparency and accountability mechanisms
- There are discrepancies between national and global level accountability. At the national level, line ministries and utilities need to show results in improved services to their constituents—those benefiting from the facilities and services provided. At the global level, progress monitoring figures may not exhibit any change, yet governments may claim an increase in service due to upgraded services to their already existing constituents, or increased investments in operation and maintenance of the sector. Examples of countries were presented where Governments have objected to JMP figures, i.e. Senegal, South Africa, Angola and Kenya.

The recap of the key issues discussed during this day was presented on Day 2, and is included in Annex C.

<u>*Key points emerging from session*</u>

The difficulties in definitions of urban. Definitions vary from one country to another, but they should go beyond population density and administrative boundaries. The use of the urban agglomeration concept may leave room for national variations, yet capture the essential elements in a harmonized manner. Within the urban context, the slum/non-slum distinction is not useful from the water/sanitation monitoring perspective. It can be further supplemented by the level of deprivation concept. Census survey data have to be the starting point for global monitoring. There is a need for international guidance towards improved definitions and greater harmonization.

Going from two to four, i.e. adding hygiene and solid waste/waste-water management to the conventional water supply and excreta disposal. This links to the concept of One Water, following the sanitation stream, use of sanitation safety plans in addition to water

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safety plans as part of the cycle. It also brings into the picture a number of additional public health issues. The man-made urban environment lends itself particularly well to a holistic approach of environmental engineering.

The *importance of formalised service delivery and monitoring of standards*: quality, reliability, cost, location. Countries aspire to have formal service provision of acceptable standards of water and sanitation facilities. The purpose of monitoring is to guide investment decisions so as to achieve this. This poses new challenges to monitoring, but also new opportunities, especially if water/sanitation safety planning is integrated into investment planning and the human rights criteria are used to strengthen the indicators for monitoring.

Balancing national and local monitoring needs, and going beyond household surveys, considering the applicability and relevance of non-survey data at national and global levels.

What needs to be measured?

This session built on the key issues that were highlighted during the previous discussions, and focused on the aspects of urban water supply and sanitation that need to be measured and at what levels, as the main items for discussion – community, system, national, global.

The session was introduced by the facilitator, Meera Mehta, who suggested that the key issues for discussion could be organized using the matrix below.

What to measure? / At what level?	Facilities *availability, functionality*	Services *quantity, quality, cost*	Practices *use of facilities, services*	Location *Planned city, deprived areas*
Community				
System				
Sub-national				
National				
Global				

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The aspects to be considered should include:

For sanitation –
- ✓ Need to include the **full sanitation chain**, especially in non-sewered areas.
- ✓ Need to include **solid waste management** services.
- ✓ **Cost** of extending sewerage lines.
- ✓ **Policy** for providing household/ community level sanitation.

For water –
- ✓ Need to measure higher levels of service as certain levels are attained for basic services – **ladder of services.**
- ✓ Need to assess **quality and reliability** of services.
- ✓ **Pit latrine density** and **use of wells.**
- ✓ **Cost** of extending sewerage line.
- ✓ **Cost of new connection for the poor.**

An open plenary further elaborated these issues and key points are presented below.

Discussion

The plenary discussion addressed the use of population density as a proxy especially in relation to access to water and sanitation services, a working definition of "slums" and what should be measured.

Influence of population density
The definition of population density is significant because it characterizes 'number(s) of people in a confined space'. In DHS surveys the lowest level of density (unit of analysis) is the enumeration area (EA), and this can be narrowed down to the level of a household. Therefore it is important to have agreement or consensus on what the denominator is for measuring various parameters, and this requires improved engagement with statisticians—in national bureaus of statistics—as these are the technical experts who can most accurately define density. Use of new techniques, i.e. geo-referencing, makes it easier to adjust enumeration areas. The relevance of population density for water and sanitation relates to the kinds of services being provided, how they are actually used, degree of acceptability and service levels, i.e. shared facilities, pit latrines, protected wells, location of wells with respect to latrines, etc. This affects the type of data that should be collected, who collects it, how that data should be classified, etc.; what are considered adequate services?

Measuring deprivations and "slums"
The current most widely accepted working definition of "slums" is that of UN-HABITAT, which uses five specific indicators. Four out of the five indicators are already addressed by the DHS, and MICS—with security of tenure being the only issue not measured. Due to the political nature of this parameter, it is not included in the deprivation index used by UN-HABITAT. Yet, it highlights the implications of whether people are willing to invest to improve their housing, including sanitation facilities, without having secured tenure (i.e. ownership of land/structure on the land they live on).

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Expanding the water supply and sanitation ladder approach
Expanding the ladder approach can be used to broaden water supply and sanitation indicators. Some of aspects to be considered include:

- **Water quality**—this could help with defining the ladder classifications and could be incorporated in surveys A few countries are piloting water quality indicators in household surveys. Water quality information can also be obtained from service providers and regulators, though capacity for water quality monitoring is limited. The challenge is that water quality standards vary between countries. Different institutions oversee water quality and there is a high cost associated with collecting the information (reference was made to the experience of the World Bank benchmarking project). In some countries proxies for water quality are used, such as presence of residual chlorine (e.g. Liberia). Participants were reminded that the previous JMP Task Force meeting looked extensively at the issue of water quality monitoring and were referred to the report of that meeting (see: www.wssinfo.org).

- **Water supply system performance evaluation** – this would look at how systems perform on a more continuous basis, rather than the existence of infrastructure alone. Parameters include hours of service per days, days of service per weeks, fluctuations according to the season. What exists and what is acceptable are two different issues, also from a monitoring perspective. A benchmarking approach could be followed and include: efficiency of operation, financial sustainability of service provider and equity in providing services. It is important to recognise the possibility of service providers overstating the level of provision, and the role of the regulator in ensuring the necessary oversight may not be fully functional everywhere. Service provider data on infrastructure provision needs to be reconciled with access data.
    - o Is this an issue of acceptability? User satisfaction indicators? People are generally happy about access to water and sanitation services, but not happy about the quality of the services.
    - o Understanding the un-served—Providers know their clients but they don't know those who are not their clients (linked to equality and equity of service provision as mentioned above).
    - o Seasonality aspects—during the summer quantity and availability of water decrease dramatically, although demand is high—this could be a reliability indicator.
    - o Storage at the community level.
    - o Affordability.

- **Institutional issues related to data collection**—there is potential for conflict of interest when the utilities for water and sanitation are also responsible for data collection (self-monitoring)—standards can vary at municipal local levels from the national standards. The reconciliation of provider data and access data at the country level is important, and there is a need for regulators to strengthen their roles in monitoring of the sector, and their relationships with utilities.

