

# Human Development Report 2006

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## Getting the 'Off Track' on Target

WaterAid

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# Getting the ‘off track’ on target.

## 1 WATER AND SANITATION: KEY TO THE POVERTY

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## AGENDA

Access to safe water and basic sanitation should be at the heart of the international community's efforts to reduce poverty given the critical contribution that it makes to human development. However, water and sanitation has been slipping down the poverty agenda, as measured by the proportion of international aid flows to the sector, until recently. This despite the fact that some of the poorest countries in the world are way 'off track' with the Millennium Development Goal (MDGs) target to halve the proportion of people without sustainable access to safe drinking water and basic sanitation. We urgently need to reassert the importance of safe water and sanitation to human development and the achievement of the MDGs, and to focus our efforts on getting the poorest 'off track' countries on target.

### ***Access to safe water and sanitation improves health***

Access to safe water supply and sanitation, for example, is critical to improve human health. Water-related diseases are the single largest cause of human sickness and death in the world and poor people are particularly affected. In particular, children suffer disproportionately and account for the majority of deaths and ill health caused by poor water supply and inadequate water. For example, diarrhoeal disease is the biggest single killer of children under five in poor countries; a child dying every 15 seconds from diarrhoea<sup>1</sup>. Yet the provision of safe water and basic sanitation, using simple inexpensive technology, can significantly reduce the incidence of diarrhoeal and other diseases.

### ***Empowers women***

Access to safe water and sanitation is also particularly important for women - providing significant, but often overlooked, social benefits in the form of greater privacy, convenience, safety and dignity. Access to basic sanitation, for example, can make a tremendous difference to women's lives. Open defecation presents additional risk and inconvenience to overburdened rural and urban poor women. The availability, for example, of a latrine at home saves women's and girl's time and reduces their vulnerability; at school it is a strong factor in encouraging girls to attend. As rural tap attendants, many women also have the opportunity to earn an independent income.

### ***Releases time and energy for productive activity***

Inadequate water and sanitation facilities impose a huge opportunity cost for poor communities. Access to safe water supply and appropriate sanitation offers a huge saving in time and energy for both women and children. For example, fetching water - a burden that falls disproportionately on women and children - can take up to a quarter of a household's time. A rural African family, for example, spends on average two hours per day drawing water- though this can rise to 6-9 hours in arid areas. It is estimated that African women and children spend 40 billion hours a year fetching water<sup>2</sup> - time that could otherwise be spent on productive activities. Seeking privacy for open defecation can also be very

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time consuming, causing women to wake earlier for this purpose.

**Looking Back: The long-term impacts of water and sanitation projects**, a study carried out by WaterAid in 1999/2000 in four countries showed significant changes in household income as a result of:

**Time saved being used for increased:** Agricultural production, agricultural product processing, manufacture of goods, sale of services.

**Money saved by:** Reduced cost of water, reduced cost of medical treatment.

**Water availability for increased:** Livestock production, crop production, fruit and vegetable production, food and drink vending

**Time saved:** With improved access, the time taken to collect water can be measured in minutes rather than hours or days. Women choose to spend their extra time and energy on activities which ensure family income rather than just family survival. For example Zeini Batti of Iteya Shaki (Ethiopia) says that 'I used to devote five hours a day to fetch water. I now can do other activities like basket weaving and making utensils. I now [regularly] save a minimum of Birr 21-24.' In Ghana, time saved translates into increased farming activity, palm-wine tapping, cola nut processing, food vending, hairdressing and pottery production. Similarly in Tanzania, the study found that people could 'increase the pace of engaging themselves' in tree-planting, establishing tea rooms, selling groundnuts and cassava, once the burden of long-distance water collection was removed.

**Money saved:** Household disposable income increases in two ways after gaining access to safe water and sanitation. People no longer have to pay premium rates to commercial water vendors. Mzee Siwa of Tandala village (Tanzania) describes how 'money saved from buying water at exorbitant prices can now be used for other [basic necessities] such as sugar, kerosene, soap bars and school uniforms.' Money is also saved as there is less need to seek medical treatment for illnesses like diarrhoea, scabies, intestinal worms and conjunctivitis that are all caused by inadequate water and sanitation. In Hate Tulu (Ethiopia) the demand for medicines for these common ailments has dropped so much that drug vendors have moved their businesses to other areas.

**Water availability:** Higher crop yields and larger livestock populations, are common consequences of increased water availability, providing poor families with both increased food security and surplus produce for sale. Water plays an essential role in other economic opportunities too. Esther Yayaa of Mpraeso Amanfrom (Ghana) says that 'With the well, people are able to sell ice water. This could not have happened when there was no potable water.' In Tanzania a local butcher from Songambe reported that because cleanliness of his shop had increased, more customers were attracted to come and buy meat. Improved quality and quantity of water enables people to sell homebrewed beer in Ethiopia and Ghana; while in India, kitchen gardens irrigated by water run-off from the new water points produce fruit and vegetables that are sold by the women who tend the gardens.

### **Improves school attendance**

Improved access to water and sanitation also improves school attendance. WaterAid's research has shown that teachers are more likely to seek employment in a village with water, girls are more likely to attend school if there is a toilet and children attend school more often when they don't have to spend hours each days collecting water. A Tanzania Household Survey<sup>3</sup> found that school attendance rose by 12% when safe water was available 15 minutes rather than one hour from children's homes. More generally, WHO<sup>4</sup> recently suggested that the world stands to gain 443 million school days, currently lost annually due to diarrhoeal disease, with universal access to safe water and sanitation.

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***And offers major economic benefits***

The economic impact of improved access to water and sanitation also should not be underestimated. In developing countries the ill-health that results from poor water and sanitation creates an extra burden on already stretched health services and undermines spending in other key areas. Investments in the sector, on the other hand, accrue to national accounts in terms of healthier, more productive citizens; improved school attendance by children; and women who are more economically active. In terms of return on investment a WHO study<sup>5</sup> has estimated that for every \$1 invested in improving water supply there is between U\$5 to U\$28 return from increased productivity and savings due to better health. Similarly, WaterAid<sup>6</sup> research on the economic value of the benefits from water and sanitation suggests a return of between \$2-U\$52 on every \$1 invested.

More specifically, WHO<sup>7</sup> estimates that \$7.3 billion health-related savings would be made annually as result of the average global reduction of 10 percent in diarrhoeal episodes if the MDG target were met. The value of time savings alone from a water supply piped into a house, or a community water supply located closer to user communities, combined with a latrine close to home would amount to \$64 billion per year<sup>8</sup>.

***So water is a priority of the poor***

Given its importance in their daily lives, poor women and men themselves often prioritise safe water in their own hierarchy of needs. This is frequently reflected in participatory poverty assessments associated with the development of Poverty Reduction Strategy Papers (PRSP). The Cameroon PRSP<sup>9</sup> reports 60% of people identifying lack of water as a cause of their poverty. In Malawi 88% of Village Development Committees in Salima district put water in their top 3 priorities, and PRSP-related district-based consultations in 26 districts confirmed water as the third overall priority of communities<sup>10</sup>. In Zambia, water came top of all the poverty consultations in 1994, 1996 and 1999<sup>11</sup>. Unfortunately, in each of these cases the priority ascribed to water and sanitation by people living in poverty was not reflected in the final PRSPs.

***And should be higher on the poverty agenda***

Improved access to safe water and sanitation, therefore, should be further up the national and international poverty agenda. Not only because it is a priority of poor people but because the MDG water and sanitation target - target 10 of Goal 7 to ensure environmental sustainability - is key to achieving many of the MDGs. In particular, as illustrated in the following table, it is critical to reducing child mortality, improving maternal health, combating disease, promoting gender equality and universal primary education.

### Box 1: Links between water and other MDGs

Development goal	Link to water and sanitation
<b>Eradication of poverty and hunger</b>	A lack of water resource management, unsafe drinking water and lack of sanitation are key links in the cycle of food insecurity, poor growth, disease, malnutrition and poverty. Irrigated agriculture provides a large proportion of the world's food and irrigation comprises over 70% of overall water use.
<b>Universal primary education</b>	Diarrhoeal diseases and parasites reduce attendance and attention. Girls often stay away from school unless there are female-only latrines. Time spent collecting water takes precedence over school attendance and this burden falls on girls. Teachers are unwilling to live in areas without adequate water and sanitation.
<b>Promotion of gender equality</b>	Women bear the brunt of poor health and the security risks from lack of private sanitation or washing facilities, and the burden of carrying water. Increasing women's roles in decision-making to match their responsibilities, and bringing about a more equitable division of labour are known to help improve water supply, sanitation and hygiene. Demonstrating this can help to improve women's status in other ways.
<b>Reduced child mortality</b>	Diarrhoea causes 2 million deaths per year mostly amongst children.
<b>Improved maternal health</b>	A healthy pregnancy and hygienic labour practices reduce the risk of maternal illness. Hand washing is simple, yet effective.
<b>Combating disease: (HIV, malaria and others)</b>	Of the global burden of disease, 23% is a result of poor environmental health, 75% of which is attributable to diarrhoea. HIV treatment is more effective where clean water and food are available. HIV infected mothers require clean water to make formula milk. Water management reduces opportunities for malaria mosquito breeding sites. Clean water and hygiene are important in reducing a range of parasites including trachoma and guinea worm.
<b>Environmental sustainability</b>	Water resource management is key to environmental sustainability. Water resources are under stress. Public health improvements can address the environmental degradation resulting from urbanisation.
<b>Global partnerships for development</b>	Public, private and civil society partnerships help deliver water and sanitation services to the poor.

Source: DFID "Water Action Plan, March 2004

Despite this, water and sanitation has been slipping down the agenda of the international funding agencies until recently. In the next section we will look at the scale of the challenge we face to meet the water and sanitation MDG target, while addressing the needs of the poorest nations, and the terrible price the poorest nations, regions and communities will pay if we fail to push water and sanitation back up the poverty agenda.

## 2 THE MDG TARGET: LEAVING THE POOREST BEHIND

### *The importance of definitions and data*

Before taking stock of progress towards the MDG targets we need to consider

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how this is measured and what implications it might have for addressing the needs of poor nations, communities and households. Progress towards the water and sanitation target is monitored by the World Health Organisation and the United Nations Children's Fund in their Joint Monitoring Programme (JMP). However, there are a number of concerns regarding the monitoring framework deployed by the JMP, which itself recognises some unresolved issues with regard to definitions, standards and measurement.

*'An improved water source... provides a good indicator for progress, it is not a direct measure of it'.*

UNICEF/WHO  
(2004)

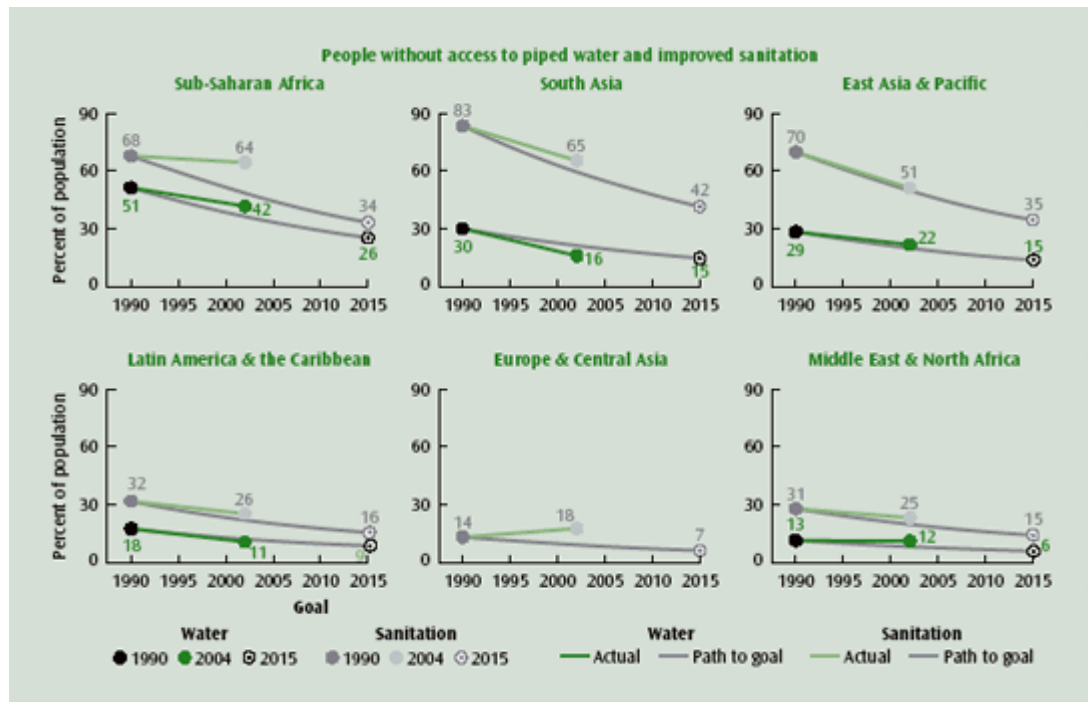
For example, JMP data are not always consistent with the data provided by a country's own PRSP documents. National statistics are not disaggregated by social, economic or gender differences making it difficult to interpret what and where the real needs are. In addition, the baseline data used by the JMP from the 1990s differed widely from country to country and is generally considered unreliable. However, the JMP has used data collected through household surveys and national censuses since 2000 to offer a clearer comparison between countries and have recalculated the 1990s statistics according to the new criteria so as to compare like with like.

A further concern is how we measure progress and what indicators we use. The JMP uses technology-oriented indicators as a measure of progress - for example, access to safe drinking water and basic sanitation is measured by the use of improved technologies since these are more likely to be more sanitary than unimproved ones. The MDG target refers to 'safe drinking water' while the indicator used by the JMP to monitor progress refers to 'improved water sources'. Similarly, the JMP indicator for 'basic sanitation' is 'improved sanitation facilities'. Progress towards the MDG target, therefore, is measured by indirect rather than direct indicators, such as functioning and use. However, as the JMP itself acknowledges, these do not constitute a direct measure of progress and have some limitations. An 'improved water source' as an indicator allows national governments to use different 'benchmarks' of coverage i.e. of the number of people a water point will serve, thus undermining the reliability of the data. Such weaknesses and lack of consistency in operational definitions and data collection undermine confidence in the reliability of national and international monitoring data.

This is more than an obscure methodological issue. Targeting the poor with water and sanitation services will require a set of clear definitions, a consistent set of standards, a comprehensive monitoring framework and good statistical data to monitor progress. If the data are not disaggregated targets might be more easily achieved at country level by targeting those easiest to help rather than those in greatest need. This could give the impression of progress while hiding internal inequalities i.e. stagnant or declining progress of the poorest or most marginal populations. Similarly, at a global level, progress towards the targets in South and East Asia, where the numbers of un-served are high, might overshadow the continuing challenges of the poorest, high priority countries.

