

WES Section  
Programme Division  
UNICEF New York

# Water, Sanitation and Hygiene Annual Report 2007

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## Executive Summary

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### *Sector Developments*

New water and sanitation coverage figures soon to be released by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) confirm overall trends from previous data sets: that the world is on track to achieve the Millennium Development Goal for drinking water but is very far off track for sanitation. The sanitation deficit continues to be huge: 2.5 billion people worldwide still do not use improved sanitation facilities, while 884 million do not use improved drinking water sources.

But there are reasons for optimism. New disaggregated data shows that of the 38 per cent of people without access to improved sanitation as defined by the JMP, only some (18 per cent of the total) are actually practicing open defecation, the riskiest sanitation practice. Moreover, the practice of open defecation is declining in all regions. The fact that the other 20 per cent are using some form of sanitation facility (albeit “unimproved”) shows that there is a significant demand for sanitation facilities.

The new JMP figures on sanitation coverage underline the irrevocable fact that without an extraordinary effort, the sanitation MDG target will not be met. There is consequently a growing recognition amongst sector professionals – and to a certain extent amongst the public health community and development stakeholders in general – that sanitation must be a key priority in the coming years. Thus, the proclamation of 2008 as the International Year of Sanitation (IYS) and the opportunity it represents was probably the most important sector development in 2007.

UNICEF and other sanitation stakeholders used 2007 to lay the groundwork for IYS in 2008. This included significant efforts to build the evidence base that links sanitation to child mortality and other MDGs, to develop plans and strategies, and to form new partnership frameworks. Key amongst these is the UN-Water Task Force on Sanitation (chaired by UNICEF), which is consciously working within the spirit of the “One UN” joint programming model. Bringing key national decision-makers on board with the sanitation agenda is a central part of IYS. Progress was made in this area in 2007 through the high-profile regional ministerial conferences on sanitation in East Asia (EASan) and in the Americas (LatinoSan).

Important developments impacting the sector in 2007 were in the area of climate change (with the publication of clear new data predicting water scarcity and significant increases in the range and severity of infectious diseases), water contamination (notably new predictions on the global occurrence of arsenic) and urbanisation (confirmation that sometime in 2008 more than half of the world’s population will be living in cities).

### *Programme Achievements – 2007 Highlights*

- along with UN and other partners, UNICEF helped design and launch the International Year of Sanitation campaign and laid the groundwork for 2008 through new partnership frameworks, building the evidence base for sanitation and hygiene, developing awareness-raising materials, and embarking on new advocacy initiatives
- UNICEF upstream efforts contributed to new and more progressive WASH policies in Afghanistan, Eritrea, Pakistan, Madagascar, Mozambique, Gambia, Sudan and elsewhere
- a total of 6.7 million people benefited from UNICEF direct support for improved sanitation facilities, 4.1 million through development programmes and 2.6 million through emergency programmes
- an expansion of community-based total sanitation approaches (CBSA), through direct support at the country level and a new capacity building programme for UNICEF staff and partners
- significant progress in mainstreaming handwashing into the overall UNICEF programme of support, notably within the Accelerated Child Survival and Development (ACSD) initiative
- a total of 14.9 million people benefited from UNICEF direct support to the construction or rehabilitation of water supply systems, 5.5 million through development programmes and 9.4 million through emergency programmes
- increased support to global and national efforts to promote household water treatment approaches and technologies
- equipped more than 12,500 schools with water and/or sanitation facilities, benefiting an estimated 3.6 million children
- four of the remaining nine Guinea Worm endemic countries recorded zero cases in 2007, while in the other five the total number of cases fell 61%, from 25,000 cases in 2006 to about 10,000 in 2007 (provisional figures)
- reached 9.4 million people through direct support for WASH in emergencies around the world including major response programmes in the Horn of Africa, Darfur, DR Congo, South Asia, Uganda and Iraq
- continued to play a leadership role in emergency WASH through the IASC Cluster approach at the global and country levels, and contributed to documented improvements in the coordination of the humanitarian WASH response
- provided extensive WASH support to countries in transition from emergencies, notably in southern Sudan and in the tsunami-affected countries through the “build back better programme”
- progress in a variety of gender-positive initiatives, including continued advocacy for improved representation of women on sectoral bodies, the design of girl-friendly school sanitation facilities and, notably, menstrual hygiene management
- concrete steps to improve the gender balance within the UNICEF WASH staff cadre
- along with WHO, under the umbrella of the Joint Monitoring Programme (JMP), completed the synthesis and analysis of a major new sector coverage data set with significant new information, better data presentation and improved disaggregation (including by gender)

### ***UNICEF WASH Programme Overview***

WASH (water, sanitation and hygiene) activities continue to be a major component of the UNICEF programme for children. In 2007, UNICEF supported WASH activities in 96 countries, the most ever (93 in 2006, 78 in 2000). UNICEF involvement in the sector ranged from large comprehensive WASH programmes of support in priority countries (such as Nigeria, Ethiopia,

India and Indonesia) to limited but targeted interventions in other countries in specific areas including emergency response, school WASH, water quality and hand-washing promotion.

UNICEF expenditure levels and staffing were also the highest on record. A total of US\$ 287 million was spent in 2007, while the total number of WASH professional staff increased to 350. The vast majority of UNICEF WASH financial and human resources were allocated to the 60 priority countries for WASH.

UNICEF is playing a growing “upstream” role at both the global and country levels. This role encompasses a wide range of activities, including support to policy reforms, strategy development, planning, capacity building, learning and the development of improved institutional and coordination mechanisms. Progress in this area takes time, but there were clear successes in 2007, ranging from new progressive policies in Afghanistan to the adoption of national standards for child- and girl-friendly school latrine designs in Viet Nam. Other successes include the development of new partnership frameworks through SWAPs and the “One UN” initiative, and a more active approach to the dissemination of sector knowledge through UNICEF’s extensive network of country offices. Upstream work continues to be firmly grounded in “downstream” realities through active involvement in field-based work and long-standing partnerships with governments and other national stakeholders.

In 2007, UNICEF reinforced the strong evidence base for the impact of WASH interventions on child survival and development, in support of its overall programme of support in the sector. While UNICEF’s strength continues to be in its country programmes of support, it is also important to build an authoritative evidence base to improve programme design, to increase the efficacy of advocacy efforts and – ultimately – to leverage more resources for interventions that have the greatest impact on the survival and development of children.

### *Sanitation and Hygiene*

In 2007, UNICEF increasingly prioritized hygiene and sanitation, both as part of the WASH package of interventions and as a component within other sector programmes.

UNICEF reached millions through support to large handwashing-with-soap campaigns in Ethiopia, Indonesia, Madagascar, Malawi, Uganda, Zambia and other countries in 2007, helping to raise awareness amongst decision-makers and the general public. Exposure to messages does not automatically translate into improved hygiene practices, and so UNICEF also sponsored studies to assess progress and to improve programme design.

Progress was also made on mainstreaming handwashing into the overall UNICEF programme of support in 2007. Handwashing has been identified as a core component within the ACSD initiative, which is UNICEF’s flagship integrated programming strategy to reduce child mortality. Handwashing is being integrated into ACSD communication packages and is already part of field campaigns, such as in Sudan, where a combined vaccination, deworming, breast feeding and handwashing programme reached almost 1.5 million children in 2007.

At the global level, UNICEF deepened its participation in the Global Public-Private Partnership for Handwashing with Soap, the main handwashing partnership framework (with the World Bank and other partners). Progress was also made in the “Project Champion” project with Unilever, which is developing a state-of-the-art methodology for promoting handwashing with soap to two key groups: school children and poorer segments of society..

While the world is still not on track for meeting the MDG sanitation target, there were successes in 2007. In South Asia more than 10,000 villages across the sub-region were declared free from open defecation and more than 15 million latrines were built. Many new sanitation facilities were constructed elsewhere in the world as well. The UNICEF programme alone, through its direct support to latrine construction in emergencies and development programmes, benefited an estimated 6.7 million people in 2007. But UNICEF's primary focus in the area of sanitation is the development of processes and mechanisms to improve enabling environments for the scaling up of national programmes.