- **Indicators relevant to equality and equity in access to water and sanitation**—establishing specific progress monitoring indicators relevant to equality and access that would enable characterizing types and levels of services provided to populations at different levels of the ladder. Improved analysis of disaggregated data could enable redefining access and this would have implication on current coverage figures and

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overtly address over-reporting. There is a pressing need to address the technology options and progression in the ladder, specifically in urban areas. For the purposes of sustainability and social equity, access should be improved gradually and technologies such as shallow wells, stand pipes, protected springs, and hand pumps, etc. could be removed as improved sources. This approach should encourage more research on how utilities should better target providing of services to the un-served, and how to provide services that could start people higher on the ladder rather than starting at the first step.

How can measurements be done?

Presentation: Monitoring in urban settings – strengths and weaknesses of available data sources (Philipp Peters)
This presentation provided an overview from a country perspective (Tanzania) about the importance of monitoring, why we monitor, institutional responsibilities, and who uses the data at country level; how often should the data be updated. Key monitoring criteria in urban settings were specifically introduced, namely water quality, price of water, service hours/availability, distance and accessibility and sustainability. It was further presented how indicators for these criteria are specifically measured in current national monitoring frameworks. Modifications of questions of national household surveys and censuses were proposed. Some of these modifications included: additional water quality criteria; formal vs. informal service provision; and characterization of different urban realities by disaggregation. The value and usefulness of baseline surveys, was also highlighted in order to better identify the specific issues and characteristics relevant to the lack of services. Baselines could be complemented with citizen/consumer feedback mechanisms and be linked to public health data. Utility information systems, such as the Water and Regulation Information System (WARIS) serve as a performance monitoring tool for technical and financial monitoring of the sector. Effective urban monitoring will provide reliable data that can guide informed decision-making, which requires an enabling environment that is facilitated by sector reforms—decentralization, transparency and accountability, efficient allocation of resources and poverty orientation.

Presentation: Urban inequities surveys (Omondi Odhiambo)
This presentation highlighted the core aspects of the UN-HABITAT agenda relevant to global progress monitoring of water and sanitation, which was established before the MDGs. The definitions used by UN-HABITAT are consistent with the current JMP definition, with additional components for drinking-water, i.e. sufficiency; affordability (less than 10% of household income/expenditure); and accessibility (less than one hour a day for minimum sufficient quantity/person/day). Data is compiled through the use of city-level surveys to collect the data needed. A presentation of a case study on data from Zanzibar Urban Inequity Survey (UIS) highlighted how incorporating additional indicators in the access definition of water and sanitation affects the assessment of progress, e.g. quantity, cost, time to fetch water. For sanitation, the definition applied by UN-HABITAT considers these facilities as improved (private or public toilet) if consistent with JMP definition standards and shared by a maximum of two households. Additional criteria used to assess the adequacy of sanitation services include: availability of handwashing facilities, facility usage day and night, safety to use facility, and frequency for cleaning shared toilet facility (most don't have slabs). Another key

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point considered relevant to the meeting was that with the expansion of the number of indicators considered in the definition of access, access levels will decrease. It was also concluded from this experience that affordability is a very important concept in cities. However, reliable data on the share of water as a cost in household expenditure is not available in many household surveys.

Presentation: Water supply utility benchmarking and its relevance for global monitoring (Alexander Danilenko)
This presentation provided a comprehensive overview of the IBNET Toolkit that provides a set of financial, technical and process indicators for the assessment of utility performance in the provision of water and sewerage services. The indicators focus on the institutional context in which the utilities are operating and enable the assessment of utility performance in the provision of water and sewerage services, as well as provide a basis for the cross-utility and cross-country comparisons. The system identifies water and sewerage coverage indicators and sub-indicators in the set of indicators. Currently, the aim is to expand the use of this toolkit, and engage utilities to benefit from the use of this tool. (see: http://www.ib-net.org/)

Panel Discussion: What data sources are available? Measurement Challenges?
Panelists: Geoffrey Greenwell, Marzuki bin Mohammad, Nii Okai Kotei, Grace Bediako; Moderator: Gordon McGranahan

What are some of the measurement challenges? What scope is there for capturing more/better data on the urban situation to improve the overall picture?

Presentation: Malaysia case study (Marzuki bin Mohammad)
There have been recent sector developments in Malaysia that range from constitutional amendment, institutional and financial reforms, to sector monitoring. Global progress reporting informed by the MDG progress report (2010) is based on data provided by the national statistics agency that is validated from other sectoral data sources. There is a persistent challenge of high access rates, yet low usage of the services provided by the authorities mainly due to other sources of water that are cheaper for households.

Presentation: Ghana case study (regulator's perspective) (Nii Okai Kotei)
From a regulator's perspective the key dimensions of the quality of a water supply service are continuity of supply, quality, water pressure, and responsiveness to complaints. The key information needs are: production data (water produced, sold, billing and collection, non-revenue water); water quality (particularly residual chlorine and bacteriological); customer/consumer satisfaction; and financial data.

Presentation: Nigeria Case Study (Geoffrey Greenwell)
The significance and result of data reconciliation was presented with the Nigeria case study. All surveys collected data differently—Demographic & Health Survey, Census, General Household Survey, Sector Baseline, Core Welfare Indicators, Living Standards Survey. Data reconciliation workshop were conducted that aimed to review data analysis, and adjust definitions that produced new estimates and trends.

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<u>What are we really monitoring?</u> (Grace Bediako)
Brief comments were shared from a national statistician's perspective. The challenge was to have a clear definition of required data. There also is a need to further define our concepts, and to question our precision in data collection mechanisms. Additionally, it is important to have a consensus on what the data is collected for. It was stated that at national level data is not specifically collected for JMP, rather it is collected for national level use, but then can also be used for other needs.

Linking the different monitoring levels

Presentation: The Urban Monitoring Landscape at National and Global levels (Dirk Schaefer)

This presentation aimed to highlight the linkages between national and global monitoring, as well as the different and complementary functions of these mechanisms. If countries do not have national level sector monitoring systems, and only rely on global estimates this indicates lack of sectoral ownership, and lack of detailed information about local conditions and facilities. The following suggestions were made for how global level monitoring might have more relevance at national level:

- More disaggregated data.
- Address and promote dialogue on the difference between global and national monitoring.
- Promote national data reconciliation.
- Capture data that are more relevant for decision-making.
- Acknowledge national monitoring (sector-specific) efforts.
- More flexibility of highlighting advantages/disadvantages of globally comparable data—sharing or highlighting good practices.
- After 2015: incorporating additional parameters (quality, availability, affordability) that reflect "moving up the ladder".