Nonetheless, with these qualifications in mind, the review conducted by the JMP in 2004 - which covers data collected till 2002 - is a timely moment to review progress towards the water and sanitation MDG<sup>12</sup>. It was in effect a mid-term

assessment of progress towards achieving the 2015 target and, as the following graphs illustrate, progress towards the water and sanitation targets has been slow and uneven across the world.



Source: WHO/UNICEF JMP

### **Water supply - on track but sub-Saharan Africa lags behind**

At a *global* level all regions have made progress in the use of improved drinking water sources since 1990 and current trends are on track to meet the MDG - 82% of the world's population in 2002 - around 5.2 billion people - used improved water sources, compared to 77% in 1990. South Asia made dramatic progress, increasing coverage in the region from 71% to 84% during the period, mainly due to increased use of improved water sources in India. Coverage in sub-Saharan Africa also increased from 49% to 58% during the period.

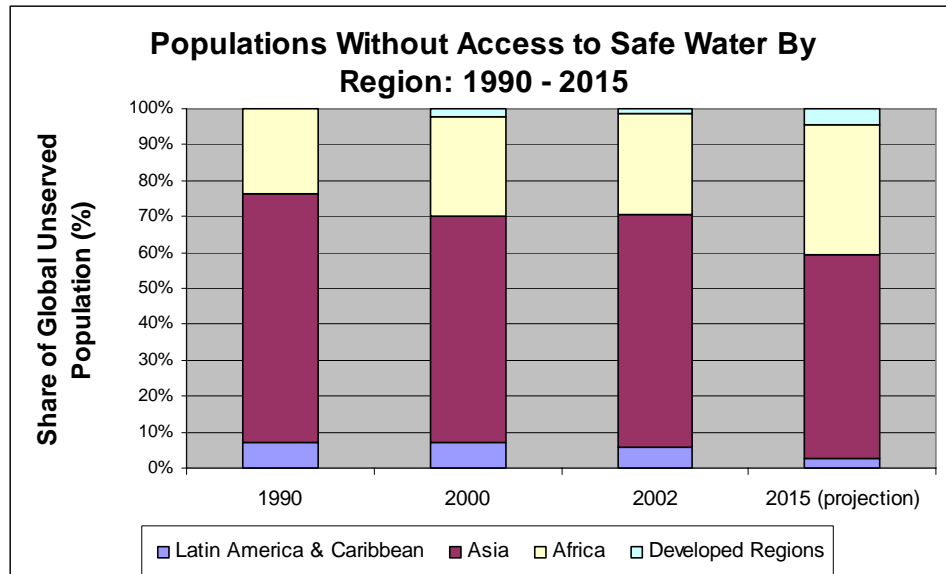
Despite this encouraging progress, the absolute number of people without coverage has decreased only by about 10 million people a year during the period due to population growth. 1.1 billion people still use water from unimproved sources, nearly two thirds of whom live in Asia. However, although the number of people without improved water sources in China is equal to those un-served in Africa, the lowest drinking water coverage levels are to be found in sub-Saharan Africa and Oceania. 42% of the population of Sub-Saharan Africa, for example, still lacks access to an improved water source and, at the current rate of progress, the region will meet the MDG target only in 2025.

This highlights Africa's deepening need. WaterAid<sup>13</sup> investigated the financing gaps to meet the MDGs in 14 countries in which it works and found that, while nearly all countries need to provide extra finance for the sector, the needs of African and Asian countries were different. Whereas African countries need to



spend up to eight times more on the sector to meet the MDGs, the needs for additional finance in the Asian countries were not so great.

Under current trends, for example, Africa will continue to account for an increasingly higher proportion of the world's population without safe water. In 1990 24% of the un-served were in Africa; in 2015 it will be 36%. Indeed, the absolute numbers of the un-served in Africa are set to increase – from 266 million in 1990 to 333 million in 2015. While every other region in the world, therefore, can be seen to be moving forward in relative and absolute terms, Africa is moving backwards.



Source: WaterAid

### **Sanitation- off target by half a billion people**

The story with sanitation is quite different. The world is already well off course of the target which, on current trends, will be reached only in 2026. Since the MDG target for sanitation is only 75% coverage, on current trends one person in four will still be without a safe place to go to the toilet in 2026.

The proportion of the world's population with access to basic sanitation rose from 49% in 1990 to 58% in 2002 (the 'on track' target for the year was 62% ).

Although one billion people gained access to sanitation during the period, the number of people without sanitation fell by only 100 million due to population growth. The JMP estimates that we will miss the target by more than half a billion people - reducing the proportion of the world's population without basic sanitation by 13% instead of 33% - unless progress is accelerated.

Behind the global statistics lies an even starker picture. Once again Sub-Saharan Africa is particularly off-track. In 2002 only 36% of its population used safe sanitation, compared to the 'on track' target for the year of 49% and the 2015 target of 66%. On present regional trends Sub-Saharan Africa will not meet the sanitation MDG until 2105, some 90 years and 133 million children's lives too

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late. WaterAid<sup>14</sup> estimates that sanitation outputs need to increase as much as 20 fold if the MDG target is to be delivered.

The figures also highlight the inequalities in provision between the rural and urban sectors. Only 31% of people in rural areas in developing countries have access to improved sanitation, as opposed to 73% of urban dwellers. Two billion rural dwellers were without sanitation in 2002 compared to around 560 million in urban areas, although the latter figure disguises the depth of deprivation of those living in urban slums.

### ***The poor pay the cost of not meeting sanitation target***

Failure to meet the MDG target for sanitation will carry a tremendous human cost. On current global trends an additional 10 million children will die from diarrhoeal diseases by the time the sanitation target is reached in 2026, some 11 years late.<sup>15</sup> Africa, which already suffers a disproportionate number of diarrhoeal deaths, will pay a relatively heavier cost as the gap widens between it and other regions with regard to access to basic sanitation.

In addition to being morally indefensible, the failure to provide adequate sanitation services carries a tremendous economic cost. Lower productivity due to sickness creates an extra burden on already stretched health services and undermines other spending e.g. on education. However, the destruction of human capital is arguably the biggest single economic cost from lack of sanitation. WHO recently suggested that 443 million school days are lost annually worldwide due to diarrhoeal disease and calculated that failure to invest in reaching the water and sanitation MDGs are costing developing countries \$84 billion per year<sup>16</sup>. WaterAid estimates that national economies will lose a cumulative total of U\$61 billion by 2026 because of the additional 10 million child deaths caused by failure to meet the sanitation target<sup>17</sup>.

### ***Getting the 'off track' on target***

At the current rate of progress, therefore, the water supply MDG may be met at a global level by 2015; however this masks the abysmal progress that is leaving Africa behind. The sanitation target will not be met by 2015. In order to focus our efforts on getting the 'off track' on target we need to understand who currently lack access to safe water and basic sanitation. The largest single group - 320 million - currently lacking access to safe water are those living below the poverty line in low-income countries. However, the largest group without access to basic sanitation - 730 million - are those living above the poverty line in middle income countries.

‘Significant progress in China and India alone ... could achieve the global target - without there being any progress at all Sub-Saharan Africa.’

UN Millenium Project Task Force p21

	Living in low-income countries	Living in middle-income countries	Total
Living below the poverty line	320	96	416
Living above the poverty line	30	259	289
Total	350	355	705

Table 2.1 Distribution of the global population without access to safe water supply. Figures in millions.

	Living in low-income countries	Living in middle-income countries	Total
Living below the poverty line	540	93	633
Living above the poverty line	565	730	1295
Total	1,105	823	1,928

Table 2.2 Distribution of the global population without access to basic sanitation. Figures in millions.

Source : UN Millenium Task Force on Water and Sanitation (2005)

While the greater *numeric* need could be argued, therefore, to reside with the un-served in middle income countries the greater *depth* of need lies with those living in poverty in low-income countries. This is because the need for safe water and sanitation is more acute in poorer countries in two senses.

First, the need, as measured by the percentage of the population without access to safe water and sanitation, is more profound in such countries. The UN Millennium Project and Human Development Office have designated 31 such countries as ‘top priority’, 25 of which were in Sub-Saharan Africa. TearFund<sup>18</sup>, added the criterion of actual numbers un-served by safe water and sanitation and narrowed the list down to 15 countries<sup>1</sup> ‘most in need’, 12 of which are in Sub-Saharan Africa.

Second, the poor in a low income country are more likely to be deprived of options or coping mechanisms being also poor in other ‘assets’ such as arable land, social and political connections and others, so the lack of access to safe water or basic sanitation is more readily a life-threatening condition. Those above the poverty line in a middle income country are more likely to have recourse to other options to protect or compensate them for lack of access, such as access to and ability to afford medical facilities should they become ill. Improved access to safe water and sanitation for the better off in a middle income country will certainly *improve* lives; for the poor in a low-income country it will *save* lives - for example through a reduction in the number of child deaths through diarrhoeal disease. For many poor people in low income countries, access to a community resource such as a water supply allows them to reach the first rung of the ladder out of poverty.

By the criterion of depth of need, we need to make a concentrated effort to target these ‘top priority’ countries. They tend to share some common features - for

<sup>1</sup> Angola, Burkina Faso, Cambodia, Chad, Ethiopia, Ghana, Haiti, Madagascar, Mali, Mozambique, Niger, Nigeria, Rwanda, Sierra Leone, Yemen.

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example, majority rural populations, high levels of poverty, aid dependency, indebtedness and weak governance - that offer real challenges to broadening access to water supply and sanitation. There is no 'one size fits all' solution. The strategies and technologies appropriate to extending water and sanitation services in such countries are not necessarily those best suited, for example, for middle income countries. Similarly the needs of poor urban and rural users present different challenges.

In particular, Sub-Saharan Africa requires special attention. Some 288 million people living in Sub-Saharan Africa lack access to improved water and 437 million lack access to improved sanitation. The region needs to almost double the annual numbers of additional people served with drinking water and quadruple the additional numbers served with basic sanitation if the MDG target is to be reached<sup>19</sup>. The compound impact of lack of access to water and sanitation in so many countries in one region on economic development, health, morbidity, mortality and education will be significant and further entrench the disparity between it and the rest of the world. The countries affected in Sub-Saharan Africa, stuck in a poverty trap, have no possibility of catching up with the MDG water and sanitation target without significant, appropriate and coherent support by the international community.

*'From now until 2015, greater effort must be made to reach the poor and those in rural areas, whose deprivation is hidden behind national averages'*

WHO/UNICEF  
(2004) p18

### ***Meeting the MDGs with equity***

There is a case for achieving the MDG target by focusing our efforts on where conditions are most propitious and the greatest numbers of un-served are to be found. This would ignore the moral dimension of those whose need is greatest. The challenge, therefore, is to meet the water and sanitation MDG targets with equity i.e. without leaving the poorest nations, regions or communities behind. The inequity of access to water and sanitation services has several dimensions i.e. between:

- *Africa and the rest of the World* - Sub-Saharan Africa in particular being under-resourced. While the *extent* of water deprivation is greater in Asia, the *depth* of deprivation i.e. the proportion of the population affected, is greater in Africa.
- *Rural and urban sectors* - i.e. in the developing world only 31% have access to improved sanitation in rural areas compared with 73% in urban areas. In Sub-Saharan Africa, for example, 45% of rural residents have access to improved water supply compared with 82% of urban residents. Though it must be stressed that the term 'access' may mask issues of restricted times, distance from water points etc.
- *Drinking water and sanitation* - i.e. sanitation receives significantly less funding and political attention than water access although needs are greater. In Africa, for example, only one-eighth of sector spending is on sanitation, even though twice as many people are without sanitation as are without safe water<sup>20</sup>.
- *Rich and poor* - e.g. affluent urban consumers frequently enjoy

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subsidised networked services while the poor pay market prices or lack any services at all.

- *Vulnerable groups and other groups in the community* – i.e., the elderly, disabled, those from lower castes and ethnic groups, women in a community have less access than others, and often less voice in decision-making over such services. But the quality of access of these vulnerable groups are often invisible in national accounts of water supply and sanitation coverage.

*The public sector is the principal provider and financier of water supply and sanitation services in the developing world – at less than 10 percent of total sector financing, the private sector supports and augments public sector initiatives rather than supplanting them.*

Source: World Bank (January 2004) p 14

To meet the MDG targets equitably will require each of these dimensions of inequality to be addressed. It can be done. The cost of delivering solutions is not exorbitant and there are no scientific or technological barriers to cross. But it will require a new political impetus to make it happen. But first we must identify the barriers that have impeded more equitable progress to broaden access to date; develop strategies in response to these; and to target our response to those countries, regions communities and households most in need.

### **3 WHY WE ARE ‘OFF TARGET’ WITH THE POOR**

#### **3.1 The impact of economic reform, debt and aid**

##### ***The legacy of economic reforms for public sector budgets***

The public sector remains responsible for providing and financing around 90% of water and sanitation services in the developing world<sup>21</sup>. Yet the ability of the sector to extend its services was severely restricted by the policies of the International Finance Institutions in the last decade. Structural adjustment policies from late 1980s onwards capped the ability of governments to invest in establishing the infrastructure necessary to extend water supply and sanitation systems to growing populations, resulting in a depreciated and limited public infrastructure system and indebtedness of urban water utilities. Public water and sewerage utilities and municipal departments, dependent on national budgetary allocations, have been increasingly unable to meet the growing level of public demand for water and sanitation services.

As a result, public investment in water and sanitation is dismally low. National government spending in basic water and sanitation infrastructure and services has stagnated from the 1990s through to the early 2000s<sup>22</sup>. Infrastructure expenditure has been one of the few discretionary spending categories that governments cut. According to the World Bank, Latin American governments now invest less than 2% of GDP in *all* infrastructures<sup>23</sup>, while required investment is 6-9% of GDP per year to meet the MDGs. In Nigeria, water investments fell from 9% of the national budget in 1996 to 3.2% in 2000, while in Malawi, overall water sector funding fell by 37% between 2001/02 to 2003/04.<sup>24</sup>

##### ***Debt servicing a continuing burden***

Debt servicing was and continues to be a significant drain on the resources of the

*Karachi has 11 million inhabitants. Of these, only 58% receive a water supply from Karachi Water & Sewerage Board. No one enjoys a 24-hour supply. Only half the population are connected to sewers and a further 5% use septic tanks.*

Source: BG

poorest countries, undermining public sector budgets. For example, Water Aid research<sup>25</sup> indicates that Bangladesh's debt service payments are 16 times greater than the extra money needed to meet the water and sanitation MDG targets at national level, Ghana's 10 times and Ethiopia's 8 times.