UNICEF stepped up its backing of community based sanitation approaches (CBSA) – which stress local solutions for the achievement of defecation-free communities without direct subsidies to households – as a key organizational strategy for rapidly increasing sanitation coverage. Working with WaterAid, the Water and Sanitation Program (WSP) and other partners, UNICEF introduced or expanded CBSA programmes in nine countries in Asia, Africa and the Americas in 2007. In support of country programmes, UNICEF also launched CBSA capacity-building activities, with two workshops in Africa: an orientation-cum-capacity-building workshop for key regional and global sectoral training institutes, and a training workshop for UNICEF country office staff and other field practitioners.

### ***Water Supply and Water Quality***

Through its regular and emergency programmes, UNICEF direct assistance to water system construction or rehabilitation provided access to safe water to almost 15 million people in 2007. Major water supply interventions were carried out in Sudan, Nigeria, Afghanistan, Indonesia and other countries.

UNICEF continued to work to improve the sustainability of water systems through a variety of interventions, notably in Africa, where breakdown rates can be quite high. The WASH partnership with the Netherlands – focusing on the use of specific tools and techniques to ensure sustainable water sources – was expanded to five countries in Africa and one in Asia in 2007.

UNICEF launched a new partnership with the Rural Water Supply Network (RWSN) to develop a code of practice for reducing the cost of boreholes, and worked in many countries to develop and demonstrate new approaches and technologies in the areas of rain water harvesting, solar-powered pumping, manual borehole construction, gravity-feed water systems and new public-private mechanisms for the management of small water supply systems.

UNICEF work in the area of water quality continued on several fronts in 2007, including mitigation, water safety planning, water quality surveillance and mapping, and technology development.

In accordance with a new strategic emphasis on household water treatment and safe storage (HWTS), UNICEF worked with WHO and other partners in the global HWTS partnership framework, to conduct awareness-raising and capacity-building activities, and carried out a number of initiatives at the country level. These included the development and piloting of improved household treatment technologies such as biosand and ceramic filters, household chlorination, solar disinfection and special home water treatment activities in communities prone to cholera outbreaks.

Arsenic mitigation efforts continued in 2007, with activities in a total of 12 countries as well as at the regional and global levels. Testing is always the first step in mitigation programmes, and UNICEF supported the testing of hundreds of thousands of wells in 2007, including more than

300,000 in South Asia. In Cambodia and Pakistan, national arsenic mitigation strategic plans developed with the technical assistance of UNICEF were launched in 2007. At the global level, UNICEF teamed up with an eminent expert on arsenic contamination prediction modelling to produce a major report on the potential global occurrence of arsenic that will be the starting point for government-led risk-assessment and intervention planning in countries around the world.

### ***WASH in Schools***

In 2007, UNICEF worked with partners in 86 countries to educate children about hygiene, to build WASH facilities, and to promote schools as catalysts for hygiene behavioural change in communities. Through this major component of the UNICEF WASH programme, a total of 12,588 schools were equipped with water and/or sanitation facilities in 2007, benefiting an estimated 3.6 million children.

Significant progress was documented through assessments in several countries, including Afghanistan (where school sanitation coverage in schools has risen from 15 per cent in 2005 to 40 per cent in 2007) and Myanmar, where the student-latrines ratio has significantly decreased.

UNICEF helped develop policies, formulate national plans and ensure child-friendly WASH facilities are integrated into major school building programmes. In Angola, Kenya and other countries UNICEF is helping to develop new designs for child-friendly toilets and handwashing facilities that incorporate key criteria such as privacy and security for girls and suitability for small children. UNICEF and partners also avail of schools to demonstrate new technologies, taking advantage of children's openness to new ideas and the visibility of schools within communities.

The institutionalization of hygiene education within primary school curricula is a cornerstone of WASH in schools programmes, and UNICEF helped to make significant progress in this area in 2007 in Angola, DPR Korea, Madagascar and Sudan. In these and other countries, UNICEF also supported teacher training for hygiene promotion.

UNICEF and the IRC International Water and Sanitation Centre continued to run the main WASH in schools website, publish a newsletter, and also produced a new WASH in Schools manual.

Surveys, evaluations and studies sponsored by UNICEF are helping to build a firmer evidence base for WASH in schools and underpin advocacy and policy development initiatives. Studies were conducted at the country level (such as Ethiopia's national assessment of facilities in schools), regional level (a study on WASH-related exclusion in schools in South Asia) and global level (the WASH in Schools Impact and Sustainability Study). UNICEF continued to use study results and experiences from the field in its advocacy efforts to put WASH more firmly on the agenda of national decision-makers and the global development community.

### ***Emergency Programming***

In 2007, UNICEF continued to play a key role in emergency programming for WASH through direct emergency response, support to capacity building and preparedness, and response coordination at the global and country levels.

The total value of UNICEF support to emergency WASH programmes rose by approximately 9 per cent over last year, to a total of US\$ 142 million. However, for the first time in several years,

emergency expenditure was less than half of overall UNICEF WASH expenditures. Over 95 per cent of emergency funds were spent for country-level response.

Large-scale direct support was provided in response to floods in South Asia and DPR Korea, to the hurricanes in Latin America and the Caribbean, and to the ongoing humanitarian crises in Darfur, DR Congo, northern Uganda, Somalia and Iraq. In these and many other emergency interventions in 2007, UNICEF reached an estimated 9.4 million people through the construction and rehabilitation of emergency water systems and 2.6 million people through sanitation facilities. UNICEF also provided coordination, logistics and material support to the massive Government of Bangladesh flood and cyclone relief operation for 14 million affected people.

In 2007, UNICEF consolidated its role as lead agency for emergency WASH coordination through both the IASC Cluster approach and other coordination mechanisms at country level. UNICEF took the lead for WASH response coordination in declared clusters in 12 countries in 2007, including cluster pilot countries of DR Congo, Liberia, Somalia and Uganda and in newly declared cluster approach countries including Bangladesh, Mozambique and Chad. In other countries UNICEF also led cluster-inspired coordination mechanisms.

UNICEF also continued to lead the Global WASH Cluster, facilitating inter-agency and inter-cluster collaboration, managing the global cluster workplan, and providing extensive support to UNICEF and cluster partners in emergencies around the world. UNICEF and its cluster partners stepped up efforts to improve WASH coordination and response effectiveness in 2007, with a variety of initiatives, including a global capacity mapping exercise and several training programmes. In 2007, UNICEF capacity was supplemented through the emergency standby partnership arrangements, through which 25 WASH professionals from NGOs, governmental bodies and private organizations were in the field supporting UNICEF programmes (more than double the placements in previous years). A comprehensive process to improve the UNICEF emergency WASH supply chain was also launched in 2007.

### ***Gender and WASH***

UNICEF continues to highlight gender-aware programming approaches in recognition of women's central role in the management and provision of WASH services and of the direct links between improved WASH services and women's empowerment. Country programmes address gender in the sector through advocacy and through example in UNICEF-sponsored activities. UNICEF is an important advocate for better representation of women in WASH-related institutions and forums at all levels: from government WASH departments at the national level, to local government water and sanitation units.

A key area where UNICEF works to influence gender relationships through sector activities is in WASH in schools programmes. To meet the objective of increased enrolment and retention of girls in schools, most UNICEF-supported programmes are designed to ensure that sanitation and washing facilities for girls are user-friendly, safe, separate and private (and have adequate facilities for menstrual hygiene). UNICEF works to address stereotypical gender attitudes through school WASH programmes by, for example, promoting meaningful participation of girls in WASH-related clubs and by challenging unfair gender-based divisions of school chores.

An innovation pursued by UNICEF in several countries, including India, Madagascar, Malawi and Nigeria, is urinals for girls as a way to achieve parity with boys in the number of facilities available in schools. While some decision-makers are hesitant, the urinals are highly acceptable to girls, most of whom see them as an obvious solution to a frustrating problem.

UNICEF country programmes are beginning to place a greater emphasis on facilitating menstrual hygiene for women and girls. The most comprehensive programme is in India, involving advocacy and policy development backstopped by demonstration projects. In the state of Tamil Nadu a variety of tools are used to raise girls' awareness of menstrual hygiene, while sanitary napkin incinerators have been installed in schools. The initiative is now being expanded within India and the ideas disseminated to other countries.

UNICEF also continues to support broad sectoral gender analysis processes (although progress is slow) and is active in promoting the use of gender-sensitive methodologies in sector participation processes, including through CBSA. Also supported are efforts to improve the gender disaggregation of sectoral data, with some progress within the UNICEF/WHO Joint Monitoring Programme, JMP. Finally, UNICEF continues to try to reflect its advocacy position on women in the sector within its own staff cadre and has had some success in increasing the number of women professionals, although more progress is needed.