The monitoring frameworks of Kenya and Zambia were briefly outlined, in addition to an example of data reconciliation between national and global indicators in the urban setting in Tanzania.

Group work session *(revision to original agenda)*

A brief introduction about key sector issues to be addressed in Urban Water and Urban Sanitation, by Antonio Rodriguez (*see Annex D)* was shared with the Task Force to be considered for further discussions. The task force then divided into four discussion groups organized around the following four topics: 1) Water, 2) Sanitation, 3) Environment, and 4) Hygiene Behavior. The questions from the original agenda were used to guide the discussions, namely:

- what are the relevant linkages between the monitoring mechanisms at the various levels (global, national, provider)?
- How can these links be used to enhance the overall picture of urban progress, particularly at the global level?

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Feedback from Group Work

Before the group work presentations were made, there was a short general discussion on two burning issues that participants wanted to call attention to.
- **Importance of advocacy and promotion of JMP**. These comments re-emphasized that the need to promote how JMP is distributed and used, and that it should be better utilized by sector partners, international, and local NGOs. There was a suggestion for developing thematic reports (by JMP) to be presented at the UN GA meeting of 2013.
- **Incorporating urban-specific indicators in JMP**. The improvement of the indicators that characterize urban statistics in JMP will further promote the operationalization of the use as well as the influence of JMP in national dialogues about access, specifically in urban areas. Direct engagement with national bureaus of statistics would be essential for this issue.

Each group provided a brief presentation of the key indicators/issues discussed during the group sessions. *Refer to Annex E, for the detailed list of indicators and issues*. A summary of the main issues presented is provided below:

Presentation: Sanitation Group (Timeyin Uwejamomere)
A table of suggested indicators and possible data sources (refer to Annex E for the table of indicators developed) to be considered for sanitation monitoring, relevant to the following topics:
1) Shared facilities (household, community, public);
2) Storage (On-site – flood prone areas);
3) Disposal services (Transport, treatment & disposal / reuse); and
4) Grey water (On-site areas).

Additional points made referred to the need for:
- increasing/improving engagement of private sector—private sector (supply chain) could develop products and technologies and promote facilities in local areas where access is low, as well as be engaged in the removal, treatment and disposal of human waste.
- investing in establishing and/or strengthening monitoring systems mechanisms-- there are substantial economic investments especially for sanitation, this also includes establishing monitoring structures, institutional strengthening and capacity building for accurate data, that supports informed policies and decision-making for improved sanitation.

Presentation: Environment Group (Gordon McGranahan)
The recommendations, as well as the proposed preliminary indicators, revolved around the following:

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- need to add a spatial dimension to urban water and sanitation monitoring (household, neighbourhood, city) in order to more accurately depict the deprivations, as well as issues and risks from an environmental health management-related perspective.
- using the broader definition of sanitation, that includes wastewater and solid waste.

This would apply to JMP-type monitoring, research and action-oriented work to complement JMP-type monitoring. The indicators that could be integrated in monitoring tools and systems may have implications for household surveys and sampling procedures, at national level. The types of indicators that could be monitored at the global level are yet to be considered.

It is noteworthy that currently UN-HABITAT GUO (Global Urban Observatory) conducts environment surveys that aim to develop environment profiles of the neighborhoods/ communities selected.

Presentation: Hygiene Group (Geoffrey Greenwell)
There is evidence-based research that links hygiene to water and sanitation and correlates to the impact on health, as well as other development indicators. However it has been difficult to make the case for hygiene-relevant indicators as opposing to monitoring access of facilities. There are already existing surveys that incorporate hygiene-related data, water quality (household water treatment and storage) and sanitation (types of facilities, numbers of households using facilities). It is recommended that linkages related to monitoring hygiene are used to:
- Build national monitoring systems that could link monitoring by health authorities and water/sanitation authorities to monitor water- and sanitation-related prevalence of diseases.
- Ensure awareness raising is incorporated in water and sanitation promotion to maximize the benefits of the facilities, because hygiene is a behavioural practice and its promotion requires different approaches.

Presentation: Water Group (Dirk Schaeffer)
Various suggestions were made for modifications to indicators either pre- or post-2015. However, it was stressed that the group had difficulty reaching a consensus for prioritizing the types of indicators that should be given consideration.
- Water Quality—key recommendation that post-2015 water quality should become part of the access definition—in the ladder.
- Availability— continuity of service is specifically proposed, post-2015 continuity should be incorporated in access definition as well, e.g. 12 hours/day being sufficient
- Formal/informal services—Human rights discourse will make this issue more valid, as accurate information will be needed to hold Governments accountable for providing services to formal or informal areas.

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- Price/affordability—there was still no consensus on this issue, as it is a complex indicator to construct and then to measure. The main issue is that the percentage of income that is spent on water and sanitation services is not a good indicator of affordability especially for the poorest who often do not have easily quantifiable incomes. Yet, generally the poor still pay higher costs for service provision.
- Changing the classification of certain technologies from improved to unimproved as they are not appropriate in urban settings, for example protected shallow wells.
- Sustainability issues should also be considered, these are more relevant to a utility-level monitoring, such as: do consumers have access to certain quality of water, within reasonable means; non-revenue water parameters (which measure the volume of water that is not accounted for); indicators for minimum price to be able to sustain services.
- Other issues might include: consumer grievances, user satisfaction, seasonal variations in services

Implications for the JMP and the next steps to be taken

Presentation: Criteria for global level monitoring (Rolf Luyendijk)

This final presentation provided an overview about considerations for global monitoring by the JMP that have been incorporated into a strategy for 2010-2015. The JMP mechanism provides a framework for the development of the sector by contributing to guiding accountability, learning, tracking progress, and advocacy processes and results at global level, as well as national level. Key challenges for global level indicators, as those included in JMP, remain. In addition, there is recognition and increasing flexibility in the need to expand the JMP's role beyond monitoring the indicators, such as:
- Bringing sector monitoring experiences together and compiling experiences for learning
- Documenting and sharing best practices
- Piloting separate surveys for assessing neighbourhood environment, and possible other parameters
- Facilitating normative discussions on standards and their measurability
- Identifying different target audiences and their information needs.

Discussion:

Recap on morning presentations (facilitated by Andrew Cotton)
This session reflected on what had emerged in the meeting and what might the JMP do, in terms of improving the picture of global progress in water supply and sanitation in urban settings? What is the JMP's comparative advantage? What could be done by others?