When countries have qualified for debt relief under the Heavily Indebted Poor Countries Initiative (HIPC) water and sanitation has tended to be overlooked. 65% of resources released by debt relief under HIPCII, for example, have been devoted to social services, only 7% has gone to infrastructure.

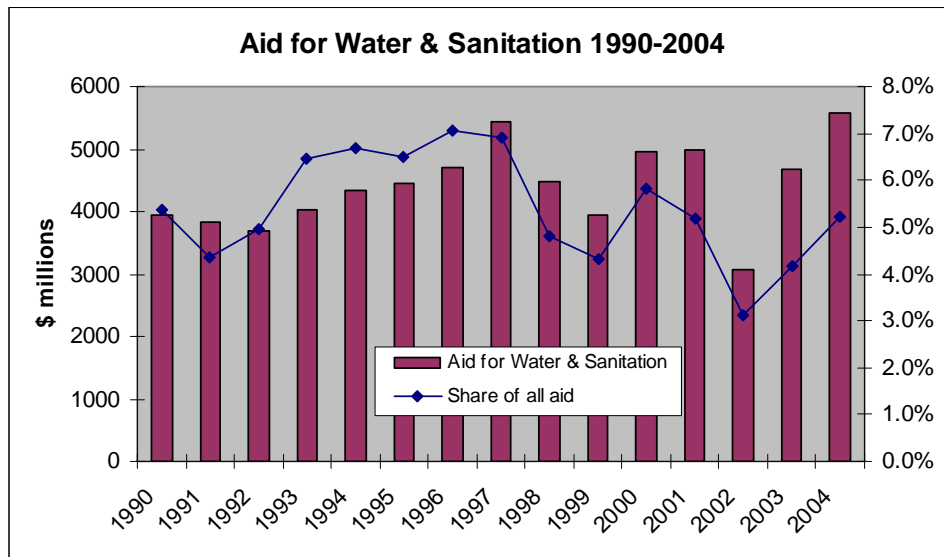
**Declining aid to sector fails to target the poor**

A handful of donors dominate sector funding - Japan, USA, France, UK, EC and the World Bank accounting for approximately three quarters of international aid. However, despite the importance of water and sanitation to the MDGs, aid to the sector as a share of all international aid was in relative decline from 1997 to 2002 before recovering in the last two years, although it is still well short of the US\$7 billion which the UN estimates will be required for the water MDGs in 2006<sup>26</sup>.

Graph 1. Comparison of total aid with aid for water and sanitation: 1990-2004

*'No progress can be made in achieving the Millennium targets for water and sanitation unless external aid is increased and refocused'*

*Millennium Task Force 2005 p29*



Source: OECD database

However, the regional distribution of aid distribution offers a mixed picture. East Asia receives the highest proportion of international aid. This is mostly in the form of loans, reflecting both the numbers of people in need and the ability of the region to pay back loans due to healthy economic growth. Sub-Saharan Africa receives the second highest total amount of international aid but the highest amount of grant aid. However, in general, the highest recipients of aid in both grant and loan form are Lower-Middle Income Countries (LMICs). A high percentage of aid to the sector -from Japan and the USA, for example - falls into this category. Just ten countries received 48% of total aid to the sector in 1997-2002 - China, India, Vietnam, Peru, Morocco, Egypt, Mexico, Malaysia, Jordan and the Palestine-administered areas - although this is primarily in the form of

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loans.

In contrast, the poorest countries where low water and sanitation coverage is concentrated, are progressively losing out in international aid. The grant element of international aid to least-developed countries (LDCs) and other low-income countries (OLICs) has declined from more than 60% from 1993-97 to less than 50% from 1998-2002<sup>27</sup>. The situation of LDCs continues to deteriorate. WaterAid has calculated that in 2004 LDCs received only 22% of international aid, compared to 37% in 2002. In response WaterAid has called for 70% of international aid to the sector to be targeted at those countries most in need<sup>28</sup>.

To illustrate the inequity of the situation TearFund compared the amount of international aid to the sector per un-served head of population in these ten countries with the 15 countries 'most in need' as derived from the Global Water Supply and Sanitation Assessment Figures 2000<sup>29</sup>. The result was that the top ten countries received 27 times more aid per person un-served compared to the neediest countries i.e. U\$446.68 per person un-served compared to U\$16.37.

The impact of declining aid to the sector has a greater effect on those developing countries, particularly in sub-Saharan Africa, where aid receipts account for the bulk of investments. For example, 71% of Zambia's authorised provision for the water and sanitation budget in 2001 was donor-supported. It has been estimated that this would rise to 85% of total spending in the sector if off-budget items were included<sup>30</sup>.

*'Water projects are slightly less targeted on poverty and gender concerns than are projects in other sectors'*

OECD 2003

Nor is the type of aid to the sector well-targeted to improve access for poor communities. Donors tend to support large-scale systems in the water sector although small-scale systems are more likely to offer sustainable pro-poor services. For example, in Tanzania, WaterAid research has found that donors mainly fund rural piped water supply schemes that serve the better-off and are least accessed by the poorest 20% of the population. These schemes use technologies that are at least 10 times more expensive to build and rehabilitate than low-cost ones (such as protected wells). So for every additional person connected to a piped water scheme, 10 households are denied access to a protected water source.<sup>31</sup> In Nepal, more than 60% of investments in water supply and sanitation will go to provide services to 6% of the country's population who live in Kathmandu valley. The cost of the expensive Melamchi tunnel for the Kathmandu reforms alone are equal to \$312, compared to a per capita cost of \$10 for a low-cost rural water point.<sup>32</sup>

In its 2002 Development Co-operation Report the OECD is candid in its comments about the pro-poor performance of donors' water and sanitation efforts. Though adding a caveat about the quality of the data used the OECD said *"data reported by eleven DAC members for 2000 and 2001 suggest that water projects are slightly less targeted on poverty and gender concerns than are projects in other sectors, though, gender issues seem to be well taken into account in water supply and sanitation projects undertaken in rural areas"*. Less than half of the projects directly assisted the poor and only one fourth targeted gender equality. This compared with two-thirds assisting the poor and one third

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targeting gender equality in the health sector.<sup>33</sup>

TearFund analysed OECD DAC figures for 1999-2000 and calculated that 75 projects of more than U\$10 million, i.e. 0.05% of the projects funded during this period, received 60% of the funds<sup>34</sup>. Nonetheless, the trend is mildly encouraging - although the practices of individual donors vary widely - since there has been a decrease in average project size since 1996 when OECD DAC started to disaggregate figures in this way.

This is not to argue for an increase in project-based aid, albeit on a smaller scale, for water and sanitation in the poorest countries. On the contrary, donors need to focus their efforts on direct support to national governments and local authorities in improving their effectiveness in delivering services for their populations, for the following reasons:

- Donors generally have a poor track record in implementing infrastructure projects in the sector. WaterAid has documented examples of donor-funded water and sanitation programmes that achieve only modest impacts for very high expenditure<sup>35</sup>.
- Aid flows to the sector are more volatile than aid flows more generally<sup>36</sup>. These variations undermine the performance of the sector where projects can take many years to complete and so require stable funding flows.
- Aid to the sector also arrives late. The OECD reported in 2004<sup>37</sup> that disbursements of aid for water take on average four to five years to reach their peak following the initial commitment and projects usually take eight years to be fully completed.
- Aid to the sector is also highly un-coordinated. Donors fund and implement their own projects, increasing the burden of monitoring and reporting for the host government.

*'Aid is found to be more volatile than fiscal revenues - particularly in highly aid-dependent countries - and shortfalls in aid and domestic revenue tend to coincide'*

Source: Bulir, A & Hamann, A.J. (2003)

These factors combine to produce a low utilization rate of aid funds for the sector compared, for example, to funds from central government. The poor track record in project implementation, combined with the volatility and late disbursements associated with project funding, also represent a strong argument - which we will explore in more detail later - for aid to the sector to be provided via budget support.

### **3.2. Weak Governance, Low Prioritisation, Poor Delivery**

The public sector is, and is likely to remain, the principal provider of water and sanitation services for the poor. However, most southern governments have failed to deliver adequate and affordable services due to the weak governance and low prioritisation of the sector. Some broad problems cut across many public utilities in urban areas and municipal departments operating in rural areas - for example, weak coordination between the relevant institutions; poor information



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and planning; weak or absent performance contracts, lack of independent regulation and of public consultation or participation - that have contributed to poor delivery.

### ***Public water services in decline***

Publicly-managed water services in towns and cities have steadily declined in most developing countries as a result of a combination of rapid urbanisation, low investment, low billing and collection rates that fail to cover basic operation and maintenance. Public utility water services are becoming increasingly erratic, with shortening hours of service for fewer days and increased rationing of water, as their physical assets deteriorate.

*Developing country governments tend to allocate very little of their budgets toward pro-poor water and sanitation services, less than one percent in many Sub-Saharan countries.*

The growing migration of rural poor to urban centres in developing countries exceeds the capacity of public authorities to deliver services; informal, unregulated urban settlements are growing rapidly with little or no water and sanitation infrastructure. As WHO noted future population growth will occur mainly in urban centres as the global rural population stabilises at around 3.2 billion in 2015. The challenge presented by the growing urbanisation of poverty, therefore, is to provide basic water supply infrastructure by 2015 to the one billion urban dwellers additional to the 2.7 billion people currently served; in the case of sanitation to the 1.1 billion urban dwellers in addition to the 2.4 billion currently served.

Source: ERM 2003, p 65

A report from the Asia Development Bank<sup>38</sup> recently illustrated the ongoing problems faced by public utilities in major Asian cities. In Delhi, for example, only 69% of the population has access to a water supply and 60% have access to sewerage. Only 1% of connections enjoy a 24-hour supply. But India's capital is far from exceptional. The same, and worse, can be said of other cities such as Dhaka that has no 24-hour supply.

A much starker picture prevails across Africa. The state utilities of Burkina Faso, Cote d'Ivoire, Senegal and Togo are among some of the poorest performers, while a number of Nigerian utilities provide coverage to fewer than 10% of their territories<sup>39</sup>.

In rural areas, community-driven development and demand responsive strategies are helping to increase rural access to water supply through community mobilisation, capital cost contributions and user management of water facilities. The WHO reports that rural areas posted the greater improvements in coverage compared to urban areas (7% compared with 1%) over the 1990-2002 period. However, there is little attention paid by governments to providing support to the water user management boards. This undermines the sustainable functioning of the water supply service. For example, a baseline study conducted by WaterAid in Assosa zone, Benishangul Gumuz in Ethiopia found that as the numbers of new water points increased, average functionality (monitored by government on a bi-annual basis) decreased, from 81.5% in 2001 to 72% in 2003. The main reasons for non-functionality were to do with repairs that had not been carried out by the management board, though the seasonal availability of water from the water points was also an issue, indicating possibly, poor design of the water point

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in the first instance.<sup>40</sup>

### ***Weak national and international coordination undermines delivery***

The overall lack of coordination of the public agencies involved; a lack of planning for and regulation of the sector contribute to this poor performance. WaterAid<sup>41</sup>, for example, found only one comprehensive water supply and sanitation strategy - in Uganda - in a review of sector policy in the 14 countries where it has major programmes, though a number of governments are currently developing their sanitation strategies to complement their rural and urban water supply strategies. The lack of strategy for and coordination of the sector leads, in turn, to poor delivery. Urban planning systems and building standards, for example, are often inadequate, incomplete and un-enforced leading to confusion of stakeholder responsibilities e.g. for waste disposal, between public, private, house owner, and tenant.

Global level strategies and initiatives contribute to driving behaviours and processes at national level. The widespread failure of coordination at national level, therefore, reflects - and is in some way a product of - a parallel failure at international level. The number of global, country and regional water and sanitation initiatives is overwhelming. The ERM Working Paper<sup>42</sup> lists eight different partnership initiatives at a global level including the Global Water Partnership, World Water Council, WSSCC etc. The proliferation of such initiatives, however, has failed to produce improved efficiencies within the sector. Water Aid<sup>43</sup> has recently documented the failure of the EU Water Initiative (EUWI) to pull together European donors to improve their effectiveness in the sector. The initiative - which was set up to create strategic linkages in-country to assist with funding - appears to have added confusion to the already complicated mechanisms of funding for water and sanitation projects. The proliferation of such uncoordinated, international water and sanitation initiatives undermines the possibility of effective coordination of the sector at a local level, leading to a piecemeal approach to delivery.

WaterAid<sup>44</sup> has also documented how multiple funding can lead to the duplication or overlapping of projects; reduce the opportunity to generate efficiencies or economies of scale; and create a duplication of effort and resources e.g. in reporting. Better coordination between donors, and between donors and governments, would help the development of coherent national strategies and budgets for the sector and reduce the wastage of time and resources.

### ***Sanitation is particularly poorly served***

Within this general picture, sanitation services are particularly poorly served. Weak coordination and low prioritisation at a local level is once again a major factor, although neither do international donors prioritise sanitation for spending in developing countries. Most countries, for example, lack a single institution or coordinating body responsible for sanitation and rarely have a national budget dedicated to sanitation. WaterAid<sup>45</sup> examined the 14 countries in which it works and only one was found to have coordinated planning and reporting systems for sanitation including a dedicated sanitation budget. As a result, even though more

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than twice as many people lack sanitation as lack safe drinking water, spending on sanitation is only a fraction of the spending on water. Overall the JMP has found that spending on sanitation is as little as one-eighth that of spending on water, while the Global Water Partnership<sup>46</sup> estimated in 2000 that only \$1 billion was being spent in developing countries on sanitation compared with \$13 billion on water.

### ***Weak regulation undermines public accountability***

Weak coordination is complemented by weak regulatory environments for service providers - private or public. Institutional responsibilities for planning, supply, regulation, monitoring and quality assurance in the sector are frequently fragmented leading to a lack of transparency and accountability in the sector.

Regulating the growth of informal water vendors and other local water and sanitation service entrepreneurs, for example, offers a particular challenge. Governments and utilities tend to ignore them as they are often perceived as temporary and unauthorised. And yet, in both urban and peri-urban areas, these vendors and entrepreneurs are the main providers of service to poorer households, particularly in urban slums, where they normally charge fees higher than the utility supplier's for water whose quality may be suspect. The first step in the effective regulation and support of these providers is through government recognition of their activities. They could be linked to the delivery system operated and managed by a public utility, like a franchise. Or they could be assisted to form a cooperative to serve sections of urban areas where existing utility services are not able to reach. Or a regulator can publicise the price vendors pay at the water point so that customers know the price mark up. In whatever way, the purpose would be to protect poorer households from the profiteering behaviour usually associated with informal vendors.