### ***Monitoring***

JMP work in 2007 focused on processing and synthesizing the new data set for global sectoral coverage in preparation for the 2008 report, which will focus on sanitation in support of IYS. For the first time, the data set includes a trend analysis of the practice of open defecation at global, regional and country levels. It also presents data disaggregated by the proportion of the population that shares improved sanitation facilities between multiple households and by the proportion of the population that enjoys piped water on premises.

The JMP also continued work to improve the range of high quality sectoral data and harmonization of indicators. The consultative process on improving the effectiveness and utility of the JMP globally continued in 2007, as did efforts to support national sectoral monitoring efforts (including an intensive pilot project in three African countries, and a series of regional capacity building initiatives).

### ***Partnerships***

UNICEF works extensively with a wide range of partners within a variety of partnership frameworks at the global, regional and country levels. As chair of the UN-Water Task Force on Sanitation, and a core team member for the preparation and launch of IYS, UNICEF actively partners with key sectoral organizations at the global, regional and country levels.

Collaboration with development banks was stepped up in 2007. UNICEF works with the World Bank in countries around the world, and reached an understanding with the African Development Bank on key areas of collaboration (sanitation, monitoring and WASH in schools). UNICEF also works with the World Bank Water and Sanitation Program (WSP) and for the first time, has observer status on the WSP governing council.

UNICEF continued to work extensively with sister agencies in the sector in 2007, notably with WHO, WFP, UNDP and UN Habitat. In some cases this is through formal joint programmes and in others through less formal arrangements. In the "One UN" pilot countries with significant UNICEF WASH programmes (Mozambique, Pakistan, Rwanda, Tanzania and Viet Nam) 2007 was the year for developing joint sectoral UN programming frameworks.

UNICEF continued to work with major funding partners, including the governments of Netherlands, Norway and the United Kingdom, and with the EU.

Collaboration with sector networking and knowledge organizations continued in 2007, including with global bodies such as the Rural Water Supply Network (RWSN), the Water, Engineering and Development Centre (WEDC) and the IRC International Water and Sanitation Centre; and regional bodies like the Network for Water and Sanitation (NETWAS) and the Centre Régional pour l'Eau Potable et l'Assainissement à Faible Coût (CREPA).

Finally, UNICEF participated in the development and implementation of WASH SWAPs in Madagascar, Malawi, Mozambique, Nicaragua, Rwanda, Sri Lanka and Zambia in 2007.

### ***Challenges***

The greatest challenge facing UNICEF and its sectoral partners for 2008 and beyond is to transform the opportunity of the International Year of Sanitation into real sustainable progress on behalf of the two and a half billion people still without access to improved sanitation. Concrete efforts were made in 2007 with the achievement of an international consensus on the need for action and on the way forward, the formation of new partnerships and an improved framework for UN coordination, and with new interest being shown by decision-makers at all levels. To achieve the MDG sanitation target, these efforts must be sustained over the eight years remaining until 2015.

Other important challenges facing UNICEF and its partners include improving sustainability of WASH services, integrating more comprehensively with the health sector, scaling up “home hygiene” approaches (which includes household water treatment, handwashing and sanitation), scaling up sanitation through the expansion of community based approaches, building the evidence base for WASH to influence prioritisation and funding decisions, responding to the global threat of arsenic contamination (now that the extent is better known), articulating the UNICEF response to the impact of climate change on water resources, accelerating the national sectoral gender analysis process and continuing to build capacity within UNICEF to improve the effectiveness and impact of UNICEF WASH programmes.

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## Abbreviations and Acronyms

<b>ADB</b>	Asian Development Bank
<b>AfDB</b>	African Development Bank
<b>AusAID</b>	Australian Agency for International Development
<b>ACF</b>	Action Contre la Faim
<b>AWD</b>	acute watery diarrhoea
<b>CAP</b>	Consolidated Appeals Process
<b>CBO</b>	Community-based Organization
<b>CCCs</b>	Core Commitments for Children
<b>CBSA</b>	Community Based Sanitation Approaches
<b>CERF</b>	Central Emergency Response Fund
<b>CHERG</b>	Child Health Epidemiology Reference Group
<b>CIDA</b>	Canadian International Development Agency
<b>CLTS</b>	Community Led Total Sanitation
<b>CRS</b>	Catholic Relief Services
<b>CSD</b>	Commission on Sustainable Development
<b>DFID</b>	Department for International Development (UK)
<b>DGIS</b>	Directorate-General for International Cooperation (Government of the Netherlands)
<b>DHS</b>	Demographic and Health Surveys
<b>DRC</b>	Danish Refugee Council
<b>EAPRO</b>	East Asia and the Pacific Regional Office
<b>ECD</b>	Early Childhood Development
<b>ECHO</b>	European Commission Humanitarian Aid Office
<b>ESAR</b>	Eastern and Southern Africa
<b>FGM/C</b>	Female genital mutilation/cutting
<b>ESARO</b>	Eastern and Southern Africa Regional Office
<b>GTZ</b>	German Technical Co-operation Agency
<b>HDR</b>	Human Development Report
<b>HWTS</b>	Household Water Treatment and Safe Storage
<b>IASC</b>	Inter-Agency Standing Committee
<b>ICRC</b>	International Committee of the Red Cross
<b>IFRC</b>	International Federation of Red Cross and Red Crescent Societies
<b>IRC</b>	International Water and Sanitation Centre
<b>IWRM</b>	Integrated Water Resource Management
<b>IWSD</b>	Institute of Water and Sanitation Development
<b>JMP</b>	Joint Monitoring Programme for Water Supply and Sanitation
<b>LSHTM</b>	London School of Hygiene & Tropical Medicine
<b>MDG</b>	Millennium Development Goal
<b>MICS</b>	Multiple Indicator Cluster Survey
<b>MSF</b>	Médecins Sans Frontières
<b>MTR</b>	Mid-Term Review
<b>MTSP</b>	Medium-Term Strategic Plan
<b>NatCom</b>	National Committee
<b>NCA</b>	Norwegian Church Aid

<b>NETWAS</b>	Network for Water and Sanitation
<b>NGO</b>	Non-governmental Organisation
<b>NRC</b>	Norwegian Refugee Council
<b>OCHA</b>	Office for the Coordination of Humanitarian Affairs
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>OFDA</b>	Office of U.S. Foreign Disaster Assistance
<b>PPP</b>	Public-Private Partnership
<b>PPPHW</b>	Global Public-Private Partnership for Handwashing with Soap
<b>PRSP</b>	Poverty Reduction Strategy Paper
<b>RADWQ</b>	Rapid Assessment of Drinking Water Quality
<b>ROSA</b>	Regional Office for South Asia
<b>RWSN</b>	Rural Water Supply Network
<b>SACOSAN</b>	Second Regional Ministerial Conference on Sanitation in South Asia
<b>SIDA</b>	Swedish International Development Agency
<b>SLTS</b>	School Led Total Sanitation
<b>SRSA</b>	Swedish Rescue Services Agency
<b>SWAP</b>	Sector-Wide Approaches to Programming
<b>TACRO</b>	The Americas and Caribbean Regional Office
<b>UNDAF</b>	United Nations Development Assistance Framework
<b>UNDP</b>	United Nations Development Programme
<b>UNEP</b>	United Nations Environment Programme
<b>UNHCR</b>	United Nations High Commissioner for Refugees
<b>UNOPS</b>	United Nations Office for Project Services
<b>USAID</b>	United States Agency for International Development
<b>WASH</b>	Water, Sanitation and Hygiene
<b>WatSan</b>	Water and Sanitation
<b>WAWI</b>	West African Water Initiative
<b>WCARO</b>	West and Central Africa Regional Office
<b>WEDC</b>	Water, Engineering and Development Centre
<b>WES</b>	Water, Environment and Sanitation
<b>WFP</b>	World Food Programme
<b>WHO</b>	World Health Organization
<b>WSP</b>	Water and Sanitation Program
<b>WSSCC</b>	Water Supply and Sanitation Collaborative Council