In response to the previous presentation, there was a discussion about the need for more reflection on the JMP role in regards to "accountability", and how the JMP data supports

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national level processes linking sector progress with investments. This could be supported by "learning" that would document and share what has worked and what hasn't.

It is recognized that there are key gaps in using the JMP alone as the global monitoring tool, without using other existing tools. The key gaps at global level for comparable data on water and sanitation include:

- Addressing discrepancies by using different types of data. Currently cross-sectional data is used, however longitudinal data could also be considered.
- Operation and maintenance remain a gap, and there is a need to capture data about this
- Current data collected are based on household level units, and there is a need to go beyond the household; community-scale indicators can also be analyzed at the household level.
- Data disaggregation on access in formal and informal areas to identify gaps and discrepancies.
- Data needed about sewerage and on-site sanitation

Governments want to invest in infrastructure because it is tangible, and can be seen. Efforts need to be focused on advocacy to understand the benefits of investments in quality services to impact how governments focus their investments into sustainable interventions.

Wrap-up and Summary (Graham Alabaster)

JMP sets a standard for data collection from specific sources that is based on local conditions and is context-oriented. The key issues that have been identified and discussed during the meeting will be the basis for future initiatives, pre- and post-2015.

- Setting the stage: JMP overview/ladder approaches
- Characterising Urban water and sanitation: urban typologies and areas/health aspects/hardware context.
- Survey types and supporting methods: learning and using existing projects/cases studies i.e. Indian PAS project.
- What needs to be measured, as suggested by the working groups :
  - Sanitation: whole chain/standards/operational procedures.
  - Environmental Sanitation: spatial dimension/integrated risk management.
  - Hygiene: intrusive and expensive/can be targeted based on disease incidence/linkages with other sectors.
  - Water: global level/Water quality is part of access/reliability/cost affordability.
- How can progress be measured / data sources/ existing tools: DHS, MICS, UIS, IBNET, PAS, provider data—practical consideration on what can viably be done, adding more indicators to surveys has cost implications and it becomes increasingly difficult to manage and analyze data.
- Linking the global/national/local levels: global indicators and policy-making processes.
- Relevance/comparability/standardization & cost effectiveness of monitoring indicators.
- Roles and responsibilities to better define accountability: JMP, other partners.
- Knowledge-sharing and reducing duplication. Several organisations (WB, GiZ, AFDB) have developed tools and need to coordinate with partners and governments that fund and promote reusing/adapting existing tools. Using same tools will increase comparability.

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Action Plan *(Graham Alabaster and Paul Edwards)*

The following presents the agreed upon activities of the Urban Task Force, as well as the proposed commitments of the task force members, attending the meeting, as consolidated by Graham Alabaster and Paul Edwards.

- *Development / confirmation of list of issues to be monitored at global level.*
- *Development of expanded ladder concept to show levels of improvement.*
- *Explore sources of data and suitability for incorporation at global level – a) further mining of surveys b) provider data.*
- *Urban topologies, delineation of low income areas (UN-HABITAT).*
- *JMP communication strategy, identification of target audience and data requirements*
- *Interagency partners for strengthening global monitoring (JMP, UN-Habitat, IB-Net, etc.)*—there was a suggestion for JMP to develop a portal/clearinghouse where existing tools for monitoring could be available.

Task Force Members input to action plan, by agency:

GIZ:
- Kenya water sector reform programme—will work more on data reconciliation among national partners.
- Syria programme—will continue engage in national discussions relevant to access and sector capacity; document field examples.

Ghana Water Regulator
- will work towards harmonizing of data to make better informed decisions, and actions for communities.

WSP Latin America
- efforts will continue to focus on developing indicators relevant to the region; especially indicators post-2015;
- linking country national results with global monitoring reports (GLAAS, JMP), and promoting country dialogue among CSOs to contribute to global level (GLAAS) progress monitoring.

WaterAid
- will continue to support regional level initiatives on data reconciliation;
- will work closely with UNICEF/WHO/IIED to identify possible research opportunities that will be relevant to the action plan—specifically working on developing a list of issues to be measured at global level (particularly sanitation); research planned to be rolled out post-September 2011.

WSP/World Bank (D.C.)
- will continue to work towards availing data and tool for information sharing;

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- will encourage and facilitate use of the IB-Net for sharing of data through the website platform;
- will promote standardization of IB-Net tools, and will request input from task force members.

Global Urban Observatory (UN-HABITAT GUO)
- continuity on working on global monitoring indicators relevant to urban areas—currently meta-data is being prepared on urban density on three (3) levels—city agglomeration; metropolitan; city proper—to support urban planning processes. This meta-data could be shared with the task force.

IIED
- will remain constructive (more informed) critics of JMP;
- research at community level; link to SHARE—try to contribute to enumerations at community level; shared sanitation study.

WEDC
- has 25-30 Master/PhD students annually that conduct projects at mining specific aspects of the data sets to see what we can get out of existing information; especially from disaggregated data; these students can explore different data sets relevant to issues discussed at this task force meeting.
- down-stream sanitation research.

LSHTM/SHARE/Oxford
- mining data sets;
- exploring linkages between using communication technology and data collection for collecting new/additional relevant data; remote-sensing.

National Statistics Agency (NSA) (Ghana)
- commit efforts to better understanding collection and use of national data;
- advocating for collection of certain types of data to better inform policy processes; and develop improved sectoral and institutional partnerships.

PAS Project, CEPT University, India:
- contribute to further development of equity related indicators
- contribute to the development of a special WSS HH survey - for survey questionnaire modules
- contribute to development of indicators for sanitation for HH survey and provider surveys, including for: a) drainage, b) SWM, and c) to capture non sewerage options and related full value chain of sanitation
- GIS based applications for slum information systems
- Web based monitoring systems for service provider performance information

JMP request for partner input for:
- developing standard/measurement for reliability of the sector;
- updating core questions/categories in the water and sanitation sector for HH surveys in a JMP-related document—this document will be updated to accommodate some of the

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changes on definitions/categories in data sets, etc. and will need to capture additional new indicators;

- data reconciliation—partners requested to support documentation of national level impacts/outputs of data reconciliation, and sharing what gaps still need to be addressed;
- advocacy and communication with Governments on sanitation—further raising the profile of sanitation through advocacy efforts with Governments (sanitation equally as important as water);
- indicators relevant to equity will be relevant post-2015 (one of the outputs of Berlin meeting).