It may also be that competition is a viable solution to high water vendor prices. The utility can either compete with the vendors themselves by improving services to those areas or encouraging other informal providers to operate. .

There has been a trend of governments creating independent regulators where long-term public-private partnership contracts are in operation. Lessons are still being learnt about how best to regulate for serving poor areas but a successful approach should involve transparent and widely publicised performance measurement that enables regulators and governments as well as external stakeholders to track service improvements in low income areas. Without the creation of independent regulators, problems with serving poor areas are likely to persist. Regulatory instruments, therefore, can be direct or indirect, formal or informal. Regulation of any form, however, can be effective in public and private water and sanitation provision if it ensures transparency and accountability to the end user.

There are few positive examples of public consultation and participation on, for example, service requirements, quality and tariffs in the water sector. Yet strong

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systems of public monitoring and accountability are the most effective way of dealing with problems of corruption and inefficiency.

***People-Centred Drinking Water and Sanitation Services: A case study from Venezuela***

*The desire to re-establish the involvement of citizens in the management of water services led the Venezuelan water sector leadership to call a workshop to outline what, from June 1, 1999, was to be known as the Communal Management of HIDROCAPITAL, the water company of the capital, Caracas. The workshop was attended by delegates from varying backgrounds. A major decision was the adoption of some of the elements of the experience of the Water Technical Tables (Mesas Técnicas de Agua) and the creation of Water Communal Councils.*

*The Water Technical Tables were an acknowledgement that there was no option other than for communal organisations themselves to gather and consolidate all the knowledge the community had about their water network in order to solve the many problems of the utility. The community organisations undertook community mapping – including a collective memory of the installations of the service provider and the network built by the people; and, then helped to diagnose the problem and formulate a working plan for works, repairs and maintenance.*

*The Water Communal Councils are the interactive platform for discussions amongst the communities (organised into Water Technical Tables), representatives of the public water company and elected officials of local government (mayors, councillors or neighbourhood boards. The council is open to all citizens with no exclusions, and it meets at a regular time and in a place well known. The council helps to prioritise issues from all identified needs; organises work programme agenda to which both the water company and the community take on commitments; and exerts social control over the public company.*

*Just over five years into its development, the organisational proposal of the Water Technical Tables and Communal Councils has been adopted by almost all the public water companies of the country. This has led to several transformations within the water and sanitation sector, not least of which is the transformation that comes from public water companies meeting with citizens, and the increasing number of communities in Venezuela who no longer think only in terms of having water or not in their taps, but in terms of managing their water resources.*

**Sources:** <http://www.tni.org/books/publicwater.htm>

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***Participatory Social Control in utility management: A case study from Brazil***

*Recife is the capital of Pernambuco State in the Northeast region of Brazil with a population of 1,500,000, more than 40% of whom live in slums. About 66 rivers and creeks transact the city, all of which were polluted with raw sewage*

*The social control and reforms in Recife was ignited at the 1<sup>st</sup> Municipal Conference on Water and Sanitation called by the City Mayor to decide on Recife's municipal water and sanitation policy, as well as to design the scope of a public control mechanism for the management. The state (provincial) level public utility, Compesa, has had a record of poor performance. Only 88% of the households are connected to the regular water supply network and they endured regular planned cut-offs to deal with water shortages. The state of sanitation was worse, only 27% of the households had any form of sewers coverage since 1970. Wastewater treatment was available for only 10% of the population.*

*Based on the decisions of the conference the Mayor introduced a direct democracy mechanism for strategic decision making in the department of municipal water and sanitation services. He declared his opposition to Compesa's privatisation in negotiations for a US\$84 million loan from the World Bank for infrastructure investments in Recife and the neighbour city of Olinda., City hall offered a new institutional arrangement to improve Compesa's performance, keeping it as a public provider and under social control mechanisms. Recife's proposal was accepted by the World Bank.*

*The concession contract with Compesa relates to the time frame for universal coverage of quality services. In the case of water supply, the initial proposal is to end the scheduled cut-offs within the next five years; for the sewage, coverage of 100% (with proper treatment) within the next 20 years, according to priorities defined by the "participatory budgeting", which exists in Recife as well as in Porto Alegre. This means more than 55,000 people per year will be added to the network.*

*Today, Compesa makes a surplus in Recife which is transferred to more than a hundred small towns throughout the state of Pernambuco.*

**Sources:** <http://www.tni.org/books/publicwater.htm>

In rural areas, the nature of regulation is similar in respect of the need for better information and better performance monitoring of community-managed services and municipal public health engineering departments. District assemblies could be better assisted in their role of determining the direction of water supply and sanitation investments if information about real coverage were available. In addition, information about private for profit and not for profit contractors – particularly the range and prices of contracting services they provide - would benefit government and private/household investors in rural services since it could help to standardise and drive down prices for these services. Finally, benchmarking the activity and service performance of community-managed services could assist municipal departments to focus support on those services that are at risk, perhaps due to weak community management structures or

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leadership. Here too, public participation is a necessary ingredient of effective regulation.

### ***As reflected in the low political priority of the sector***

The lack of sensitivity of governments to the public demand for improved water and sanitation is reflected in the low political priority attributed to the water sector. WaterAid's research<sup>47</sup> in five African countries (Madagascar, Kenya, Uganda, Malawi and Zambia), for example, showed that water and sanitation had a low priority in the first round of national Poverty Reduction Strategy Papers (PRSPs) that are a condition of debt relief under the Heavily Indebted Poor Country (HIPC) initiative. The exception was Uganda whose wider civil society lobbied government to prioritise the issues that poor people themselves highlighted through the participatory poverty assessment. Research by the Water and Sanitation Program – Africa confirmed this assessment in its research into 12 countries.<sup>48</sup>

Where water and sanitation did figure in PRSPs the focus was on enabling private sector participation and investment in urban water services and building standard infrastructure e.g. boreholes, dams and weirs in rural areas. The latter reflects the view that improved irrigation for agriculture will have the most immediate impact on rural household incomes and poverty. Water for human consumption, therefore, is effectively de-prioritised even when water and sanitation features in the PRSPs. Additionally, the focus on physical water points is not complemented, for example, by the attention to and adequate investment in the creation and support for user associations and community management boards to help ensure the sustainable operation and management of the facilities.

WaterAid's analysis<sup>49</sup> also noted that the focus on cost recovery in the PRSPs without any consideration of the need for subsidies to those who are unable to contribute to capital or operating costs. It highlighted that there were no specific strategies to assist the poor in areas, for example, where water resources were degraded or under threat. There was no geographical targeting in spite of varied hydrological and poverty conditions within different regions and districts. In Kenya, for example, low-cost water supply and sanitation in rural areas was allocated only 9% of the funds earmarked for projects in urban areas, although the majority of the country's poor live in rural areas. Monitoring systems also had collapsed in all five countries - leading to a lack of information on the state of water resources, size of demand by different users, sources of supply and providers - in the absence of which water strategies were reduced to untargeted infrastructure building.

### ***Confusion on standards a brake on progress***

Lack of agreement on appropriate standards and technologies for the sector also act as a brake on progress - leaving open, for example, which technologies are most appropriate to broaden the access of the poor. The lack of sector coordination e.g. in project funding can lead to a proliferation of technologies

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being used in national water and sanitation systems. This often increases the difficulty in establishing maintenance systems as parts - for example of a particular hand pump - may not be available nor bought in bulk. On the other hand, poor sector coordination has also meant differences in practices in regard to soliciting capital cost contributions from rural communities – undermining many governments’ policy on sustainable rural water supply. This, in addition to weak project monitoring systems<sup>50</sup>, can lead to parts being prohibitively expensive and water points inadequately maintained. In turn the lack of maintenance of asset infrastructure can lead to high levels of non-functioning water points in rural areas.

Estimating coverage – how standards get in the way

In another sense, standards set for water supply have masked the extent of real effective access, and therefore coverage rates. For example, in Niassa province in Mozambique, the Provincial Directorate for Public Works and Housing had used a standard measure of 500 people served per improved water point as a basis for planning increases in water supply coverage. However, studies have shown that the average number of users per source in Niassa province is only 280 persons.<sup>51</sup> (Hugman and Whiteside 1999).

### **3.3. The failure of the private sector to meet the challenge**

While public sector utilities are beset by problems and underperforming, the introduction of international private sector involvement in water and sanitation services in the last two decades has failed to deliver the step change in service delivery expected.

#### ***The limited performance of international private sector***

The international private sector was promoted as a solution for the water sector by donor-led reform programmes in the 1990s. Despite the priority given to the role of the international private sector in reform programmes it was never anticipated that the sector would play anything other than a minority role in water and sanitation provision. Nonetheless, the rationale for the aggressive promotion of the sector was that international water companies would:

- Attract international private investment in the sector,
- Offer more efficient management and improve the quality of services,
- Secure the independence of water utilities from the political patronage that had plagued the sector.

The record of the international private sector, however, is very mixed. The reform model did not succeed in attracting significant new investment in the form of international risk capital. This is not surprising since the water sector generally attracts a very small share of private finance because the returns in other sectors with smaller upfront investments and bigger income streams are more attractive. Water and sanitation from 1990-2001 attracted only 5% of cumulative investment in infrastructure projects with private participation in developing countries compared to 44% in telecommunications<sup>52</sup>. And the forthcoming investment

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certainly did not reach the poorest countries. Sub-Saharan Africa, for example, got only US\$37 million of the global US\$25 billion of private finance for water from 1990 and 1997<sup>53</sup>.

Nor did the introduction of the expertise of the international water companies lead to improved services for the poor. International companies often renegotiated contracts and pricing mechanisms with governments, once accurate information about the state of current infrastructure and assets was available, and increased tariffs accordingly. WaterAid and Tear Fund<sup>54</sup> researched the impact of private sector participation (PSP) in the countries where they work. They concluded that PSP does not address the causes of the failure of water utilities to serve the poor – for example, weak regulation of utilities, municipal laws and standards that rendered urban poor slums ineligible for services, lack of community participation, lack of enforcement of rights and entitlements and underdeveloped markets – and is unlikely to play a significant role in extending services to the poor. As private companies are called in to deliver water and sanitation services and state agencies are scaled down, there is a danger of the public sector irreversibly losing capacity to take the services back should PSP fail or when contracts end.

The introduction of the international private sector into water supply provision in developing countries has highlighted weaknesses in government regulation of urban water supply services, which are relevant whether or not the utility provider is a public or private entity. A poor information base – of the state of the physical infrastructure as well as of the clientele, absence of clear and real performance targets for the utility grounded on updated information, weak monitoring of utility performance, lack of transparency in decisions over tariffs and subsidies, and absence of a platform to ensure that consumers' concerns – and those would-be consumers from slum communities - are raised and addressed are outstanding areas for action.

### ***Gives rise to a high cost informal sector***

Local independent private and not-for-profit providers are playing an increasingly significant role in the provision of water for poor communities. The proportion of the population covered in this way is considerable. A study of ten cities in Africa in 2000<sup>55</sup> reported an average of 47% of households used small water providers or traditional sources such as dug wells as their main sources of water. 44% of Jakarta's population is served by private vendors and the Asian Development Bank<sup>56</sup> estimates that non-state providers serve between 20 to 45 percent of households in a number of South East Asian cities.

These small, informal and formal vendors range from households with a connection to the utility supply selling water to their neighbours to those who collect water in jerry cans from public standpipes and transport these in push-carts to sell to others. There are also entrepreneurs who invest in boreholes and set up private water kiosks, or invest in tankers that draw water from the public supply to distribute and sell privately. Water cooperatives, especially in Latin America, and other not-for-profit and community-managed services have also



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grown and become an established part of the water supply landscape. In similar vein, though on a much smaller scale, some entrepreneurs and civic organisations have established toilets, bathing and laundry areas in poor urban communities available on a 'pay per use' basis or a monthly household subscription.

However, the service offered by small scale providers to otherwise un-served communities often comes at a high cost. Many poor households pay a much higher proportion of their income for water and sanitation services delivered by informal private vendors - who offer poorer quality and smaller quantities of water - than the better off do for networked services. The water charge of informal water vendors is typically ten times the unit price of piped water supply and the cost of water can amount to over one-fifth of the income of a poor urban household.<sup>57</sup> Much of this activity goes un-noticed or unregulated by public bodies.

***But community managed systems are under threat***

Despite the proliferation of small-scale providers, international and national conditions for contracting water delivery services (public or private) may inhibit the growth of low-cost, community-managed water and sanitation systems in rural and urban areas, by rendering them illegal and unable to access funds. The General Agreement on Trade and Services (GATS), the first and only set of international rules governing trade in services, could have profound consequences for the nature and variety of service provision in the sector. Under GATS water and sanitation services are broadly defined as 'goods' to include 'the collection, purification and distribution of services of water'. This broad definition presents problems for governments that may want to protect specific aspects of service provision in order, for example, to promote social or environmental objectives.

The aim of GATS towards 'progressive liberalisation' coupled with the pressurised nature of the negotiation process means that developing countries may have little control over the speed and depth of the private sector measures they eventually adopt. This is a cause for concern since there is no single approach to developing and providing water services for the poor and current provisions might restrict the policy-making autonomy of national governments, for example, to balance social, environmental and economic benefits of policy choices in the water sector. As GATS commitments are 'effectively irreversible', developing countries may enter into agreements in the water sector, for example, without the electorate having a full discussion and debate on the consequences.

If water services are opened up to increased international private sector involvement under GATS, there could be a considerable impact on community managed water services. The agreement (Articles XVII and XVI) prevents any kind of preferential treatment to national companies or community managed suppliers in the provision of water for human use. Community managed schemes could, therefore, only be protected if governments specify a 'horizontal limitation' in the GATS schedule, defining which sub-sectors or regions should be exempted. Without being so exempted, community-managed schemes would flounder and services for the poor, especially in rural areas, suffer. However,

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powerful trading interests often pressure for these horizontal limitations to be removed in negotiations - for example, the USA and EU in the past.

## 4 GETTING THE 'OFF TRACK' ON TARGET

The international community faces a huge challenge if it is to meet the MDG water targets, particularly in sanitation. In 2005 a new UN water decade of action was launched. To meet the MDG targets the number of people served by water supply must increase by 1.6 billion (32%) and those served by sanitation must increase by 2.2 billion (59%). To achieve this would mean an increase in annual spending on the sector from US\$14 billion to \$30 billion - with all the extra money being spent on sanitation<sup>58</sup>.