# 1 Sector Analysis

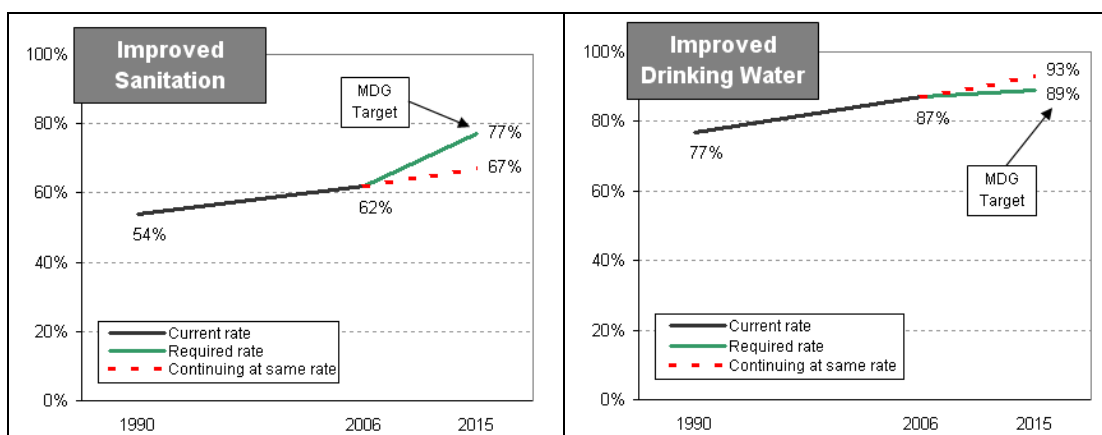
## 1.1 Sector Status: New Water and Sanitation Coverage Figures

The WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) has compiled a new set of water and sanitation coverage figures for the year 2006. The figures confirm the overall trends established by the last major update of sector figures in 2006 (2004 data set): that the world is on track to achieve the Millennium Development Goal target<sup>1</sup> for drinking water but not for sanitation (Figure 1).

The new figures<sup>2</sup> show that some progress has been made in sanitation: in 2006, 62 per cent of the world's population used improved sanitation, up from 54 per cent in 1990. However, the global deficit continues to be huge: 2.5 billion people worldwide still do not have access to improved sanitation facilities.

The news on water is more positive: 1.6 billion people have gained access to improved drinking water since 1990, raising coverage from 77 per cent in 1990 to 87 per cent in 2006. For the first time, the global population without improved drinking water has fallen below one billion, to 884 million. At current trends, the world will meet the MDG target.

Figure 1: Progress on meeting the MDG water and sanitation targets



For both water and sanitation there continue to be major disparities amongst regions. Sanitation coverage is lowest in South Asia and in Sub-Saharan Africa, where two-thirds of people do not have access to improved sanitation. For water, coverage remains below 60 per cent of the population in both Sub-Saharan Africa and Oceania whereas all other regions have coverage rates of 80 per cent or higher. Other disparities also continue: poor people and people living in rural areas are far less likely to have access to improved water and sanitation facilities than their richer and their urban compatriots. Of course disparities exist within these categories as well, in many countries the urban poor are very poorly served with water and sanitation services.

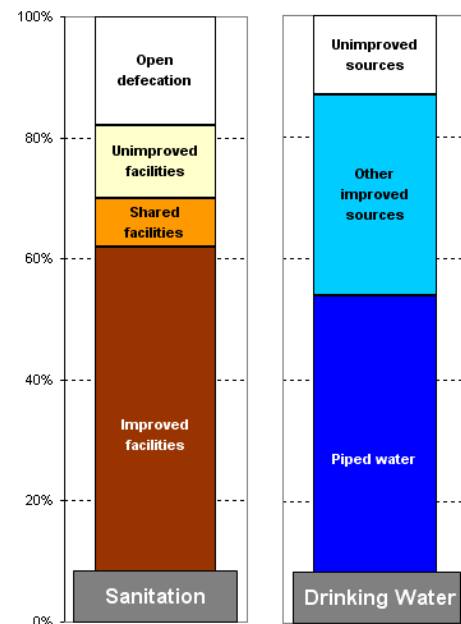
<sup>1</sup> The Millennium Development Goal 7, Target 7C, calls on countries to “halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation”.

<sup>2</sup> All coverage data in the text and figures in this section from: JMP (2008) (in press). *Progress on Drinking Water and Sanitation – Special Focus on Sanitation*. WHO/UNICEF: Geneva and New York.

The new global coverage figures are more disaggregated than in the past, and thus present a more nuanced picture of the water and sanitation situation (Figure 2).

For example, while 38 per cent of people globally do not have access to improved sanitation as defined by the JMP (flush or pour-flush toilet, Ventilated Improved Pit (VIP) latrine, pit latrine with slab or composting latrine), only 18 per cent are actually practicing open defecation. Twelve per cent use some form of “unimproved” sanitation facility (such as pit latrine without a slab, or a bucket latrine), and 8 per cent use a sanitation facility that is shared amongst two or more households.<sup>3</sup> Thus 20 per cent of the world’s population, while not having access to improved sanitation, are actually using some sort of facility. This presents a somewhat more positive picture because it shows there is a significant demand for sanitation facilities. It also has implications for strategy development: it may be more effective to have different sanitation promotion strategies for those who have already made some progress up “the sanitation ladder” than for those who need to be encouraged to abandon open defecation.

Figure 2: Levels of service - water and sanitation (global, 2006)



For water, 54 per cent of people worldwide use piped water (in dwelling, plot or yard) and an additional 33 per cent use other improved sources (public tap, tubewell, protected dug well, protected spring or rain water collection) for the total coverage rate of 87 per cent. A key trend emerging from the data is that the percentage of people who use piped water has risen 6 per cent since 1990, a greater increase than amongst those using other improved sources (4 per cent). This is good news from a public health perspective, because both water quality and quantity improve and households save time otherwise spent on hauling water.

There is much more information and data trends contained in the new figures, and they will be used by sector professionals to improve advocacy and strategic programme design. But a few broad headlines stand out:

- Progress must double to reach the MDG sanitation target: 2.5 billion are still without improved sanitation; at current rates, only half of the MDG sanitation target will be met;
- People are progressing up the sanitation ladder: open defecation – the riskiest sanitation practice – is decreasing; the fact that many people use even unimproved sanitation facilities shows that there is significant demand for sanitation;
- The 2015 MDG water target will be met at current rates and the population without improved drinking water has fallen below one billion; however disparities continue and Sub-Saharan Africa has the lowest coverage and is not on track for the MDG target;
- Coverage disparities continue to be pronounced: poor people, and people living in rural areas, have significantly less access to water and sanitation services than their wealthier and urban compatriots.

<sup>3</sup> Unimproved and shared sanitation JMP figures were provisional at the time of writing this report, and may change in the final publication.

## 1.2 Major Sector Developments in 2007

### *International Year of Sanitation*

The new JMP figures on sanitation coverage trends underline the now irrevocable fact that without an extraordinary effort, the sanitation MDG target will not be met. There is consequently a growing recognition amongst sector professionals – and to a certain extent amongst the public health community and development stakeholders in general – that sanitation is a key priority in the coming years. Thus, the proclamation of 2008 as the International Year of Sanitation (IYS) and the opportunity it represents was the most important sector development in 2007.

Figure 3: International Year of Sanitation



At the launch of IYS in November, the UN Secretary General stressed that “access to sanitation is deeply connected to virtually all the Millennium Development Goals,” underlining the importance of sanitation for the success of the entire Millennium Development agenda.

As a key preparatory step, sanitation stakeholders carried out much work on building the evidence base linking sanitation to the environment, education, gender equality, child mortality reduction MDGs. Several important studies on the costs and benefits of sanitation were launched in 2007, including by WHO<sup>4</sup>, by WaterAid (with UCLA)<sup>5</sup> and by WSP<sup>6</sup>. Other agencies released advocacy documents using the evidence base, including WaterAid’s “The State of the World’s Toilets”, the End Water Poverty coalition’s film “The Stink Goes On”, and publications in support of ministerial sanitation conferences (see below), including the joint WSP, UNICEF, WHO publication “Universal Sanitation in East Asia: Mission Possible?”<sup>7</sup>

A major part of the preparatory work for IYS is the formation of new partnership frameworks for sanitation promotion. Key amongst these is the UN-Water Task Force on Sanitation (chaired by UNICEF), which is consciously working within the spirit of “One UN” through fund pooling, clear agency responsibility mapping, consensus on strategies and policies (such as the five key IYS messages, see box on page 4) and a commitment to release advocacy and other material jointly during IYS (such as the IYS brochure and the website<sup>8</sup>). Another important new partnership arrangement motivated by IYS is the “Sustainable Sanitation Alliance” or SuSanA, a coalition of more than 50 prominent multi and bilateral organisations (including UNICEF), NGOs, businesses, governmental and research institutions active in the field of sanitation.