Finally it was noted that there will be a series of events with opportunities for addressing and furthering initiatives on the issues identified throughout this meeting. Robert Bos presented the expected timeline of events leading up to 2015:

- September 2013—UN GA meeting on post-2015 on development targets.
- Biennial JMP reports – February 2012 and February 2014.
- Biennial GLAAS reports—produced shortly after publication of JMP reports.
- Stockholm World Water Week (August 2011—theme Water in the context of urbanization).
- SWA (Sanitation and Water for All) was initiated in 2010, next High-Level Meeting April 2012.
- SixthWorld Water Forum (Marseille, 7-12 March 2012) - 20-25,000 participants—all aspects of water (supply, resources, environment).
- More specific activities related to the action plan from this and other task force meetings will be identified.
- Two thematic reports scheduled: 2011 JMP thematic report on drinking-water: equity, sustainability, and safety; 2013 Thematic report on sanitation-related issues.
- Planned second round of JMP water quality assessments RADWQ
- A suggestion to consider producing a JMP thematic report on urban, piloting the use of non-survey data, in 2013.

The final and closing meeting comment provided by Paul Edwards from UNICEF, reiterated the role of this and other JMP task force(s). A planned meeting of the JMP/GLAAS Strategic Advisory Group that will receive feedback from all the recent task force meetings, and will harmonize action plans for a clear way forward that will be shared with all partners, and technical experts.

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ANNEX A
JMP Technical Task Force Meeting 'Monitoring progress in water supply and sanitation – challenges in urban settings'
Adopted Agenda

Tuesday 7th June   Chair for today – Roland Werchota

09.00 – 10.00	Session 1 - Introduction Welcome, introduction of participants, review of meeting objectives and agenda	Robert Bos
10.00 – 11.00	Session 2 – Setting the stage	
10.00 – 10.20	Presentation: Current approach to global monitoring of progress in water supply and sanitation in urban settings by the JMP	Rolf Luyendijk
10.20 – 10.40	Presentation: Background paper for the meeting – questions to be addressed by the Task Force	Paul Edwards
10.40 – 11.00	Q&A / Discussion	
11.00 – 11.30	Coffee / tea break	
11.30 – 13.00	Session 3 – Characteristics of water supply and sanitation in urban settings and key issues arising	
11.30 – 12.00	Presentation: Characteristics of the urban landscape: urban, periurban, slums, small towns	Eduardo Moreno
12.00 – 12.30	Presentation: Environmental issues in the urbanization process	David Bradley
12.30 – 13.00	Presentation: Water supply and sanitation facilities and services in urban settings	Timeyin Uwejamomere
13.00 – 14.00	Lunch	
14.00 – 15.00	Session 3 (continued) Discussion: What are the key aspects that characterize urban areas, particularly slums? What are the primary environmental health concerns in cities/slums? How does increased urbanization affect environmental health?	Facilitator – Didier Allely
15.00 – 15.30	Coffee / tea break	
15.30 – 17.00	Session 3 (continued)	
15.30 – 16.00	Presentation: Water supply and sanitation in urban slums in India	Meera Mehta

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16.00 – 17.00	Conclusion of discussion: What are the key issues on water supply and sanitation specific to urban that are of most relevance or concern for monitoring?	Facilitator – Didier Allely
Wednesday 8th June	**Chair for today – David Bradley**	
10.00 – 10.30	Recap of Day 1	Rania El Essawi
10.30 – 12.00	Session 4 – What needs to be measured? Discussion: Based on the previous day's discussion and conclusion, what are the aspects of urban water supply and sanitation that need to be measured and at what levels – community, system, national, global?	Facilitator – Meera Mehta
12.00 – 13.00	Session 5 – How can measurements be done?	
12.00 – 12.30	Presentation: Monitoring in urban setting – strengths and weaknesses of available data sources	Philipp Peters
12.30 – 13.00	Presentation: Urban inequities surveys	Omondi-Odhiambo
13.00 – 14.00	Lunch	
14.00 – 15.30	Session 5 (continued)	
14.00 – 14.30	Presentation: Water supply utility benchmarking and its relevance for global monitoring	Alexandr Danilenko
14.30 – 15.30	Panel Discussion: What data sources are available? What are some of the measurement challenges? What scope is there for capturing more/better data on the urban situation to improve the overall picture?	Panelists: Geoffrey Greenwell, Marzuki bin Mohammad, Nii Okai Kotei Grace Bediako Moderator: Gordon McGranahan
15.30 – 16.00	Coffee/tea break	
15.30 – 17.00	Session 6 - Linking the monitoring levels Presentation: The urban monitoring landscape at national and global levels	Dirk Schaefer

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	Discussion: What are the relevant linkages between the monitoring mechanisms at the various levels? How can these links be used to enhance the overall picture of urban progress, particularly at the global level?	Group Work
Thursday 9th June	**Chair for today – Robert Bos**	
08.30 – 10.00	Recap of Day 2—Presentation of Group Discussions	
10.00 – 11.00 10.00 – 10.15 10.15 – 11.00	Session 7 – What does this mean for the JMP? Presentation: Criteria for global level monitoring Discussion: Based on what has emerged in the meeting, what might the JMP to do, in terms of improving the picture of global progress in water supply and sanitation in urban settings? What could be done by others?	Rolf Luyendijk Facilitator – Andrew Cotton
11.00 – 11.30	Coffee / tea break	

11.30 – 13.00	Session 8 – Next steps and wrap up
	  i. Summary of findings from the meeting
	  ii. Discussion on follow-up action points, responsibilities, timelines
	  iii. Agreement on and commitment to follow-up action plan
		Facilitator –
		Graham Alabaster

13.00	Closure	

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Annex B

List of Participants

Task Force Members

Grace Bediako   grace.bediako@gmail.com
Head, Ghana Statistical Service
Accra, Ghana

David J Bradley   David.Bradley@lshtm.ac.uk
Professor Emeritus,
London School of Hygiene and Tropical Medicine
Ffawyddog House, High Street,
Beckley, Oxford, OX3 9US, United Kingdom

Andrew Cotton   A.P.Cotton@lboro.ac.uk
Director WEDC
Loughborough University
Leicestershire LE11 3TU, United Kingdom

Timeyin Uwejamomere   TimeyinUwejamomere@wateraid.org
Senior Policy Analyst (Urban)
WaterAid
47-49 Durham Street,
London, SE11 5JD, United Kingdom

Alexander Danilenko   adanilenko@worldbank.org
Senior Water and Sanitation Specialist
Water and Sanitation Program, The World Bank,
Washington DC, USA