We have known since the end of the last water decade (1981-1990), which failed to meet its targets, that water sector investments need to be doubled if MDG targets are to be achieved. Given the political will, this is easily affordable. The financing gap of \$16 billion a year<sup>59</sup> is affordable and is much less than the \$22 billion the world spends on bottled water each year<sup>60</sup>. This is achievable but will require changes in the levels and ways the sector is financed, structured, and governed. To meet the MDG targets with equity will also require a commitment to address the inequalities of water and sanitation service provision worldwide and, in particular, the plight of Africa. In this section we will suggest how this might be done by:

- Increasing and redirecting resources to the poor
- Strengthening governance and accountability in the sector
- Strengthening providers and targeting delivery
- Monitoring progress to improve performance.

### 4.1. Increase and redirect resources to the poor

A new approach to sector financing is required if we are to make significant progress in increasing the access of poor nations and communities to water supply and sanitation.

We need to increase the resources available to the sector and to target these more effectively at the poor i.e. there needs to be:

- A dramatic increase in financial assistance to the sector
- Targeted support to the responsible institutions of local and national government
- A redirection of resources towards the poorer nations and communities where needs are greatest.

There are a number of ways in which this can be done.

*'It is impossible to escape the conclusion that the global water sector ...is in a disastrous condition... physical infrastructure is lagging behind need. Sector management is deficient, services are deteriorating, and deficits growing...financial situation has been getting worse in the last few years, and the sector shows no sign of generating the funds to meet future service targets.'*

*World Water Council (2003) p8*

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**Multi and bi-lateral donors** should:

- ***Double and target investments in the sector***

A higher proportion of development assistance and domestic public sector resources needs to be directed to the WSS sector and, in particular, the 'top priority' countries. We have already noted that international aid for water and sanitation failed to target those countries that needed it most throughout the 1990s and that aid to water and sanitation in least-developed countries declined as a percentage of total aid to the sector. This trend needs to be dramatically reversed.

At a global level, international aid accounts for roughly 20% of water sector investments<sup>61</sup>. However, water and sanitation services in those countries where water poverty is most critical tend to be more highly dependent on international aid. For example, in the countries where WaterAid works international aid supports 76% of sector investments in Ghana, 85% in Zambia and 89% in Burkina Faso<sup>62</sup>. To achieve the necessary step change in extending safe water and sanitation to the poor, countries such as these will require higher levels of international aid - there is no realistic alternative. Increased donor funding could be channelled to the sector in two ways to be effective:

- *Increase budget support in line with sector allocations*

The preferred route would be through national budget support in line with increased allocations for the sector, since the prioritization of the sector would be nationally owned rather than externally imposed. This presupposes that governments have the political will, resources and capacity to secure the water and sanitation entitlements of their populations. Budget support could be effected, for example, through debt relief when it is available under the Highly Indebted Poor Countries (HIPC) initiative. Many of the 'top priority' countries most in need also qualify as HIPC and some resources released through debt relief can be earmarked for the water and sanitation sector. In several countries where WaterAid works, debt repayments dwarf what is needed to close the finance gap for the water and sanitation MDG targets. Where debt relief has been available there is evidence that the additional resources can assist the water sector, for example, as WaterAid has documented in Uganda. This can only happen, however, where national governments prioritise water and sanitation in their national poverty reduction plans, which we have noted has not always happened in the past.

It is important to note also that water sector itself can also be affected directly by un-payable debts. The Ghana Water Company Ltd, for example, in effect has been bankrupt in recent years due to the enormous debts resulting from devaluation of the national currency against the US Dollar in which the original loan was denominated<sup>63</sup>. In such circumstances it is important to ensure that the debts of public utilities are also cancelled.

Budget support can only be an effective way of targeting impoverished un-served communities when the recipient governments' financial and administrative systems are prudently managed and responsive to the interests of those

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communities. This raises the question of how the aid system should respond to the urgent humanitarian imperative of investing in water and sanitation when recipient government systems are not sufficiently robust or pro-poor?

- o *Direct budget support to the sector*

The second route is for donors - unilaterally or collectively - to fund the sector directly. The downside is that there may be less ownership of the prioritisation of the sector by national governments. Nonetheless, there is a wide range of mechanisms for doing this - from sector budget support through pooled funds and conditional grants. However, increased financial support to sector will not deliver the benefits for the poor if it is not aligned to government-led sector investment and delivery plans that target the poor. Donors should tie their aid to such plans and harmonise their procurement and other operating practices with government policies in the sector. This would be more likely to provide stable funding for the sector and ensure the effective delivery of services than, for example, a project-based approach.

Either route could result in increased development assistance for water and sanitation being channelled to those countries and communities that need it most. However, this will require improvements in government finance systems that often result in funds being disbursed too late for them to be used in the financial year, or in deductions being absorbed by intermediate institutions undermining delivery at the grass roots. Water Aid<sup>64</sup> has demonstrated that many of its countries of operation succeed in spending less than half their nominal budgets for the sector and has argued that water sector expenditure could be enhanced if funds were ring-fenced and passed directly to the responsible authorities, as happens in other sectors e.g. education. Budgetary support, general or sector-specific, as the preferred conduit for international aid, could address the issues we have noted with regard to the volatility of aid flows, the low utilization rate of aid to the sector and the poor record of donor-funded projects in delivering improved services for the poor.

Official donor agencies also have an important role to play - particularly with aid-recipient governments - in pushing the interests of the poor up the domestic political agenda. Donors could help to create the environment for pro-poor provision by supporting initiatives to update sector information, monitor performance on delivery targets, and supporting the creation of local and national platforms where government, service providers and poor community representatives could dialogue over their water and sanitation requirements. Accountability to impoverished people must underpin the framework that governs the interaction between donors, recipient governments and sector stakeholders. Even for states that do not have the capacity to effectively meet the rights and needs of impoverished communities, the longer term goal must be to build policy design, implementation and monitoring processes that build accountability for service investments towards the poor, un-served and the currently served. Donors should also seek to publicise and make accountable their public policy choices to a wider group of country stakeholders

**National governments** should redirect resources to ensure that water and

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sanitation services reach the most needy. This requires a number of pro-active strategies, for example:

- ***Establish financial sustainability of networked services***

Governments need first to re-balance public investment to make networked services, predominantly in the urban areas, financially sustainable in order to redirect resources to those who are currently un-served. The present pattern of investment by public and private utilities tends to be to improve and extend existing services to comparatively better off urban populations who, in effect, receive heavy subsidies for their services while the un-served urban poor pay many times more for services from small-scale private providers and rural areas are starved of investments. As has been demonstrated in the cases, for example, of Porto Alegre or Uganda, public utilities can achieve the financial sustainability of urban networked services, if given sufficient financial autonomy, through progressive tariff structures and more efficient billing and collection. Currently too many public utilities survive only through financial support from national government, diverting funds from un-served informal urban settlements and rural areas. In most cases, this will require a national dialogue over tariffs and subsidies, balancing both the need for utilities' financial sustainability, social goals of achieving universal service provision, and environmental goals. Government agencies must also be the model consumer and pay their water bills regularly.

- ***Reduce financial barriers to access***

There are a number of ways in which the financial barriers faced by the poor to access water and sanitation services can be reduced. Tariff structures can be adapted to broaden access by the poor to basic services, albeit with different economic implications. For example<sup>65</sup>, through:

*Cross-subsidisation between consumers*

Public sector utilities, in particular, should consider the public goods arising out of safe water e.g. in health, education and the economy, when devising tariff structures that broaden access to poor households. Tariffs for networked services have tended to increase in those developing countries where the water sector has been opened up to the international private sector. The privatisation of Manila's water and sewerage system, for example, in 1997 - at the time the biggest privatisation of a water utility in the world - delivered tariff increases of between 400% and 700% by 2003<sup>66</sup>. If water tariffs are based on market criteria - for example, taking into account operational costs, cash flow projections and return to shareholders - they are likely to present an insuperable barrier to access for many of the poor. However, it is also possible to achieve a financially viable service while implementing social objectives, as the following case study illustrates:

In Uganda the National Water and Sewerage Corporation cross-subsidise water uses through offering different tariffs on its metered service to different users. Users of a public standpipe are charged 400 Uganda shillings per cubic metre

where a residential user is charged UShillings 616 per cubic metre and institutions pay UShillings 760/cubic metre. Commercial users pay from 1,056 to 1,424 per cubic metre depending on volume used.<sup>67</sup>

***Cross-subsidisation as a means of broadening access: A case study from Brazil***

*The tariff structure of the Municipal Department for Water and Sewerage (DMAE) in Porto Alegre, addresses social need through a system of cross subsidies. There is a social tariff for low-income people who have a right to 10 cubic metres per month but pay for only four. People who use water only for basic needs i.e. who consume up to 20 cubic metres per month, are strongly subsidised by those who use between 20 and 1,000 cubic metres per month. Tariffs for the latter group of larger consumers increase exponentially. This progressive tariff structure generates an annual surplus that enables DMAE to invest in the maintenance and expansion of local water and sanitation services. In the last seven years about 70% of DMAE's investment in improved services has been derived from tariff collection.*

*Source: WaterAid and TearFund (2003)*

*Lifeline tariffs*

Another approach is to provide a minimum amount of water free to meet the basic needs of all the population, although this is unlikely to be a model for most developing countries. In South Africa, for example, the first six kilolitres per month (equivalent to 25 litres per capita per day for eight people) is free to consumers. However, the government recognises that due to the size and wealth of their economy, this system is probably not replicable elsewhere in developing countries.

*Targeted connection subsidies.*

Connection fees for piped water, however, are a more significant barrier to the poor with regard to access to water and sanitation services than higher tariffs. 'Demand responsive' approaches to service provision tend to emphasise the communities' willingness and ability to pay as a measure of demand. This is a

***Connecting squatter households to water supply piped network in Dhaka, Bangladesh***

*Some 20% of the population of the Dhaka metropolitan area (some 1.1 million people) live in slum and squatter communities, without legal entitlement to the land they occupy. This used to effectively bar them from gaining a connection to the water supply provided by the Dhaka Water Supply and Sewerage Authority (DWASA). Since 1996, local NGO Dushtha Shasthya Kenda (DSK) has been working with DWASA to facilitate connections for slum communities. It does this by acting as an intermediary between DWASA and the communities. DSK acts as the guarantor on behalf of the communities – paying the security deposit for the connection, and guaranteeing bill payments. DSK also provides the investment for the infrastructure within the slum community – a reservoir with a water point, which draws water from the DWASA mains. Households were organised by DSK to form a water management committee. The committee then ensured payment of the connection deposit and initial infrastructure investment, paying DSK by instalment and ensured regular bill collection. The approach satisfied DWASA to the extent that in 2001, they lowered the connection deposit from US \$134 to \$18. Connecting squatter families in this way ensured that DWASA lowered the incidence of illegal tapping of their water mains, reducing their non-revenue water in the process, and increased its regular revenue through serving the urban poor. The approach has now been replicated by DWASA in partnership with other NGOs and development partners in many other squatter communities in Dhaka. It has also been replicated in Chittagong.*

*Source: WaterAid, March 2003*

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### *Savings and Credit schemes*

NGOs and community associations, for example, have shown how simple savings schemes can enable the poor in urban and peri-urban areas to access basic services. The following example illustrates how poor households were supported to afford the connection charges to piped water.

#### ***Financing household connections for the poor: a case study from Côte d'Ivoire***

*The NGO CREPA, together with the public utility SODECI, developed a strategy to get poor households in peri-urban areas connected to the water network and still able to pay their water bills.*

*CREPA paid SODECI the initial connection fee and then helped the households to pay this loan and their water bills by promoting a savings scheme. Water was previously sold at an inflated price by illegal water vendors. These vendors were re-trained by CREPA to form household committees who provided a savings box to each household. The equivalent funds previously paid to the vendors were paid into the box and each month these funds were adequate to pay loan instalments, the water bill and often provide additional funds which could be used for income generation.*

*After three years, the billing rate was 95% and the strategy has enabled poor households to get connections which provide income for SODECI, a reduction in illegal connections and employment for water vendors.*

*Source: WaterAid*

Similarly, this example illustrates how a savings and credit scheme succeeded in encouraging the household management of domestic waste in urban areas.

#### ***Financing peri-urban sanitation: a case study from Burkina Faso***

*In Wogodogo, a low-income area in Ouagadougou, Burkina Faso, a saving-credit initiative has been set up for household management of domestic waste. A credit system was provided by LAGEMYAM, a women's association working for local improvements in sanitation, to make it possible for poor people to repay the loan in line with their income pattern.*

*46 households benefited from solid waste collection, excreta and waste water infrastructures. Initially only five households reimbursed the credit; households were used to receiving free assistance so revenues from solid waste collection were invested in basic needs such as water and food. However, LAGEMYAM worked with the community to highlight the importance of a sustainable system and build a willingness to pay for clean water and excreta infrastructures. The system runs well now and the rate of reimbursement is more than 80%.*

*Source: WaterAid*

### *Land tenure*

Though not a financial barrier, the issue of land tenure, is probably one of the most important obstacles to access to water and sanitation, especially in

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informal and unplanned urban and peri-urban settlements. Public utilities are often unwilling to provide a service due to the illegal or uncertain status of the area. Resolving the land tenure issues and securing residence status is usually the first step towards service supply. However this is beyond the remit of the utility and is the responsibility of the local authority.

It is of vital importance that local authorities ensure that these land tenure issues are immediately resolved, either over a temporary fixed term or over the longer term, so that communities are served with water, sanitation and other essential services.

The Water Utility Partnership for Capacity Building (WUP) AFRICA has suggested three policy reforms<sup>69</sup>:

- Facilitating some form of immediate tenure that may stop short of full land title. (A full form of title may be laborious to arrange and a less contentious form may still give residents and utilities the comfort that occupation is guaranteed for a fixed period of time (e.g. the right to occupy the land for 10 years).
- Agreeing in principle that all consumers should be provided with access to water supply regardless of their location and that the service provider be given the mandate to work with any community to design and deliver an appropriate service.
- Allowing the service provider to modify their traditional approaches and procedures to make service provision feasible in the short and medium term (e.g. by permitting pipes to be laid for an agreed period, laying pipes above ground, or laying pipes on private land.