Bringing key national decision-makers on board with the sanitation agenda is a key part of IYS. Two regional conferences were held in 2007 for the first time, the East Asia Ministerial Conference on Sanitation and Hygiene (EASan) and the Latin American Conference on Sanitation (LatinoSan). The meetings were well attended by ministers and other senior government officials and each resulted in declarations with new commitments for sanitation. AfricaSan II and SACOSAN III (South Asia) are being held in 2008.

<sup>4</sup> Fewtrell, L. et al (2007). *Water, sanitation and hygiene: quantifying the health impact at national and local levels in countries with incomplete water supply and sanitation coverage*. (WHO environmental burden of disease series ; no. 15). WHO: Geneva.

<sup>5</sup> Kemen, T. (2007). *Sanitation and economic development: Making an economic case for the MDF Orphan*. UCLA and WaterAid. [http://www.wateraid.org/documents/sanitation\\_and\\_economic\\_development.pdf](http://www.wateraid.org/documents/sanitation_and_economic_development.pdf)

<sup>6</sup> Hutton G. et al (2008). *Economic impacts of sanitation in Southeast Asia: summary report*. World Bank, Water and Sanitation Program: Washington.

<sup>7</sup> WSP, WHO and UNICEF (2007). *Universal Sanitation in East Asia - Mission Possible?* WSP, WHO and UNICEF: Bangkok.

<sup>8</sup> <http://www.sanitationyear2008.org>

In some countries IYS is already influencing plans and resource allocation decisions. The Government of India, for example, plans to eradicate open defecation by 2012, and in the IYS national plan of action the Government of Nigeria will support a radical increase in efforts to promote latrine construction. In other countries, 2007 and 2008 will be more about laying the groundwork to create a solid framework for accelerating efforts through renewed commitments, increased resource allocation, new partnerships and capacity building.

In addition to influencing national leaders, it is also necessary to promote sanitation amongst the development community, parts of which have not yet fully embraced the importance of sanitation for child survival and development. Resource allocation decisions for child health programming are heavily influenced by the views of health researchers and professionals, and so the highly-publicised 2007 poll conducted by BMJ (British Medical Journal), in which respondents voted sanitation as the most important medical milestone since 1840 (more important than antibiotics, anaesthesia and vaccines) was a step forward. Much more needs to be done however, and UNICEF has taken a number of steps to build the sanitation evidence base and disseminate findings to both the health and development communities (see Sections 2.2 and 3.1).

IYS is a significant opportunity for UNICEF, governments, the development community and all other sanitation stakeholders to spotlight the seriousness of the global sanitation crisis and kick-start effort to accelerate progress toward achieving the MDG target.

### ***Other Sectoral Developments***

The link between accelerating climate change and water supplies became even clearer in 2007 with the publication of “Climate Change 2007” by the Intergovernmental Panel on Climate Change (IPCC)<sup>9</sup> and the prediction that over three billion people could be affected by water scarcity by 2100. Along with spatial water availability changes, rising sea levels, floods and droughts will threaten water reserves and extraction systems.

At the same time, there is increasing evidence that climate-induced changes in temperature and precipitation patterns will increase both infectious disease rates and their geographic range, especially of malaria and diarrhoea. Also clear is that the effects of climate change will have the greatest negative impact on poorer countries and communities, which are the least able to cope.

The fact that climate change makes meeting the sector goals even more of a challenge – and that response strategies must be developed now – was a major topic of discussion in 2007, including

#### **IYS: Five Key Messages**

***Sanitation is vital for human health.***

Poor sanitation and hygiene causes death and disease.

***Sanitation generates economic benefits.***

Improved sanitation has positive impacts on economic growth and poverty reduction.

***Sanitation contributes to dignity and social development.***

Sanitation enhances dignity, privacy and safety, especially for women and girls.

***Sanitation helps the environment.***

Improved disposal of human waste protects the quality of drinking-water sources and improves community environments.

***Improving sanitation is achievable.***

Working together, households, communities, governments, support agencies, civil society and the private sector have the resources, technologies and know-how to achieve the sanitation target.

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<sup>9</sup> IPCC (2007). *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)]. IPCC: Geneva.

by the participants in the 2007 World Water Week in Stockholm<sup>10</sup> and in the 2007/2008 Human Development Report<sup>11</sup>, which identified water stress and water insecurity as one of five key mechanisms through which climate change could stall and then reverse human development.

The seriousness of the threat of water contamination was again brought to light in 2007 with the publication of new findings on the global occurrence of arsenic in a work carried out by Cambridge University (with the involvement of UNICEF - see Section 3.2). The new estimates show that more than 140 million people in at least 70 countries are affected worldwide. But arsenic is not the only threat to drinking water of course: faecal contamination is still by far the greatest threat (especially to children) and the effects of industrialisation (and agriculture) on water quality are growing. This was highlighted in the press in 2007 in a series of articles on the spills and ongoing pollution in Chinese rivers affecting millions.

UN DESA<sup>12</sup> and UNFPA<sup>13</sup> reports in 2007 confirmed that in 2008, for the first time in history, more than half people worldwide will live in cities and that the urban majority will rapidly increase in the future. More than 90 per cent of urban growth up to 2050 will take place in cities and towns in Africa and Asia, and most of the new urbanites will be poor. This urbanisation trend is becoming a major factor in the sector. Water and sanitation coverage rates are higher in cities than in rural areas, but the figures are not disaggregated enough to show the very poor levels of access in slums (or the fact that the costs of services in urban areas can be very high). There are however clear indications that rapid urbanisation is putting severe pressure on water and sanitation systems in developing countries, and that the sector as a whole will need to put greater emphasis on the urban poor.

## **2 UNICEF WASH Programme Overview**

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### **2.1 Programme Scope and Structure**

The UNICEF WASH programme continues to expand. In 2007, UNICEF supported WASH activities in 96 countries, the most ever (compared to 93 in 2006 and 78 in 2000). UNICEF expenditure levels were also the highest on record, a total of US\$ 287 million was spent in 2007, US\$ 52 million from the UNICEF core budget and US\$ 235 million from funds contributed by donor partners and UNICEF National Committees (see Section 10 for a more complete breakdown on expenditures). Staffing also increased significantly, with a total of 350 professional staff at the end of 2007, compared to 289 at the end of 2006.

In keeping with the 2006 WASH Strategy Paper, UNICEF continued to focus efforts at the country level through three packages of interventions. One comprehensive package – or set of strategies – for the 60 designated priority countries (those countries with the greatest need in terms of WASH and child health indicators – see Annex 1), one package for other countries in which UNICEF works, and a third response package for emergency countries (see last year's

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<sup>10</sup> Stockholm International Water Institute (2007). *Prospects on Water - Striving for Sustainability in a Changing World: 2007 World Water Week Synthesis Report*. SIWI: Stockholm.  
[http://www.worldwaterweek.org/Downloads/Synthesis\\_07\\_web.pdf](http://www.worldwaterweek.org/Downloads/Synthesis_07_web.pdf)

<sup>11</sup> Watkins, K. et al. (2007). *Human Development Report 2007/2008: Fighting climate change : human solidarity in a divided world*. UNDP: New York. <http://hdr.undp.org/en/reports/global/hdr2007-2008/>

<sup>12</sup> United Nations Department of Economic and Social Affairs (2007). *World Urbanization Prospects: The 2007 Revision*. UN DESA: New York.

<sup>13</sup> United Nations Population Fund. (2007). *State of World Population 2007: Unleashing the Potential of Urban Growth*. UNFPA: New York.