Geoffrey Greenwell   gpg@greenwell.org

Nii Okai Kotei   niikai35@yahoo.co.uk
Director, Water
Public Utilities Regulatory Commission
51 Liberation Road
BOX CT 3095
Cantonments, Accra
Ghana

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Gordon McGranahan   gordon.mcgranahan@iied.org
Group Head, Human Settlements
International Institute for Environment and Development (IIED),
3 Endsleigh Street, London WC1H 0DD, United Kingdom

Meera Dinesh Mehta   mmehta1949@hotmail.com
Professor Emeritus
CEPT University
Navrangpura
Ahmedabad 380009
India

Marzuki Bin Mohammad   marzuki@span.gov.my
Director of Research, Development and Innovation
National Water Services Commission
Suruhanjaya Perkhidmatan Air Negara (SPAN),
Block 3510, Prima 7
Jalan Teknokrat 6
63000 Cyberjaya
Selangor Darul Ehsan
Malaysia

Dirk Pauschert   Dirk.Pauschert@giz.de
Advisor - Economic Regulation
GIZ Water Programme
Tanzania

Philipp Peters   Philipp.Peters@giz.de
Advisor – Water sector regulation
 and pro-poor financing
GIZ Water Programme
Kenya

Antonio Manuel Rodríguez Serrano amrodriguez@worldbank.org
Water and Sanitation Specialist
WSP Central America
The World Bank
4 Piso Centro Fianciero CITI
Boulevard San Juan Bosco
Tegucigalpa, Honduras

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Dirk Schaefer
Modernisation Programme for the
  Syrian Water Sector
Programme Director
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH
Damascus, Syrian Arab Republic

Dirk.Schaefer@giz.de

Roland Werchota
Program Manager - GIZ
PO Box 19512-00202, Nairobi
Kenya
Tel 00254 721737955

roland.werchota@giz.de

Temporary Advisors/rapporteurs

Rania Elessawi
Development and Participation Specialist
Consultant
21 Overhill Drive
Marlboro, NJ 07746 USA

relessawi@gmail.com

Rose Alabaster,
Consultant, UNICEF

rose.alabaster@gmail.com

UN-Habitat

Eduardo Moreno
Head, City Monitoring Branch, Monitoring
  and Research Division
United Nations Human Settlements Programme, Nairobi, Kenya

eduardo.moreno@UN-Habitat.org

Graham Alabaster
Chief, Section I, Water Sanitation
  and Infrastructure Branch
Human Settlements Financing Division,
Nairobi, Kenya

graham.alabaster@UN-Habitat.org

Dr. Omondi Odhiambo
Human Settlements Officer, Demographer,
Global Urban Observatory,
Monitoring and Research Division,
Nairobi, Kenya

omondi.odhiambo@UN-Habitat.org

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Lars Onsager Stordal (Mr.)   lars.stordal@UN-Habitat.org
Junior Professional Officer
Water, Sanitation and Infrastructure Branch, Section I
Nairobi, Kenya

Members of the JMP Team

WHO

Didier Allély   allelyd@who.int
Technical Officer, Water, Sanitation, Hygiene and Health
Department of Public Health and the Environment
Geneva, Switzerland

Robert Bos   bosr@who.int
Coordinator, Water, Sanitation, Hygiene and Health
Department of Public Health and the Environment
Geneva, Switzerland

Wilfred Ndegwa   Ndegwaw@ke.afro.who.int
Technical Officer
WHO Country Office Kenya
 Nairobi, Kenya

Abdou Savadogo   savadogoa@who.int
Technical Officer, Water, Sanitation, Hygiene and Health
Department of Public Health and the Environment
Geneva, Switzerland

UNICEF

Paul Edwards   pedwards@unicef.org
Senior Adviser, Water Sanitation and Hygiene WASH
3, UN Plaza
New York, NY 10017
USA

Rolf Luyendijk   rluyendijk@unicef.org
Senior Statistics and Monitoring Specialist
Statistics
3, UN Plaza
New York, NY 10017
USA

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Invited, but only available for project visit

Unable to attend

Fred Arnold   farnold@icfi.com
Senior Fellow,
ICF Macro,
11785 Beltsville Drive, Suite 300,
Calverton, MD 20705, USA
(attended the field visit on Monday 6 June)

Dr. Darren Saywell   Darren.Saywell@iwahq.org
Regional Group and Programmes Director
International Water Association (IWA)
Koningin Julianaplein 2
2595 AA Den Haag
The Netherlands

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Annex C
Recap of Day 1

Issues discussed
- Harmonizing definition of urban
- Characteristics of ―urban‖
- Slums—where do they count?
- Broadening W&S Indicators
- National and Global Monitoring Data and Indicators
- Accountability and Transparency Mechanisms

Issue: Harmonizing definition of "urban"
- there is no consensus on specific one definition of ―"urban" areas
- Different Countries have various parameters/classifications of what is "urban"
- Guidelines could be useful for governments using the national parameters
- New techniques are becoming available, beyond 2015
- International working definition "urban agglomeration"
- Using deprivations index, contextualized, easier to agree on
- HIGHLY political process

Issue: Characteristics of "urban"
- Population density
- Administrative boundaries
- Access to basic services (water, sanitation, health, solid waste management, drainage)

Need for improving communication and advocacy with governments on acceptable indicators that characterize "urban" –linkage with global monitoring mechanisms

Slums—where do they count?
- Establish good baselines—this refers to better characterizing ―urban‖
- Improve indicators to enhance pro-poor interventions
- Improve and harmonize existing monitoring frameworks—national and global
- Characteristics of poverty inside or outside slums is similar—further reinforces using deprivation index rather than measures of poverty

Issue: Broadening W&S Indicators
- Focus has been traditionally on technology options—there is need for further defining 'improved' and 'safe' internationally acceptable options—expand on the ladder approach
- Incorporating indicators across sanitation chain: solid waste management; drainage; environmental health (diseases); hygiene/behavioral change
- Additional social and qualitative indicators—gender, burden, etc.

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Issue: National and Global Monitoring Data & Indicators
- Need for data reconciliation /harmonization among sectors at the national level (i.e. bureaus of statistics vs. WATSAN ministries/ utilities)
- Contribution of non-survey data at the global level
- Need for more slum-specific research (indicators) either within or outside national data surveys (census, DHS, MICS)

Issue: Accountability & Transparency Mechanisms:
National commitments in-country:
- Public investment in the sector, needs to go beyond coverage figures and into operation and maintenance.
- Considerations to efficiency and quality of service delivery (i.e. service continuity, micro-metering, user satisfaction with services, etc.)
- Pro-poor targeting, increasing service to the un-served or moving up-the-ladder
- Protection of water resources

Issue: Accountability & Transparency Mechanisms
Global Commitments:
- Reporting against MDG targets and indicators
- Human rights instruments/frameworks --provide specific criteria and parameters that hold states accountable for progressive realization towards water and sanitation beyond just access levels (availability, quality/safety, affordability, acceptability)

Linkages between global level and national level monitoring

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Annex D
Suggested Urban Water and Sanitation Sector Issues

Key Sector Issues to be address in Urban Water (Antonio Rodriguez, WSP Central America)

Coverage: Annual expansion of household connection is enough to meet the national/MDG target?