#### ***The Role of Tenure in Improving Access to Water Supply: a Comparison of Ethiopia and Kenya***

*Secure tenure plays an important role in determining whether poor households have access to water supply and sanitation. In countries such as Ethiopia where most households have secure tenure, the **utility is not restricted** in its provision of services. The utility has managed to extend services to an estimated 90% of the population through a combination of service options including standpipes, yard and house connections – they are not restricted by building codes or unachievable standards. It is interesting to note that many of the mud and wattle structures occupied by poor households are owned by the Ethiopian Government and as a result poor households are tenants of the government and eligible for a service.*

*By comparison, in Kenya where a majority of low-income households live in informal settlements and households lack formal tenure, the utility has often restricted its supply of water to the boundaries of the area to be served, leaving it up to **private entrepreneurs** to establish water kiosks at their own cost (and risk) by drawing long pipelines into the settlement. In Kibera, a settlement in Nairobi of up to 500,000 people, more than 1,000 private connections have been installed. These pipelines stretch up to 1 kilometer from the nearest utility main. Increasing security of tenure is a key step that governments can take to avoid inefficiencies and improve access to water supply to poor households.*

*Source: Simie, 2000*

*From: [http://www.wupafrica.org/toolkit/resources/pdf-files/good\\_practices/good\\_practice\\_Africa.pdf](http://www.wupafrica.org/toolkit/resources/pdf-files/good_practices/good_practice_Africa.pdf)*



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- **Earmark sanitation funds**

National governments need to take resolute steps to ensure that adequate resources are allocated to improve sanitation facilities for the poor. A necessary first step would be to establish national funds earmarked for urban and rural sanitation infrastructure - to grant fund districts based on sector investment plans as an alternative to project funding. This, in association with the promotion of national sanitation authorities or coordination forums (see 4.3), would help to ensure a concerted and coordinated approach to this neglected area.

***Earmarking Sanitation Funds: A Case Study from Bangladesh***

*In Bangladesh, the government committed itself to the ambitious target of achieving universal access to basic sanitation by 2010 and included water and sanitation as one of the seven pillars of its Poverty Reduction Strategy paper (PRSP). A National Sanitation Strategy was formulated in 2005, along with a Pro-Poor Strategy, to deliver this objective. 20% of the Annual Development Programme Funds (ADP) that are allocated to local government are ring-fenced for sanitation. This was the result of the political leadership of the responsible Minister who became convinced of the importance of water and sanitation to poverty reduction and the achievement of the MDGs and who commented 'if safe access to water and sanitation is so important to us why should Bangladesh wait until the MDG target year?'*

*Source: WaterAid*

- **Devolve sector funds to local authorities**

National governments should devolve budgets to local authorities with responsibility for water and sanitation wherever this is appropriate. This could be achieved by setting up special purpose water and sanitation grants to enable public financing to flow more quickly to local governments and municipal water departments, as was done in Uganda. Grant funding should reflect the level of need to redress disparities in both geographic coverage and relative wealth. An illustration of how this might be done is provided by the disappointing case of the Ministry of Water in Tanzania. In 2003 the Ministry of Water in Tanzania proposed to decentralise a substantial proportion of its recurrent and development budgets to local councils. Recurrent grants would be determined by the size of local population. The Ministry also proposed to allocate a conditional development grant to each council on the basis of the number of un-served people in each district, as calculated by weighting district routine data figures with those of the National Bureau of Statistics. However, the proposal was neither acknowledged nor discussed in the Ministry of Finance 2004/05 guidelines. A successful illustration is provided by the case study below.

### ***Devolving conditional grants to districts : A Case Study from Uganda***

*The Ugandan government prioritised water and sanitation in its Poverty Eradication Action Plan (PEAP). As a result of debt relief, sector investment increased massively from \$3 million in 1997 to \$31 million in 2002 (2.5% of national budget). Official water coverage has increased from 39.4% in 1996 to 51% in 2003 with 2 million extra people gaining access to safe water.*

*Central government financing was allocated to district governments via conditional grants for the sole purpose of expanding water and sanitation coverage in the rural areas. District governments re-distributed funds locally but were accountable for the funds to central government.*

*There was evidence of initial problems with the system e.g. poor value for money resulting from poor supervision of private contractors and exclusion of the poorest communities. However, the problems were identified through studies and joint sector reviews and the government put into place mechanisms - such as the creation of District Technical Support units - to strengthen the local supervision of contractors.*

*Source: Barungi et al (2003) WaterAid*

- ***Incorporate low-cost technologies***

The choice of inappropriate and expensive technologies, frequently as a result of PSP contracting, further accentuates the financial difficulty faced by the poor to access services. To make inroads into water poverty technologies need to offer a good standard of service, be affordable to those on low incomes and be functional where institutional arrangements are weak. Low-cost technologies should be appraised in comparison to capital intensive technologies if we are to 'reach the hard to reach' and make water schemes affordable to the poor. However, in 2000, for example, the OECD reported that only 1.6% of all WSS aid in 1996-97 was earmarked for programmes based on affordable, low-cost technology, with similarly low levels of domestic public sector investment.

### ***Low cost technology: rope pumps in Mozambique***

*In remote areas of Mozambique many rural communities struggle to maintain Afridev handpumps, the preferred technology in many developing countries.*

*People living in poverty hundreds of miles from the nearest town find it nearly impossible to get hold of, or afford, the necessary spare parts. WaterAid research has shown that only 10% of Afridevs are mended within a week. This can have dire health consequences as most communities with a broken pump revert to collecting drinking water from risky sources such as unprotected traditional wells, swamps or rivers.*

*To get round the spare parts problem, WaterAid Mozambique has been piloting the use of simple rope pumps in its projects since early 2003. The most common problem in a rope pump is a broken rope, and even in the remotest areas rope is fairly to easy to find and cheap enough for communities to afford.*

*WaterAid's pilot has been well received by the government and Mozambique's National Department of Water is now carrying out a feasibility study into rolling out this technology nationwide.*

*The official recognition of the spare parts problem in remote areas is a big step forward. Prior to 2003 WaterAid Mozambique had been offering poor rural communities the option of setting up protected wells with a windlass and bucket, so that the only spares they would need to source when problems arose would be readily accessible buckets or rope. However, despite WaterAid evidence that these were preferred by the community and more easily sustained, government policy changed in 2002 disallowing their use in future.*

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## 4.2. Strengthen governance and accountability

- ***Prioritise water and sanitation in Poverty Reduction Strategies and national development plans***

*In Uganda, where WSS was prioritised in the PRSP, the result was a five-fold increase in government spending, aid to the sector doubled, and an additional 2.2 million people gained access to safe water.*

*Source: Slaymaker and Newborne (2004).*

A determined effort needs to be made to ensure that water and sanitation services for the poor are incorporated into the Poverty Reduction Strategy Papers (PRSP) of the countries most off track of the MDG. PRSPs represent an important opportunity to link water and sanitation - historically under-prioritised and under-funded - with poverty reduction and assure its place in national budgets. PRSPs are matched by a national-level medium term expenditure framework (MTEF) which should be the basis for donor assistance and where poverty reduction priorities are clearly earmarked. PRSPs could help, therefore, to unlock government and other resources for water supply and sanitation. This would require improved financial data for the sector, since, for example, the investment gap is unknown and unknowable in many countries due to poor data. Improved information systems would also facilitate more transparent monitoring of disbursement, spending, outcomes and impact. Moreover allocations for the sector could be stabilised through the MTEF providing a framework for medium term planning. Such explicit commitments to water and sanitation strategies and budgets through a PRSP empower stakeholders to monitor and to advocate for improved services for the poor.

- ***Improve coordination through national sectoral plans and joint reviews***

The central utility or municipal department is usually one of many service providers in rural and urban areas, including small and medium scale providers, not-for-profit providers and water cooperatives. Reform efforts, therefore, need to focus on improved coordination in the sector as a necessary precondition to more effective delivery and accountability. National governments should produce, therefore, an investment and delivery plan, with a separate budget for sanitation, for managing their water supply and sanitation resources and achieving their water and sanitation targets. This should be produced in partnership with the donor community and other stakeholders to provide the means for greater funding and operational coordination within the sector, and reviewed annually.

- ***Strengthen regulation and accountability of the sector***

National governments should strengthen the regulatory environment of the sector so that the quality of services and associated fees comply with public agreements and goals. Small and medium-scale enterprises in urban and rural areas, for example, will continue to play an important role in service provision. However, their relationship with central utilities need to be clearly defined and their operations better regulated and licensed so that their provision complies with government targets and goals. An example of constructive engagement by a public utility with informal provides to improve services is provided below.

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### **Regulating small-scale service providers : A Case Study from Malawi**

*In Malawi the Blantyre Water Board (BWB) encourages local community groups to raise funds to provide local water services in low income urban areas. The BWB takes an active role in the planning, implementation and monitoring of community-initiated projects and some private vendors, for which it has standardised procedures. The utility both regulates and supports the activities of community groups and other service providers by, for example, providing the water main up to the settlement while the community lays the pipes within their area.*

Source: [www.idd.bham.ac.uk/service\\_providers](http://www.idd.bham.ac.uk/service_providers)

However, the most significant driver of improved service delivery for the poor will be systems of public accountability that enable citizens to measure and respond to the performance of service providers. Donors should support and strengthen civil society, media and parliamentary scrutiny of water and sanitation sector performance and financing. There are a variety of mechanisms by which this can be done - for example, stakeholder reviews, citizens' reporting and citizens' juries. This must include the establishment of consultative multi-stakeholder mechanisms and greater attention to the collection and use of information on sector performance. It will also require improvements in the transparency and accessibility of this information to the public. Public scrutiny of the performance of utilities to operating targets and rules by effective regulatory bodies and /or public mechanisms will reduce the possibility of corruption and political patronage.

National governments should strengthen the participation of the principal stakeholders in the sector - the consumers; the providers; those not provided for; regulatory and other interested parties - in the planning, monitoring and review of water and sanitation services. They should be more involved in establishing a more publicly accountable service by setting the standards of quality for the services, including the pricing structure. A good example of public monitoring of a public utility's performance is provided by Porto Alegre.

### **Engaging the public in performance monitoring : a case study from Brazil**

*Porto Alegre has the lowest infant mortality rate in Brazil. The Municipal Department for Water and Sewerage (DMAE) provides a treated water supply to 99.5% of the city's population and collects 84% of raw sewage at one of the cheapest rates in the country. In 2000-2001, it generated a surplus of \$2.96 million.*

*The DMAE operates autonomously from the city authority. It is fully financially independent, generating 50% of municipal revenues locally, and using these to invest in service improvements. All supplies are metered allowing charging to be accurately applied to all customers and providing the DMAE with financial sustainability. It operates a social tariff that charges low income customers a discounted rate for the first ten cubic meters and that ensures that water fees do not prevent access to the water supply.*

*An independent Deliberative Council, composed of representatives of professional, business and civil society organisations, decides on the investment priorities for DMAE and carries out performance monitoring. The city's participatory budgeting practice has successfully engaged the public, involving around a thousand civic associations, making them willing partners of local government and utilities.*

Source: WaterAid and TearFund (2003)

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Nowhere are multi-stakeholder processes more important than when governments and donors embark on a programme of reform of water and sanitation service provision. More often than not, the design of reforms are negotiated solely between donors and central government. Often the water utility managers are merely informed of the programmes already agreed. In the recent past, much of urban water supply reforms have featured increased involvement of the private sector in the operation and management of the public water utility, and stepped increases in tariffs. Experiences in Bolivia, Argentina, Manila amongst many other privatisations underlie the necessity of opening up the discussions on reforms of service provision to wider scrutiny and public debate.

### ***The Water Dialogues, a multi-stakeholder process***

*The Water Dialogues, a process supported by the German and British governments, initiated by a multi-stakeholder group including a multinational water company (RWE Thames Water), international trade union federation (Public Services International), municipal public water authorities (ASSEMAE of Brazil), environment campaign group (EMG of South Africa), international consumer association (Consumers International), an association of domestic private water operators (APWO of Uganda) and an international NGO (WaterAid) is organising and carrying out these dialogues in Brazil, South Africa, Uganda, Indonesia and the Philippines. The national dialogues, while focused on understanding whether and how the private sector could contribute to the achievement of the Millennium Development Goals and universal access, are also being used by the national stakeholders to review different issues in service provision, including tariffs and regulation of utilities. The reviews, using combinations of research, dialogues and participatory processes are being linked to existing reform processes in those countries, and involve the stakeholders in the water sector, including perhaps for the first time in reform processes, the consumers and the un-served poor.*

### **4.3. Strengthen the providers and target delivery**

While increased and more effective aid, combined with improved governance and coordination, are essential conditions for improved performance, it is critical to strengthen the capacity of the public utilities and municipal water departments in developing countries to become more responsive to the needs of poor people and communities and more effective service delivery agencies.

- ***Increase autonomy and capacity of public sector providers***

Public service providers should be operationally and financially autonomous from central or local government to increase the efficiency and transparency of the operations. The National Sanitation Programme in Lesotho is a case in point. The programme - which has increased national sanitation coverage from 20% to 53 % since the early 1980s - is fully supported by government policy; funded and incorporated into the mainstream functions of the government ministries; and

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independent of external support agencies<sup>70</sup>. Similarly, the highly successful Municipal Department for Water and Sewerage (DMAE) of Porto Alegre is financially and operationally independent from the city.

However, effective leadership has been, and will remain, a necessary condition of the improved performance of public sector utilities. Imaginative human resource programmes need to be established to increase the capacity of public service providers, particularly at municipal level. There is evidence that public sector employees can outperform other sectors if well led, motivated and remunerated<sup>71</sup>. In the 2000s the World Bank and Dhaka Water Supply and Sewerage Authority (DWASA) agreed to test the comparative performance of private contractors and an Employees Cooperative (EC) in operating water and sanitation services in one revenue zone. The EC clearly outperformed both the private contractors and DWASA, increasing revenue, reducing 'unaccounted for' water, and increasing customer satisfaction. Key to the EC's success was buying integrity by doubling the salaries paid by DWASA and exploiting the experience of the workforce through participative decision-making. There are other examples of how leadership and motivation can lead to a step change in performance, as illustrated below.

***The role of leadership and workforce motivation : case studies from, Malaysia and Uganda***

*The linkage between clear leadership, workforce motivation and improved company performance is demonstrated in both the water utilities of Pulau Pinang, Malaysia (PBAPP) and the Ugandan National Water & Sewerage Corporation (NWSC). Although operating within distinctly different financial, social and geographic environments, clear leadership helped build motivated workforces that outperformed within their sector. Key success criteria from both examples are:*

- *Clear Leadership*
- *Operational autonomy*
- *Commercial outlook and operation*
- *Customer orientation*
- *Financial awareness leading to information-based decision making*
- *Decentralised management*
- *Workforce empowerment*
- *Incentivised performance*

*These have all created an environment of innovation, problem solving, accountability and customer orientation.*

*Sources: Santiago. C (2005) and Muqisha et al (2005)*

• ***Promote a political commitment to sanitation***

Dramatic improvements in sanitation are unlikely to occur unless there is a step change in the prioritisation and coordination of the sector. Responsibility for sanitation frequently is shared between several ministries and departments resulting in a lack of leadership focus to champion a 'joined up approach' to improving basic sanitation. Where there is a high-level political 'champion' for sanitation - such as in the case of Bangladesh (see Case Study p 33) - this results in it being assigned a higher priority. One option would be that national

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governments, with the support of donors, should create national sanitation authorities or programmes to drive and oversee expansion and improvement of sanitation services for poor communities.