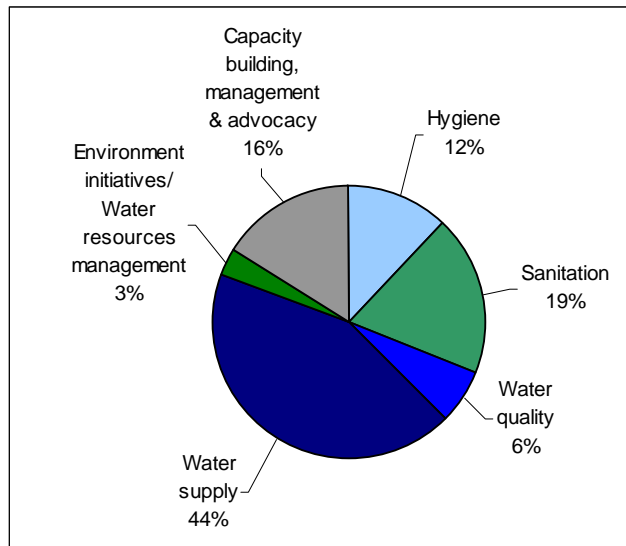
progress report, or the Strategy paper<sup>14</sup> for more detailed information on the UNICEF WASH strategy).

Emergency programming continued to be a major component of the UNICEF WASH programme: US\$ 142 million was spent on emergency WASH activities in 2007. However, this is the first time in several years that emergency expenditure has dropped below 50 per cent of the overall budget (see Section 4 for progress in emergency countries).

The 2007 balance between major programme components as measured by expenditure levels (Figure 4) is very similar to the 2006 figures. In both 2006 and 2007 hygiene and sanitation accounted for 31 per cent of the total budget while water (water supply plus water quality) accounted for 50 per cent.

To a certain extent, this lack of movement in expenditure level ratios indicates that more could be done to increase focus on hygiene and sanitation within the overall programme (which is the intention of UNICEF). However, expenditure ratios are a poor measure of relative activity levels for sanitation and especially hygiene because water supply is a much more costly intervention. In addition, almost half of the expenditure was on emergency programming in 2007, which is more heavily weighted towards water supply.

Figure 4: Programme balance by expenditure, 2007<sup>15,16</sup>



## 2.2 Enabling Environments for WASH

### *Upstream programming*

UNICEF is playing a growing “upstream” role both globally, and in countries around the world. This encompasses a wide range of activities including support to policy reforms, strategy development, planning, capacity building, learning, and the development of improved institutional and coordination mechanisms.

In its engagement with policy development UNICEF focuses on sector decentralisation, sustainability, participation and highlighting the importance of hygiene and sanitation. With UNICEF support, new national WASH policies or legislation were finalized in several countries in 2007. This includes a comprehensive new hygiene policy and strategy in Afghanistan, a new rural sanitation policy in Eritrea, a new drinking water policy in Pakistan, a new sanitation policy in Madagascar and a revised national water policy in Mozambique that represents a major shift in focus towards decentralisation, sustainability and effective user participation. New policies were also developed with UNICEF support in Gambia, southern Sudan and Puntland (Somalia), and are under development in DR Congo, Liberia, Rwanda and other countries.

<sup>14</sup> United Nations Economic and Social Council (2006). *UNICEF water, sanitation and hygiene strategies for 2006-2015*, United Nations Economic and Social Council: New York. (E/ICEF/2006/6)

<sup>15</sup> While budget coding has improved, it is still necessary to use some estimates to present these breakdowns, given the complexity and decentralized nature of UNICEF country WASH programmes.

<sup>16</sup> Salary support costs are incorporated into the categories shown.

UNICEF’s support to WASH policy development – and to upstream work in general – is firmly grounded in “downstream” realities through active, long-term involvement in field-based work. The new policy in southern Sudan, for example, is based on years of UNICEF support at the field level, as is the new hygiene policy in Afghanistan. This is true in all instances of UNICEF upstream programming: everything from the draft cabinet paper on water quality surveillance in Sri Lanka to the adoption of national standards for child- and girl-friendly school latrine designs in Viet Nam (both occurring in 2007) is informed by UNICEF-supported field work. Extensive experience on the ground and close long-standing relationships with government counterparts have always been UNICEF’s key comparative advantages. Today, UNICEF is increasingly using this to promote and support more structural changes in national WASH sectors.

UNICEF’s influence on sectoral policy is not limited to the larger programmes of support. In some cases, relatively modest UNICEF inputs influence national policy or leverage new funding. Two Government of Norway-supported programmes provide examples of this: in Sierra Leone, UNICEF is making significant contributions to the development of a new national water and sanitation policy and in Colombia a rural WASH programme helped to leverage additional funds from government.

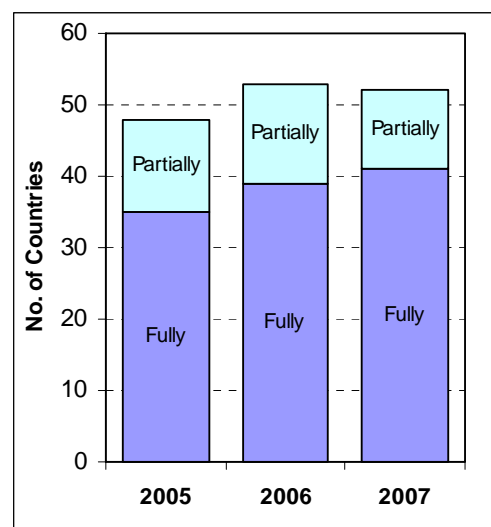
An upstream approach to programming focuses on advocacy with decision-makers and on building capacity of key sectoral institutions, with the objective of catalyzing change downstream, at the implementation level. Programmes that adopt an upstream approach tend to shift away from field-level support in favour of engagement at the national level. However in countries where sector budgets and planning responsibilities have been devolved to the provincial or district levels (such as Indonesia), UNICEF is finding that “upstream work” can be highly effective at these sub-national levels. This does not mean that upstream work at the national level no longer has a place, but that the upstream approach can also be successfully applied downstream.

In 2007, UNICEF also continued to work with government partners to better integrate WASH into national development plans. Due in part to these efforts, 90 countries (including 41 priority countries – see Figure 5) now incorporate explicit programmes and targets for achieving the MDG target 7.C on water and sanitation in their official national development plan or equivalent.

UNICEF also continued to support the development and refinement of WASH SWAPs, including in Madagascar, Malawi, Sri Lanka and Zambia in 2007. In Mozambique, UNICEF support to the new WASH SWAP included drafting the Code of Conduct and Memorandum of Understanding.

With its presence around the world, UNICEF is in a good position to disseminate lessons learned from region to region and country to country. The best example of this in 2007 is the India WASH International Learning Exchange initiative, through which 81 participants from 20 different

*Figure 5: Priority countries with national plans incorporating explicit programmes and targets for WES MDGs<sup>17</sup>*



<sup>17</sup> Data are from UNICEF Country Offices through the MTSP baseline and progress monitoring system.

countries participated in learning programmes on water quality, WASH in schools, rural sanitation and integrated water management. The programme is highly successful due to its emphasis on practical learning through field trips, and coverage of key sub-sectoral areas.

This kind of information sharing occurs on a smaller scale in many other countries. For example, in DPR Korea UNICEF-sponsored missions by specialists from other country programmes have helped to upgrade national capacity in key areas. In Indonesia, programme experience from other countries was UNICEF's key input into the design of the new national sanitation and hygiene strategy. And in Africa, an EU Water Facility-funded JMP project is helping professionals from three countries (Ghana, Mozambique and Nigeria) work together to improve national monitoring systems and bridge the differences in reported coverage at national and global levels.

### ***Preparing for IYS***

UNICEF used the opportunity the International Year of Sanitation represents to redouble advocacy and support efforts worldwide in 2007. UNICEF – in its role as chair of the UN Water Task Force on Sanitation – played a key role in promoting the IYS agenda globally, including hosting the first preparatory meeting in New York and helping with the global launch. UNICEF was also very active in the development and implementation of the UN Water joint communication strategy for IYS (funded in part by the Gates Foundation and DFID), which includes the IYS website. UNICEF has also put together an extensive information package on IYS – including a significant section on the sanitation evidence base – for use by UNICEF and partners at the regional and country levels.