Equity: Do urban utilities serving least 50% of the national urban populations have specific plans developed and implemented for serving the urban poor?

Service Quality

Continuity: What is the average number of hours of service per day across urban utilities serving at least 50% of the national urban population (largest utilities/ average last three years/Weighted by number of HH connections per utility)?

Efficiency: What is the average percentage non-revenue water across in urban utilities serving at least 50% of national urban population (largest utilities/ average last three years)?

Quality of Water: Are there drinking water quality standards for UWS and are they regularly monitored under a penalties' regime?

Cost Recovery: Are all O&M costs for utilities serving at least 50% of national urban population being covered by revenues (user fees and/or public subsidies)?

Water Resource Protection: Do urban utilities serving least 50% of the national urban population invest annually in water source conservation measures and pay a fee for watershed protection? (largest systems)

Users:

User's Register: Do urban utilities serving least 50% of the national urban population have a register of service's users?

Micro-metering: What is the percentage of users of urban utilities serving least 50% of the national urban population that have micrometers in household connections? (largest systems)

Revenue: What percentage of invoices issued to users is collected in urban utilities serving least 50% of the national urban population (largest utilities/ average last three years)?

Satisfaction: Are there mechanisms in place to measure customer satisfaction with the service provided?

Key Sector Issues to be address in Urban Sanitation (Antonio Rodriguez)

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Coverage: Annual expansion of sanitation services is enough to meet the national/MDG target?

Equity: Do urban providers have specific plans developed and implemented for serving the urban poor?

Service Quality

Waste Water Treatment: Are there national norms and standards for wastewater treatment that are routinely monitored under a penalties' regime?

Functionality: What percentage of wastewater treatment systems and sewerage systems meet the preventive and corrective maintenance plans?

Water Resource Protection: What percentage of wastewater treatment systems meet norms and standards for discharge to water bodies?

Supply-chain: Are there sufficient companies, operators and entrepreneurs to meet the demand of households for sanitation facilities (on-site or networked)?

Private sector capacity: Are there sufficient operators to handle the demand for excreta removal, treatment and disposal?

Quality of facilities: What percentage of people living in urban areas use improved toilet facilities?

Satisfaction: Are there mechanisms in place to measure customer satisfaction with the service provided?

Possible Indicators (Gordon McGranahan)

- e.g. open defecation; faecal load per unit of open land in area or % defecating in open.
- e.g. unlit public toilet; gender and violence at home vs. in public spaces.
- e.g. distance vs. waiting time
- e.g. importance of drainage? For flooding?
- e.g. latrine emptying and transport; more important in urban; distance to dispose of safely; land to build additional latrine.
- e.g. pit latrine density and shallow well water use; danger of normative issues.
- e.g. cost of extending piped system?? Normative issue.

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Annex E
Group Work—Proposed Additional Indicators

Sanitation Group – Indicators discussion
Improved facilities as defined (JMP) plus the following additional issues & indicators:
1. Shared facilities (HH, Community, Public)
2. Storage (On-site – flood prone areas)
3. Disposal services (Transport, Treatment & Disposal / Reuse)
4. Gray water (On-site areas)

Type	Indicators	Levels	Priority
1. Shared Facilities			
Household shared (A) Community Managed (B) Public Facilities (C	• No. of Households (e.g. 2 – 5 per seat) • Cleanliness (e.g. Odorless, Flies-less, Presence of Hand-washing) • Accessibility (e.g. Distance, Safety, Within Community) • Privacy (e.g. Enclosure with secure door, Separate women / men) • Affordability (e.g. Monthly expenditure as % of total HH expenditure) – *B,C* • Sustainability (e.g. O + M recovery) – *B,C*	• Community • Local • Service provider • National • Global	
2. Storage			
On-site	• Facilities is in non-flood prone area (& meets JMP improved sanitation standards) • If area is flood prone, facility has lined pit	• Community (HH) • Local (Municipality) • National • Global	
3. Disposal services			
Transport – onsite Transport - sewered	• Frequency of pit emptying • No. of emptying trucks available • Accessibility to/of pit emptying trucks • Cost of using trucks • Safety of handling of excreta	• Local (Municipality) • National • Global	

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	• Sewerage system		
Treatment	• Availability of treatment facility / plant – *(G)* • Availability of drying beds • Decentralised treatment options • Norms / Standards compliance – *(G)* • Safety of handling	• Local (Municipality) • National • Global (G)	
Disposal / Reuse	• Norms / Standards for different reuse (e.g. Agriculture) • Regulation – Instruments & Institutions	• Local (Municipality) • National • Global	
4. Grey water (Sullage)			
Areas with On-site sanitation options	• Availability of covered surface drains • Drained into HH / community covered pits or soak-away pits • O + M system for covered / open drainage (No intrusion of solid waste) – *(L)* • Appropriate treatment & disposal • Norms / Standards for disposal – *(N)*	• Community (HH) • Local (L) • National (N)	

Urban Environment Group: (adapted from presentation)

Water and Sanitation in the Urban Environment
Recommendations revolve around
- Need to add a spatial dimension to urban water and sanitation monitoring.
- Need to go back to the broader definition of sanitation, including wastewater and solid waste.

Relevant to
- JMP type monitoring.
- Research and action-oriented work to complement JMP type monitoring.

Argument
- Especially where dense settlement and some level of service deprivation co-exist, a large share of the water and sanitation conditions that create local health risks and dissatisfaction lie outside the home.

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- Sanitation, waste-water drainage, and solid waste collection of neighbours or upstream inhabitants often matter more than one's own.
- Judging everything at the household level misses things out, and makes urban conditions in particular look better than they are.
- Interventions need to be made in particular places.
- Increasing availability of spatial data make this an opportunity to be seized.