*“Sanitation often has no institutional home at all, creating a policy vacuum”*

Source: UN Millennium Project Task Force (2005)

- **Target the poor**

National governments need explicit strategies to redirect resources towards pro-poor provision. Priority should be given to expanding services to those who lack safe water and sanitation rather than to improving services to populations those who already have access. To target the poor effectively water sector plans and funding should be needs-based. WaterAid country programmes, for example, have developed a simple methodology to enable policy makers to target scarce resources in accordance with need by differentiating between areas on the basis of, for example, existing coverage, future population, type of technology and unit costs.<sup>72</sup> The wide deployment of simple methodologies such as this would significantly increase the effectiveness and impact of scarce resources.

**Targeting the un-served : a case study from Malawi**

*In Malawi, areas which are already well-served receive more resources while areas which are un-served remain that way. Water point locations are clustered together rather than evenly spread through the administrative areas. There are no sector-wide criteria which would make investments transparent. Water Aid has therefore developed Equity of Distribution indicator. This involves a survey of water points and their condition, together with their GP Positions. These data are then translated into maps to produce a GIS (Geographical Information System) water database. combining this with census statistics of population distribution then allows calculation of the number water points per 1000 population, called the Improved Community Water Point density (ICWP). Variations in ICWP densities of different areas reveal the equity of distribution of the water points. New investments can then be targeted at the areas with the lowest densities. WaterAid's analysis of the Salima district using ICWP mapping techniques indicated that that the MDG target for the district would not be achieved until 2027. Yet, with effective planning from the outset, it could be achieved in 2007.*

Source: WaterAid (2004)

- **Protect and Support community-managed services**

Local, community-managed services have, and will continue to have, a vital role in providing pro-poor water and sanitation services, in particular to the ‘hard to reach’ in both urban and rural areas. Community-managed water services have a long tradition in the South and are increasingly recognised as an effective means of service provision for poor communities. Communities often have organised to address their own needs in the absence of public or private provision. Community managed schemes are often less expensive to install and maintain and offer strong local ownership and accountability. The growing popularity of such services reflects local demand and play an important role in providing infrastructure and services for poor communities. National legislation should support the regulation and financing of such decentralised services.

In light of the risks and uncertainty that GATS provision present for decentralised services, national governments of developing countries should advocate the

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following 'safeguards' to ensure the rights of such community managed services<sup>73</sup>:

- WTO Members should include appropriate 'horizontal limitations' in any water services liberalization commitment to safeguard their right to undertake discriminatory measures in favour of national community managed providers, to designate certain geographical areas only for community management and to establish certain market access limitations. Such limitations would restrict the scope of Articles XVI and XVII of the GATS in the particular sector. Communities would be given the right to choose to manage their own services, restricting access to other suppliers.
  - The WTO should issue a stand-alone political declaration emphasising that Members should be aware that the GATS Agreement does not intend to restrict communities' right to self-management of water services.
  - Governments should provide direct (grants) or indirect (tax breaks) subsidies designed to support community managed services since there are currently no rules on subsidies in services.
  - WTO Members could make a decision to ease Article XXI compensation requirements for developing countries that wish to modify liberalization commitments concerning public utilities.
- ***Contract for pro-poor services***

National governments need to ensure that pro-poor services are incorporated in all tenders for water and sanitation service provision. For example, governments should specify and enforce provision of water and sanitation services to the urban and rural poor in their agreements and contracts with all providers, including public utilities and municipal departments. Utilities, in turn, can contract with and support local groups or informal providers to extend services to poor communities, as illustrated by the Blantyre Water Board and DWASA.

#### **4.4. Monitor progress to improve performance**

Strategies, plans and targets are precondition to redirecting services to the poor but progress will be made only if these are driven and effectively monitored at national and international level.

- ***Establish a UN Rapporteur***

To generate the level of political interest and support required to accelerate progress towards the MDG targets the international community must develop coherent and authoritative systems to call national governments to account. The responsibilities and competencies for water and sanitation in the UN system are currently too diffuse. Too many competing agencies duplicate and sometimes share responsibility for monitoring and reporting on international progress towards the water and sanitation MDG targets. The UN Secretary General should



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appoint a single body and Rapporteur with sole responsibility for reporting on progress to the MDG targets. As an independent appellant authority the Rapporteur would produce annual assessments of county governments' plans on water and sanitation and progress towards the MDG targets. These reports could serve to highlight and champion best practice in broadening access as well as to 'name and shame' those governments that fail to deliver adequate plans and those donors that fail to meet their promise that '*no plan will fail for lack of finance*'. Alternatively, the remit and authority of UN Water, an agency set up in 2005 to coordinate the activities of various UN agencies in water supply and sanitation, could be expanded to carry out the role of global performance monitor as well as appellant authority.

- ***Empower civil society to monitor progress***

At national level, governments and sector stakeholders should agree a common framework to monitor and measure progress in the achievement of national and international water and sanitation targets, and to report on this progress to the public. Civil society needs to play a role within these monitoring frameworks if these are to be effective. An example is provided below of how civil society can be consulted on key performance indicators for a utility and constructively involved in monitoring its performance.

***Civil society involvement in monitoring progress : a case study from Uganda***

*In Uganda there is a water sector working group whose membership includes central government ministries, donors and NGOs. There are also monthly donor co-ordination meetings to update one another about ongoing activities by different donors.*

*NGOs working in the water sector are coordinated by the Uganda Water and sanitation NGO Network (UWASNET). UWASNET is represented on the sector working group and therefore the NGOs can access and exert influence on policies and programmes in the sector at the national level.*

*A joint sector review is conducted each year. The members of the sector working group assess performance according to eight 'golden indicators, prepare a sector performance report, conduct field visits and hold a workshop during which the reports are presented. The review takes stock of the achievements of the previous year and sets new priorities for the next year. This review provides the single opportunity for all development partners comprehensively to review policy, strategy, performance and capacity needs.*

*Source: WaterAid*

## **5 CONCLUSION**

Safe water and basic sanitation for the poor is critical to human development and contribute directly to the MDGs. Yet, the pivotal role of the sector in poverty reduction is inadequately prioritised by multi and bilateral donors in their development assistance, and by national governments in their poverty reduction

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*'Higher per capita investment costs to reach the remaining few follow the law of diminishing returns. Servicing urban slums, remote rural villages and arid areas may require a much greater effort than reaching a population in more accessible or less arid regions.'*

Source:  
WHO/UNHCF  
2004

*"Expanding water and sanitation coverage is not rocket science. It requires neither colossal sums of money nor breakthrough scientific discoveries and dramatic technological advances."*

UN Millennium  
Task Force 2005

plans. Unless there is a dramatic turnaround in national and international policy most of the two billion people living in poor households, communities and countries who currently lack access to this basic human right - most of whom live in Sub-Saharan Africa and Asia - will still be deprived of water and sanitation services in 2015 and millions of lives will be lost unnecessarily in the process.

Some countries and regions are making good progress towards the MDG - for example, in improved access to safe water - particularly in Asia. In focusing its efforts in achieving the MDG the international community faces a dilemma. The global targets could be reached by concentrating efforts most cost effectively where it is easiest and cheapest to extend coverage e.g. East Asia. This approach could potentially deliver the greatest benefit at least cost - a logic that appeals to economists the world over. To focus on the most deprived or 'hard to reach' might seem to follow a 'law of diminishing returns'. However, a strategy of targeting the 'lowest hanging fruit' in pursuit of the MDG would deepen the divide between the poorest countries and communities and the rest of the world. Unless, for example, we are prepared to contemplate hundreds of millions of women and children in Sub-Saharan Africa being deprived of safe water and sanitation well into the 21<sup>st</sup> century, we have no choice other than to achieve the water and sanitation MDG whilst meeting the needs of the poorest and most marginal. To return to a catch phrase at a water conference in Delhi in 1990 to mark the end of the UN International Drinking Water Decade, what we need is "Some for all, not more for some".

Getting water and sanitation services to the poor is not rocket science, as the Millenium Task Force recognised, but it will require a dramatic and unprecedented service expansion to those most in need in remote rural areas and densely populated urban slums. There is a growing consensus among the proliferation of high-level task forces and pressure groups about what needs to be done - for example, a doubling of resources to the sector; an explicit focus on sanitation; and improved coordination, regulation and accountability in the sector. What is required to get the 'off track' on target is a much more explicit focus on pro-poor service provision than has happened to date.

In 1990s, for example, private sector participation was effectively made a precondition for the provision of finance, either loans or grants, to poor developing countries. In the decade prior to the MDG target date of 2015, the condition for international development assistance in the sector should be that the interests of the poor will be served.

International aid can be used much more effectively to provide sustainable and equitable services. International donors, for example, should focus their aid wherever possible on those stakeholders that are most directly concerned with the provision of water and sanitation services to the poor - municipal governments, public utilities, small-scale entrepreneurs and civil society organisations. Public and private utilities should replicate some of the successful methodologies and approaches, for example, that WaterAid has demonstrated that target the poor and offer sustainable services.

Water is at the heart of the daily struggles and concerns of people living in

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poverty. Perhaps the strongest 'push' factor in delivering a step change in water and sanitation services would be to empower the un-served to monitor and prioritise service provision. Among all the reforms to the sector, greater public transparency and accountability is the means by which we can release the energies of stakeholders to ensure that safe water and sanitation, such an essential feature of our lives and well-being, is available to those who need it.

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## 6 A MANIFESTO

### 1. Increase and redirect resources to the poor

**Multi and bi-lateral donors** should:

- *Double and target investments in the sector*

**National governments** should :

- *Establish financial sustainability of networked services*
- *Reduce financial barriers to access*
- *Earmark sanitation funds*
- *Devolve sector funds to local authorities*
- *Incorporate low-cost technologies*

### 2. Strengthen governance and accountability

- *Prioritise water and sanitation in Poverty Reduction Strategies*
- *Improve coordination through national sectoral plans*
- *Strengthen regulation and accountability of the sector*

### 3. Strengthen the providers and target delivery

- *Increase autonomy and capacity of public sector providers*
- *Promote national sanitation authorities*
- *Target the poor*
- *Protect and Support community-managed services*
- *Contract pro-poor services*

### 4. Monitor progress to improve performance

- *Establish a UN Rapporteur*
- *Empower civil society to monitor progress*

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## 7 BIBLIOGRAPHY

Ahmed, R (2003) '*DSK: a Model for Securing Access to Water for the Urban Poor.*' Fieldwork Report produced for the Water and Poverty Dialogue Initiative at the 3<sup>rd</sup> World Water Forum, Japan, March 2003.

Andrews, C.T. and Yniguez, C.E. (2004) '*Water in Asian Cities: Utilities Performance and Civil Society Views*' Asian Development Bank, Manila

Annamraju, S, Calaguas, B, and Gutierrez, E. (2001) 'Financing water and sanitation: key issues in increasing resources to the sector' WaterAid.

Asian Development Bank (2004) *Water for All* series. Manila.

Breslin, E. '*Demand response approach in practice: Why sustainability remains elusive*' Discussion Paper in Asian Development Bank (2004) *Water for All Series*.

Bulir, A & Hamann, A.J. (2003) '*Aid Volatility : An Empirical Assessment*', IMF

Cairncross, S (1998) '*Why promote sanitation and hygiene?*' (from a UNICEF workshop on environmental sanitation - unpublished)

Calaguas, B and O'Connell, M (2003). '*Poverty Reduction Strategy Papers and Water: Failing the Poor?*' WaterAid.

Collingnon, B. and Vezina, M. (2000) '*Independent Water and Sanitation providers in African Cities*', Water and Sanitation Program, WBI,GTZ,BADC

DFID (2001) '*Addressing the Water Crisis*'

DFID (2002) '*Financing the EU Water Initiative*', Report by Environmental Resources Management, London

DFID (2004) '*Water Action Plan*'

Foster, Vivien et al (2000) '*Designing Direct Subsidies for the Poor- A Water and Sanitation Case Study*' World Bank, Public Policy for the Private Sector

Global Water Partnership (2000) '*Framework for Action*'

Hall, David et al (2004) '*Water privatisation and restructuring in Asia-Pacific*' Public Services International Research Unit (PSIRU), University of Greenwich, London

Hutton G. & Haller L. (2004) '*The costs and benefits of water and sanitation improvements at the global level*' WHO Geneva

Kapoor, S (2004) '*Debt, the Millenium Development Goals. Water and Sanitation*' A report by NEF for WaterAid.

Komives, K et al (2005) '*Water, Electricity and the Poor: Who benefits from*

---

*utility subsidies?* World Bank

Manning, R. (2005) *Development Cooperation 2004 Report. Efforts and Policies of the Members of the Development Assistance Committee.* Organisation for Economic Cooperation and Development (OECD)

McIntosh, A.C. (2003) *'Asian Water Supplies - Reaching the Poor'* Asian Development Bank, Manila and IWA Publishing, London

Mitlin, D and Vivas Eugui, D (2005) *'Water, Development and the GATS'* Policy Views on Trade and Natural Resource Management, IIED and ICSTD

ODI (2002) Water Policy Brief: Poverty Reduction and Water: *'Watsan and PRSPs' in sub-Saharan Africa*. ODI London

ODI (2005) Briefing Paper *'Water and GATS : Mapping the Trade-Development Interface'* ODI London

OECD (2003) *'Supporting the development of water and sanitation service in developing countries'*

OECD (August 2004). *"Aid for Water Supply and Sanitation"*. A report prepared by the Secretariat of the Development Assistance Committee (DAC) of the OECD at the request of the IWA. TIWA Seminar "Water for the Poorest" at the World Water Week in Stockholm 2004

Redhouse, D. et al ( 2005). *'Getting to boiling point: Turning up the heat on Water and Sanitation. National Water Sector Assessments'*. WaterAid

Santiago, C. (2005) *'Private-Public Partnership: An Alternative Strategy in Water Management in Malaysia'* in TNI and CEO *'Reclaiming Public Water'*.

Slymaker, T and Newborne, P (2004) *'Implementation of Water Supply and Sanitation programmes under PRSPs: Synthesis of research findings from sub-Saharan Africa'*. ODI Water Policy Programme and WaterAid.

Sugden, S. (2003) *'Indicators for the water sector: examples from Malawi'* Fieldwork Report prepared for the 3<sup>rd</sup> World Water Forum, Japan

Terry, G and Calaguas, B. (2003) *'Financing the Millenium Development Goals for domestic water supply and sanitation.'* WaterAid, January 2003.