In countries, the focus in 2007 was on laying the groundwork for building enabling environments for scaling up national sanitation programmes. As a first step, UNICEF worked with partners on raising the profile of (and funding for) sanitation within national development agendas. UNICEF – along with WHO, WSP and other partners – provided extensive support for the regional ministerial conferences on sanitation (EASan and LatinoSan) both at the regional level, and in countries. In Cambodia, for example, UNICEF advocacy work around IYS and the ministerial conference helped to significantly raise the profile of sanitation and hygiene on the political and policy agenda in 2007, resulting in the first-ever national forum on sanitation and the establishment of a sanitation policy development mechanism led by the Prime Minister. In other countries, UNICEF worked with partners on the development of advocacy tools, on support to planning for IYS (such as support to the development of Nigeria's national plan of action for 2008) and on major national sanitation forums (in several countries, including Angola, Nicaragua and Indonesia).

### ***Building the evidence base for WASH***

In 2007 UNICEF focused on building a strong evidence base for the impact of WASH interventions on child survival and development. While UNICEF's strength continues to be in its country programmes of support, it is also important to build a more authoritative evidence base to improve programme design, to increase the efficacy of advocacy efforts and – ultimately – to leverage more resources for interventions that have the greatest impact on the survival and development of children.

An important initiative in this area in 2007 was the launch of a new project with the objective of putting handwashing with soap on the child survival and development agenda. In this project, UNICEF is working with the London School of Hygiene & Tropical Medicine (LSHTM) to gather, synthesize and disseminate evidence which quantifies risk factors and the impact of WASH interventions in five key areas.

The five key areas are:

- 1) the impact of excreta disposal interventions on health;
- 2) the relative effects of water quality and water quantity on specific pathogens;
- 3) the relation between ascaris (roundworm) and handwashing;
- 4) the relation between the disposal of young children's faeces and child health; and
- 5) the current prevalence of exposure to hygiene promotion programmes.

As part of the project, LSHTM will present the findings to the Child Health Epidemiology Reference Group (CHERG), an independent group of eminent scientists (hosted by WHO and UNICEF), which is influential in determining the type of resource allocations to child health, survival and development programmes worldwide.

In addition to this major initiative, UNICEF is working with partners to build evidence on several other fronts including in the areas of WASH in schools, household water treatment, drilling costs and community based approaches to sanitation (see more on these and other initiatives in the sections below).

### **2.3 Beneficiaries**

It is not possible to assess the progress or impact of the UNICEF global WASH programme of support simply by counting beneficiaries. As this report makes clear, the programme goes far beyond constructing water and sanitation facilities for people. Even the emergency component of the programme puts significant emphasis on interventions such as capacity building and preparedness planning, in addition to building and rehabilitating WASH facilities. The number of people indirectly benefiting from UNICEF's overall programme of support is much larger than the number of direct beneficiaries that appear in the tables below. Many people ultimately benefit from national policy development and capacity building support, for example, but do not appear in the tables presented below. Other examples of UNICEF beneficiaries that do not appear in the tables include those reached by handwashing promotion efforts, by technology development efforts, by the distribution of water treatment chemicals, through water quality testing programmes, etc.

It should also be noted that sanitation beneficiaries are under-represented in the tables, in part because new demand-led approaches to sanitation rely on households building their own latrines in response to education and mobilization, and increasingly UNICEF and its partners do not provide subsidies directly to households. So, for example, UNICEF's long-standing comprehensive support to the Government of India Total Sanitation programme does not appear on the tables (in 2007 there were two million direct sanitation beneficiaries in India – which are included in the tables – but an estimated 19 million indirect beneficiaries, which are not included). UNICEF direct non-emergency sanitation beneficiaries tend to be part of pilot projects, which by definition are designed to leverage resources from elsewhere to ultimately benefit many more people.

These points notwithstanding, there is merit in estimating the total number children and their families that have benefited directly from the programme. It represents another way to measure the scale of the programme (in addition to expenditure levels, number of countries where the programme is active, etc.). It helps to assess to what extent UNICEF is active in priority vs. non-priority countries, and it is another way of judging the relative sizes of the emergency and the development components of the programme.

It is important to note that there is no way of determining exactly the number of direct beneficiaries in a programme as varied and complex as the UNICEF WASH programme.

The figures below are estimates, and are based on a number of assumptions and criteria, as follows:

**Service standards vary significantly from place to place.** In some countries a handpump-equipped borehole “officially” serves 500 people, in others the exact same system is considered to serve only 150 people. These beneficiary counts use national standards (within minimum international criteria).

**The level of UNICEF contribution to systems also varies significantly** from country to country, from project to project and even from year to year. UNICEF never works alone, and it is very rare for a water or sanitation facility to be funded entirely from UNICEF resources. Normally there are significant contributions from government budgets, from partner organizations and from beneficiaries themselves. Country offices determined which facilities are considered to be directly supported by UNICEF for inclusion in the tables below.

**School water points often serve the host community as well** (but usually not school sanitation facilities). WASH in schools programmes benefit school children and are listed as such in the tables. But in many countries, water points also serve communities.

**There is no distinction made between rehabilitated and newly constructed water supply facilities in these tables.** While the distinction is made at country level, it is not possible to compile this level of detail globally. Beneficiaries from rehabilitated systems are counted here because they represent people who – at least for some period of time – have not had access to improved water supplies, but now do.

**Some emergency water and sanitation systems are temporary.** In some cases facilities constructed in emergency situations continue to be serviceable after the emergency is over, but in other cases – such as in refugee and IDP camps – they are not. Within UNICEF programmes, much emergency work is carried out in communities and thus facilities are more than likely to be permanent.

**The distinction between emergency and “development” WASH facilities is inexact.** Although listed separately in the tables, in reality there is some overlap between the two. Emergency funding is often used in reconstruction work for facilities that would probably be better described as development, but because of the funding source, they are classified as emergency.

*Table 1: Estimated direct beneficiaries from UNICEF-supported community WASH programmes, 2007*

(millions)	Water		Sanitation	
	Emergency Programmes	Development Programmes	Emergency Programmes	Development Programmes
Estimated total beneficiaries	9.43	5.50	2.61	4.12
Estimated under-five beneficiaries	1.88	0.93	0.80	0.42

*Table 2: Estimated direct beneficiaries from UNICEF-supported WASH in Schools programmes, 2007*

Number of schools with facilities installed	Estimated children benefiting
12,588	3.63 million

### **3 Progress in Priority Countries**

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In 2007, the vast majority of UNICEF WASH resources at the country level were used in the 60 WASH priority countries. A total of US\$ 231 million, or 82 per cent of the total, was spent in these countries. In addition, 87 per cent of professional staff field posts are in priority countries.

The vast majority of direct beneficiaries are also in priority countries. In 2007, 98 per cent of the water systems, 99 per cent of the sanitation facilities and 96 per cent of the schools served through UNICEF support for development programmes globally were in priority countries.

The sections below describe UNICEF's work in priority countries in three main programme areas: hygiene and sanitation, water (water quality and water supply) and WASH in schools. A key part of the UNICEF programme of support in priority countries is upstream work to support the building of enabling environments for WASH. These efforts are described in Section 2.2 above, and in more detail in the appropriate sections below.

#### **3.1 Hygiene and Sanitation Promotion**

##### *Hygiene*

In 2007, UNICEF increasingly prioritized hygiene, and especially handwashing with soap, both as part of the WASH package of interventions and as a component within other programmes of support. Most WASH programmes now include a significant hygiene component and overall spending on hygiene was up US\$ 8 million (30 per cent) over last year.

UNICEF supported large handwashing-with-soap campaigns in Ethiopia, Indonesia, Madagascar, Malawi, Uganda, Zambia and other countries in 2007 to help raise awareness amongst both decision-makers and the general public. Millions have now been reached through such programmes – in Nigeria alone, an estimated 2.5 million people were exposed to high-profile handwashing campaigns in 20 of the country's 36 states.

Exposure to messages does not automatically translate into improved hygiene practices, of course, and so UNICEF sponsors studies to assess progress and improve programme design. However, due to the expense of comprehensive impact studies on handwashing practices, most studies are limited to assessments of proxy indicators. In Angola, for example, UNICEF completed a study on hygiene knowledge that has informed national programme design, in Ethiopia schools were surveyed for handwashing facilities, and in several other countries baseline surveys and KAP studies included hygiene proxy indicators. In some cases more comprehensive impact studies are being carried out, including one initiated in Kenya in 2007 as part of a programme review and one in Nepal where an assessment of the UNICEF-supported pilot handwashing campaign in five districts was shown to have resulted in an increase in handwashing rates and a reduction in under-five diarrhoea cases. In India, Indonesia and Afghanistan, studies and research on the links between handwashing and Avian and Human Influenza were conducted in 2007 to inform the design of response programmes.