Examples of neighbourhood water and sanitation indicators
From household data:
- % households in area where someone practices open defecation
- % households in area where solid waste is uncollected/dumped locally
- % households in area where wastewater is released unsafely
- Average. individual perceptions of local water and sanitation conditions

From informed local observation
- Evidence of open defecation
- Accumulations of uncollected solid waste
- Unprotected streams of polluted wastewater
- Breeding sites of potentially hazardous vector species

From linked spatial data
- Risk of flooding
- Distance from sewers/water pipes
- Presence of upstream polluters (or stream/river pollution data)

Issues of neighbourhood 'delineation'
- Enumeration area for convenience of statistics and conformity with UN-Habitat def (but is sample size enough?).
- 'Natural' boundaries of contiguous 'slum' or low-income settlement (but is this available –and should this be limited to low income?).
- Natural boundaries of micro-watershed (but difficult and not relevant to all neighbourhood issues).

Additional points•
- Also need to consider relationships between risks: waste, flooding and fecal exposure; intermittent water supplies and mosquito breeding; bad sanitation and shallow well use.
- Focus on environmental sustainability of water and sanitation also requires broader spatial approach, and is relevant to affluent settlements.
- Two approaches to spatial expansion: extend over sanitation/water chain; increase spatial scale to neighbourhood.
- May have implications for household survey contents and sampling procedures.
- May need geo-referencing data to be made available at finer resolution.

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AGAIN, ALL THIS NEEDS TO BE CONSIDERED IN THE CONTEXT OF JMP AND
ALSO BROADER RESEARCH/ACTION PROGRAMME

Hygiene Group (Adapted from presentation)

Hygiene Group
- Rationale and relevance to the Water and Sanitation Sector
- Definition
- Indicators: Current indicators and Other indicators
- Monitoring the Sector
- Intervention and Service Provision

Rationale
- The known correlation between disease and hygiene (contamination of disease transmitting agents).
- Safe water plus improved sanitation does not necessarily mean there is no disease if there is a hygiene problem (dirty hands or sanitation facility) .
- Among the main problems which are responsible for this situation are: lack of priority given to the sector, lack of financial resources, lack of sustainability of water supply and sanitation services, *poor hygiene behaviours, and inadequate sanitation in public places including hospitals, health centres and schools.* Providing access to sufficient quantities of safe water, the provision of facilities for a sanitary disposal of excreta, *and introducing sound hygiene behaviours are of capital importance to reduce the burden of disease caused by these risk factors.*

Definition (contextual)
- It is difficult to tackle the issue in the context of a more urban water supply workshop with limited field expertise.
- By definition it requires involvement of Ministry of Health officials as hygiene appears this would seem the more appropriate monitoring agency.

Indicators
Looked at the DHS Hygiene related indicators (Egypt). There is interest in common indicators (i.e. typical water based indicators) like:
- Water
- Type of Water Source
- Time to Water Source
- Person obtaining the Water
- Water supply and interruption
- Water treatment prior to drinking (Quality and safety)

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Sanitation
- Sanitation Facility
- Drainage system
- Number of Households using the toilet•

More hygiene specific indicators
- Water storage
- Covered containers for storage
- Type of containers for storage
- How is stored water dispensed
- Disposal of kitchen waste and trash (household waste management)
- And the inclusion of relevant new measures
- DHS inclusion of handwashing question (observation) in next round
- Cleanliness of toilet facility (not considered in DHS)

Need to be realistic and careful about expectations to add more questions to standard household surveys (unless they are designed specifically for national level hygiene indicators) and implies "sector" or hygiene monitoring.

Monitoring
- A big problem with specific monitoring of hygiene is that it is behavioural.
- Reviewed the WSP handwashing survey and found that such a behavioral survey tends to be intrusive (since it can require physical observation of habits and facilities)
- Funding of these surveys would be expensive.
- There could be a need for more in-depth monitoring if:
  - There is a suspicion (based on a higher incidence of disease reported) to establish a targeted baseline survey.
  - There is a desire to prevent outbreak in high risk areas and measure impact of intervention programs (i.e. handwashing promotion programs)

Intervention & Service Provision
- Service Provision for Water is easy to define—It is material (i.e. pipes laid or taps to homes)
- Hygiene is behavioural
  - It is social (requires public awareness campaigns)
  - There is no tangible service (unless you distribute soap)
  - Inclusion in school (primary) curriculum
- Ministry of health involvement in the monitoring
  - However, the outcome (impact) of better hygiene should be measurable in terms of decrease in diarrheal prevalence or reduction in Acute Respiratory Disease (ARI) or other(s).

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Water Group (adapted from presentation): Global Water Indicators in Urban Setting

General Comments•
- All indicators on global level. Rationale: All global indicators have to be available on national level, but not vice versa
- Differentiation between indicators to be implemented prior to 2015 and post 2015. Rationale: For some indicators data is readily available through household surveys or national monitoring systems, others need time to be taken up.
- Complex issues. Need dedicated working group defining indicators in more detail and accuracy and then communicate for broader debate.

Water Indicators
Pre 2015
Water Quality
- Inclusion of WQ indicator (*E. coli* tests + 2 natural contaminants) currently being piloted
- Likely (80% probability) to be available through DHS surveys in about three years.
- If available, disaggregated results should be published (coverage excludes WQ and coverage including Water Quality).
Post 2015
- WQ should be part of future definition of adequate access.

Water Indicators
Pre 2015
Availability
- Service hours per day.
- Days of service per week.
- Consumption at domestic connection and public water points.
- Available at household and utility level.

Post 2015
- Take into account when defining different levels or access. E.g. below 12 hours per day = access; above 12 hours per day = improved access.

Water Indicators
Pre 2015
- Formal/Informal Service Provision.
- Percentage of population depending on ISP (link data to e.g. WQ, price).
- Important particularly in the context of Human Right to Water and Sanitation.
- No clear definition of indicator yet. Try to include questions in household surveys that identify formal and informal service provision.

Post 2015

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- Clear differentiation between formal and informal service provision.

Water Indicators

Pre 2015

Price / Affordability

- Group recognized that need for such indicator, but recognized it is difficult to define.
- Issue: People afford water by lowering consumption levels if necessary.
- Denominator not available if affordability to be defined as expense/income ratio.

One suggested indicator was tariff formal provision / tariff informal provision.

Post 2015

- Depends on outcome of pre-2015 process to find suitable indicator.

Water Indicators

Pre 2015

- Disaggregate access by infrastructure types = the ladder.
- Accessibility indicators – Time to fetch water (available in household surveys) – Distance to source.
- Sustainability Indicators – While important, the group could not agree whether or not this should be taken up at global level.

Post 2015

- Exclude boreholes/hand pumps, protected wells and protected springs from any acceptable "access level" after 2015.
- Accessibility should be part of adequate access definition.