TearFund (2004) *'Making every drop count: an assessment of donor progress towards the water and sanitation target'*.

TNI and CEO (2004) *'Reclaiming Public Water\_-Achievements, Struggles and Visions from around the World'*

Unicef and World Health Organisation (2004) *'Meeting the MDG Drinking Water and Sanitation target. A Mid-Term Assessment of Progress'*

---

UN Millennium Task Force on Water and Sanitation (2005) *'Health, Dignity and Development: What Will it Take?'*

UN (2005) *'Investing in Development'*

*Water and Sanitation International Benchmarking Network (IBNET)*  
<http://www.ibnet.org>

WaterAid (2002) *Looking back: The long-term impacts of water and sanitation projects*. A condensed version of the WaterAid research report *'Looking back: participatory impact assessment of older projects'*.

WaterAid Nepal (2002) *'Sustained drinking water and sanitation for all in Nepal - sector financing requirements'*

WaterAid Nepal (2004). *'The Water and Sanitation Millennium Development Targets in Nepal: What do they mean? What will they cost? Can Nepal meet them?'*

WaterAid and TearFund ( March 2003) *'New Rules, New Roles: Does PSP benefit the poor? :The Synthesis Report'*

WaterAid and TearFund ( March 2003) *'New Rules, New Roles: Does PSP benefit the poor? Case studies of private sector participation in water and sanitation in 10 countries'*.

WaterAid (2004) *'More for some, none for others'* Discussion Paper

WaterAid (2004) *'Water and Sanitation: The education drain'*

WaterAid (2004) *'Everyone's a Winner? Economic valuation of water projects'* WaterAid, London

WaterAid (April 2004) *'Global Water Scoping Process: is there a case for a multi-stakeholder review of private sector participation in water and sanitation?'*

WaterAid (2005) *'Dying for the Toilet. The cost of missing the sanitation Millennium Development Goal?'*

WaterAid (2005) *'An empty glass: the EU water initiative's contribution to the water and sanitation Millennium targets'*

WaterAid (2005) *'The State of the World's Toilets 2005: WaterAid's Bog Roll of Dishonour'*

WaterAid Tanzania (2005). *Water and Sanitation in Tanzania. An Update based on the 2002 Population and Housing Census*. WaterAid, Dar es Salaam.

WHO (2004) *'Evaluation of the costs and benefits of water and sanitation*

---

*improvements at global level'* WHO, Geneva

WHO (2005) Health and the Millennium Development Goals. Keep the promises. WHO Geneva

WHO/UNICEF Joint Monitoring Programme (2004) *'Meeting the MDG Drinking Water and Sanitation Target: A Mid-Term Assessment of Progress'*

WHO/UNICEF Joint Monitoring Programme (2005) *'Water for Life; Making it happen'*

World Bank Private Participation in Infrastructure (PPI) database

World Bank (2002) *'The National Sanitation Programme in Lesotho: How Political Leadership Achieved Long-term Results'*, Water and Sanitation Program - Africa Region, Nairobi

World Bank (2004) The World Bank Group Program for Water Supply and Sanitation. Water and Sanitation Sector Board.

World Development Movement (2005) *'Dirty aid, dirty water: the UK government's push to privatise water and sanitation in poor countries'* WDM London

World Health Organisation (2003) *'Right to Water'*

World Health Report (2005)

World Water Council (March 2003) *'Financing Water for All'* Report of the World Panel on Financing Water Infrastructure

WSP (October 2003) *'Water Supply and Sanitation in Poverty Reduction Strategy Papers in SAub-Saharan Africa: Developing a Benchmarking Review and Exploring the Way Forward'* Water and Sanitation Program



---

## REFERENCES

---

- <sup>1</sup> World Health Report (2005) taken from WHO website at: [http://www.who.int/water\\_sanitation\\_health/en/rtw1.pdf](http://www.who.int/water_sanitation_health/en/rtw1.pdf) - Box on p2
- <sup>2</sup> Cosgrove WJ & Rijsberman FR (1998) *Creating a vision for water, life and the environment* in 'Water Policy' Vol. 1 pp115-122
- <sup>3</sup> WaterAid Tanzania (2005). *Water and Sanitation in Tanzania. An Update based on the 2002 Population and Housing Census*. WaterAid, Dar es Salaam.
- <sup>4</sup> Cairncross, S (1998) '*Why promote sanitation and hygiene?*' (from a UNICEF workshop on environmental sanitation - unpublished)
- <sup>5</sup> Hutton G. & Haller L. (2004) '*Evaluation of the costs and benefits of water and sanitation improvements at the global level*' WHO Geneva
- <sup>6</sup> WaterAid (2004) '*Everyone's a Winner? Economic valuation of water projects*' WaterAid, London
- <sup>7</sup> Hutton G. & Haller L. (2004) op cit.
- <sup>8</sup> UN Millennium Project Task Force on water and sanitation, Final Report, Abridged Edition (2005) '*Health, Dignity and Development: What will it take? Achieving the Millennium Development Goals*' Swedish Water House
- <sup>9</sup> Redhouse, D., et al (2005) '*Getting to Boiling Point: Turning up the heat on Water and Sanitation*' quoted from Annex 3.2 of Cameroon PRSP. WaterAid
- <sup>10</sup> Tsoka, M, Nyirenda N, Milazi, L and Sugden S. 2002. Poverty Reduction and Water Access in Sub-Saharan Africa. WaterAid-Overseas Development Institute, Watsan-PRSP Project. Unpublished research report.
- <sup>11</sup> 1994 Participatory Poverty Assessment, the 1996 Participatory Poverty Monitoring and the 1999 Consultations with the Poor studies were undertaken by the Poverty Assessment Group (PAG), Lusaka.
- <sup>12</sup> WHO/UNICEF Joint Monitoring Programme (2004) '*Meeting the MDG Drinking Water and Sanitation Target: A Mid-Term Assessment of Progress*'
- <sup>13</sup> Redhouse, D (2005) op cit
- <sup>14</sup> WaterAid (2005) '*Dying for the Toilet. The cost of missing the sanitation Millennium Development Goal?*'
- <sup>15</sup> *ibid.*
- <sup>16</sup> WHO (2005) '*Health in the Millennium Development Goals*'
- <sup>17</sup> Redhouse, D. (2005) op cit
- <sup>18</sup> TearFund (2004) '*Making every drop count: an assessment of donor progress towards the water and sanitation target*'.
- <sup>19</sup> WHO/UNICEF (2005)p5 'Water for Life; Making it happen'

- 
- 
- <sup>20</sup> TearFund (2004) op cit.
- <sup>21</sup> World Bank (January 2004) *The World Bank Group's Program for Water Supply and Sanitation*. Water Supply and Sanitation Board.
- <sup>22</sup> OECD (2004) '*Aid for water supply and sanitation*'.
- <sup>23</sup> Water Supply and Sanitation lending: Volume Rises, Quality Remains High. [web.worldbank.org/wbSITE/EXTERNAL/TOPICS/EXTWSS/O,,contentMDX:20638261~pagePK:210058~piPK:210062~thesitePK:337302,00.html](http://web.worldbank.org/wbSITE/EXTERNAL/TOPICS/EXTWSS/O,,contentMDX:20638261~pagePK:210058~piPK:210062~thesitePK:337302,00.html)
- <sup>24</sup> Sugden, S. & Nyirenda N. et al (2002) '*Report of research into the financial flows, resource allocation processes and impact of investments made in the water supply and sanitation sector in Malawi*'. Unpublished. Quoted in WaterAid (2004) '*More for Some, none for others*' Discussion Paper
- <sup>25</sup> Redhouse, D. et al (2005) *Bangladesh, WaterAid National Water Sector Assessment*.
- <sup>26</sup> Manning, R. (2004). Development Cooperation 2004 report. The report notes that water's share of bilateral aid fell from 9% in 1999/2000 to 6% in 2001/02 and comments that in view of the efforts being made to achieve the MDGs "the decline in aid for water seems paradoxical" OECD January 2005 (p46)
- <sup>27</sup> TearFund (2004) op cit.
- <sup>28</sup> Redhouse, D. (2005) op cit
- <sup>29</sup> Tear Fund(2004) op cit.
- <sup>30</sup> Slaymaker, T and Newborne, P (2004). '*Implementation of Water Supply & Sanitation Programmes under PRSPs: synthesis of research findings from Sub-Saharan Africa*' from research by Guterriez, E., Wake. W., and Mwambwa S. '*Resource Allocation and Flows, Decentralisation, and Poverty Reduction Strategies: The Case of Rural Water Supply and Sanitation in Zambia*' WaterAid/ODI March 2004
- <sup>31</sup> de Waal, D, 2003. '*That sort of rural water supply infrastructure should Tanzania invest in?*' in United Republic of Tanzania, 2004. Poverty and Human Development Report 2003.
- <sup>32</sup> WaterAid Nepal, (2002). '*Sustained Drinking Water and Sanitation for all in Nepal – Sector Financing Requirement*' and WaterAid Nepal (2004) *The Water and Sanitation Millennium Development Targets in Nepal: What do they mean? What will they cost? Can Nepal meet them?*
- <sup>33</sup> OECD (2003) 2002 Development Co-operation Report <http://www.oecd.org/dataoecd/27/22/2955840.pdf>
- <sup>34</sup> TearFund (2004) op cit
- <sup>35</sup> WaterAid Nepal (2002) op cit.

---

<sup>36</sup> Redhouse, D. (2005) op cit. Also, see ERM ‘*The European Union: Final Report of the Financial Component*’.

<sup>37</sup> The International Water Academy (TIWA) (August 2004). “*Aid for Water Supply and Sanitation*”. A report prepared by the Secretariat of the Development Assistance Committee (DAC) of the OECD at the request of the IWA. TIWA Seminar “Water for the Poorest” at the World Water Week in Stockholm 2004

<sup>38</sup> Andrews, C.T. and Yniguez, C.E. (2004) ‘*Water in Asian Cities: Utilities Performance and Civil Society Views*’ Asian Development Bank, Manila

<sup>39</sup> Water and Sanitation International Benchmarking Network: <http://www.ibnet.org> survey document on Water and Sanitation

<sup>40</sup> WaterAid Ethiopia (2004) *Benishangul Gumuz Baseline study*

<sup>41</sup> Redhouse, D. (2005) op cit.

<sup>42</sup> DFID (2002) ‘*Financing the EU Water Initiative*’, Report by Environmental Resources Management, London

<sup>43</sup> WaterAid (2005) ‘*An Empty Glass: the EU Water Initiative’s contribution to the water and sanitation Millennium targets*’

<sup>44</sup> Redhouse, D. et al (2005) op cit

<sup>45</sup> *ibid*

<sup>46</sup> Global Water Partnership (2000) ‘*Towards Water Security: A Framework for Action*’

<sup>47</sup> Calaguas, B and O’Connell, M. (2002) ‘*Poverty Reduction Strategy Papers and Water: Failing the Poor?*’ A discussion paper

<sup>48</sup> Water and Sanitation Program (October 2003) ‘*Water Supply and Sanitation in Poverty Reduction Strategy Papers in Sub-Saharan Africa: Developing a Benchmarking Review and Exploring the Way Forward*’ WSP

<sup>49</sup> Calaguas, B and O’Connell, M. (2002) op. cit.

<sup>50</sup> DFID (2002) op cit

<sup>51</sup> Hugman, S and Whiteside, M. (1999) Evaluation of the WaterAid Programme of Rural Water supply, Sanitation and Hygiene Education in the Province of Niassa. Final Report. Governo Provincial de Niassa, Direccao Provincial de Obras Publicas e Habitacao and WaterAid, London.

<sup>52</sup> World Bank Private Participation in Infrastructure (PPI) database

<sup>53</sup> World Bank PPI database

<sup>54</sup> WaterAid and TearFund (March 2003) ‘*New Rules, New Roles: Does PSP benefit the poor? The Synthesis Report*’

- 
- 
- <sup>55</sup> Collingnon, B. and Vezina, M. (2000) *Independent Water and Sanitation providers in African Cities*, Water and Sanitation Program, WBI,GTZ,BADC
- <sup>56</sup> McIntosh, A.C. (2003) *Asian Water Supplies - Reaching the Poor* Asian Development Bank, Manila and IWA Publishing, London
- <sup>57</sup> DFID (2001) *Addressing the Water Crisis*
- <sup>58</sup> WaterAid (2005) *Dying for the Toilet*
- <sup>59</sup> *ibid.*
- <sup>60</sup> UNESCO (2003) [http://www.wateryear2003.org/en/ev.php-URL\\_ID=5226&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://www.wateryear2003.org/en/ev.php-URL_ID=5226&URL_DO=DO_TOPIC&URL_SECTION=201.html)
- <sup>61</sup> Annamraju, S, Calaguas, B, and Gutierrez, E. (2001) *Financing water and sanitation: key issues in increasing resources to the sector* Policy Briefing Paper. WaterAid.
- <sup>62</sup> Redhouse, D. et al (2005) *op cit.*
- <sup>63</sup> Redhouse, D. et al (2005) Ghana National Water Sector Assessment
- <sup>64</sup> Redhouse, D. et al (2005) *op cit*
- <sup>65</sup> TNI and CEO (2004) *Reclaiming Public Water - Achievements, Struggles and Visions from around the World*
- <sup>66</sup> Hall, David et al (2004) *Water privatisation and restructuring in Asia-Pacific* Public Services International Research Unit (PSIRU), University of Greenwich, London
- <sup>67</sup> National Water and Sewerage Corporate website. [http://www.nwsc.co.ug/general\\_information.php](http://www.nwsc.co.ug/general_information.php)
- <sup>68</sup> PPIAF, World Bank Institute (2003). Water Tariffs and Subsidies in South Asia, Paper 5. Can subsidies be better targeted?
- <sup>69</sup> Water Utility Partnership for Capacity Building (WUP) AFRICA, Better Water and Sanitation for the Urban Poor. [http://www.wupafrica.org/toolkit/resources/pdf-files/good\\_practices/good\\_practice\\_Africa.pdf](http://www.wupafrica.org/toolkit/resources/pdf-files/good_practices/good_practice_Africa.pdf)
- <sup>70</sup> World Bank (2002) *The National Sanitation Programme in Lesotho: How Political Leadership Achieved Long-term Results*, Water and Sanitation Program - Africa Region, Nairobi
- <sup>71</sup> Hall, David et al (2004) *op cit*
- <sup>72</sup> Sugden, S. (2003) *Indicators for the water sector: examples from Malawi*
- <sup>73</sup> Mitlin and Eugui (2005) *Water, Development and the GATS* Policy Views on Trade and Natural Resource Management, IIED and ICSTD