While these country-level studies are useful, additional in-depth research is necessary both for the development of improved hygiene promotion tools (to help improve programme efficacy) as well as on the impact of hygiene on child health (to underpin advocacy efforts promoting increased resource outlays for hygiene programming). Globally, UNICEF is actively working on both these fronts through initiatives like Project Champion and the PPPHW (see below) and

through its work with LSHTM on building the evidence base for both hygiene and sanitation interventions (see Section 2.2).

At the country level, UNICEF also helped to increase access to handwashing facilities in communities and schools (see Section 3.3 below), and worked on improving facility designs. In Bangladesh, for example, new handwashing technologies were developed and piloted in seven districts in 2007, in preparation for an expansion to all programme districts in 2008.

Progress was also made on mainstreaming handwashing into the overall UNICEF programme of support in 2007. Handwashing has been identified as one of the key strategies within UNICEF's main integrated initiative to reduce child mortality, the Accelerated Child Survival and Development (ACSD) programme. The ACSD communication plan for Eastern and Southern Africa, for example, includes handwashing as one of five key messages while in West and Central Africa four countries have integrated handwashing in the national ACSD programme.

Handwashing promotion is also now incorporated into UNICEF-sponsored child health promotion initiatives such as the "Child Health Weeks/Days" campaigns held in several countries, including Malawi and Ghana. Another example is the integrated high-impact intervention campaign in Sudan that combined vaccination, deworming, breastfeeding and handwashing reaching almost 1.5 million children in 2007. In other countries, such as Indonesia, UNICEF has developed integrated handwashing campaigns that target behavioural change both for reducing diarrhoea and to reduce the risk of avian influenza.

At the global level, UNICEF deepened its participation in the Global Public-Private Partnership for Handwashing with Soap (PPPHW), which includes the World Bank, WSP, LSHTM and other partners. UNICEF continues as co-chair of the PPPHW schools sub-committee and is now a member of both the behavioural change and monitoring and evaluation sub-committees. UNICEF participated in a variety of PPPHW initiatives, including country-level handwashing promotion programmes (notably in Nepal and Uganda) as well as global initiatives like the 2007 "University of Handwashing" sessions held to develop tools to improve programme quality.

The "Project Champion" partnership with Unilever moved forward in 2007. Field-level research was carried out in Uganda and work was started on the development of a qualitative profile of practices, attitudes and lessons learned on handwashing promotion through a comprehensive interview process with a large cohort of handwashing stakeholders from development agencies and academia. These parallel processes will contribute to the partnership goal of developing a set of state-of-the-art tools for promoting handwashing to two key groups: school children and poorer segments of society.

Other global-level hygiene activities carried out by UNICEF in 2007 include work on defining hygiene indicators for inclusion in the UNICEF Multiple Indicator Cluster Surveys (MICS), support for expanded hygiene promotion in emergencies, and building new global and regional partnerships for handwashing.

### ***Sanitation***

New JMP figures show that the world is still not on track to meet the MDG target for sanitation. In response, UNICEF strengthened its promotion of sanitation in priority countries with an emphasis on supporting processes and mechanisms to scale up new and existing programmes.

There were successes in 2007. In South Asia, for example, "total sanitation" approaches are clearly paying off: more than 10,000 villages across the sub-region were declared free from open defecation and more than 15 million latrines were constructed. About half of these villages were

in India, where UNICEF is a strong supporter of government's total sanitation programme with a focus in 2007 on strengthening the community open-defecation-free award verification process and sustainability monitoring.

Many new facilities were constructed elsewhere in the world as well in 2007. The UNICEF programme alone, through its direct support to latrine construction in emergencies and development programmes, benefited an estimated total of 6.7 million people in 2007 (see Section 2.3). Many more toilets were constructed by households themselves, with the support of government and other partners.

Despite this progress, much more needs to be done: as the new JMP coverage figures are beginning to show, progress continues to be slow, especially in Africa where only five of 54 countries are on track to meet the MDG sanitation target.

In response UNICEF continued to help build enabling environments to stimulate greater progress. For example, in Eritrea – a country with one of the lowest rates of sanitation coverage in the world – UNICEF helped to develop the new rural sanitation policy, paving the way for more coordinated, effective and sustainable programming. New sanitation policies or guidelines were also drafted or finalised in Madagascar and Rwanda, and revisions are underway in Ghana, Timor Leste, Sierra Leone and other countries.

Other upstream activities for scaling up sanitation programmes that UNICEF supported in 2007 include strengthening national training institutes (in DR Congo, for example), the development of sub-national sanitation policies in support of decentralised approaches (in Indonesia and Pakistan), building sanitation networks and alliances (such as Nigeria's National Task Group on Sanitation) and related activities.

In many priority countries UNICEF country offices are active in the area of advocacy and awareness raising for sanitation promotion. In the Americas and East Asia and Pacific regions there were a variety of country-level events leading up to the two regional ministerial conferences (LatinoSan and EASan), including in Cambodia where the first National Sanitation Forum was held and the Prime Minister declared a National Day of Sanitation, and in Colombia where LatinoSan generated significant media interest in sanitation. UNICEF also continued to support annual sanitation promotion events around the world, such as in Myanmar where the annual National Sanitation Week activities resulted in the communities constructing or upgrading almost 180,000 household sanitary latrines.

In 2007, UNICEF also stepped up its backing of the community based sanitation approaches (CBSA) – which stress local solutions for the achievement of defecation-free communities without direct subsidies to households – as a key organizational strategy for rapidly increasing sanitation coverage.<sup>18</sup> UNICEF is pursuing a three-prong strategy to promote the wider use of CBSA: 1) building capacity of staff and partners; 2) adapting the approach to country-specific contexts and 3) using established programmes, partnerships with government and strong implementation capacity – especially in Africa – to help scale up CBSA implementation (drawing on the experiences and resources of partners that have been promoting CBSA for years: including WaterAid, WSP, Plan International and the Institute of Development Studies).

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<sup>18</sup> CBSA encompasses community led total sanitation (CLTS), total sanitation and related approaches.

UNICEF supported the introduction or expansion of programmes based on CBSA in an increasing number of countries in 2007 (Table 3). While approaches differ, the focus in each case is on sustainably increasing the number of people that practice safe excreta disposal through a mobilisation-intensive no-subsidy approach. In Cambodia, the small-scale pilot programme initiated in two villages with government counterparts in 2005 has rapidly expanded and by late 2007 approximately 12,000 families in 62 villages have built and use their own low-cost toilets. In Nigeria, UNICEF is working with WaterAid and government to expand a pilot programme to more states, and in Eritrea UNICEF launched a new CBSA pilot to coincide with a new draft rural sanitation policy.

*Table 3: Countries where UNICEF supported pilot CBSA projects in 2007*

Bolivia	Pakistan
Cambodia	Nigeria
Eritrea	Nepal
Ethiopia	Zambia
Indonesia	

In support of efforts to broaden and expand the use of the CBSA, UNICEF is re-programming existing funds and finding new funding sources. For example, funds from the Government of Norway were used for the ongoing CBSA efforts in Eritrea and Zambia, and for setting up the planned move into a CBSA approach in Sierra Leone in 2008.

In support of these and other country programmes, UNICEF also launched its CBSA capacity building programme. In 2007, two sessions were conducted in Africa. First, an orientation and capacity building workshop was held for key regional and global sectoral training institutes: participants included NETWAS (Network for Water and Sanitation), CREPA (Centre Régional pour l'Eau Potable et l'Assainissement à Faible Coût), the IRC International Water and Sanitation Centre (IRC), IWSD (Institute of Water and Sanitation Development), and the Streams of Knowledge network. Then an intensive training programme was conducted in Zambia for field practitioners – primarily UNICEF staff – that incorporated a field exercise that established a CBSA project in 12 villages. The CBSA capacity building programme will continue in 2008 with planned sessions in Sierra Leone for West Africa and in Bolivia for the Americas.

### **3.2 Water Supply and Water Quality**

#### ***Water Supply***

Through UNICEF regular programmes, 5.5 million people (including an estimated 1.9 million children under five years old) gained access to improved water sources in 2007. An additional 9.4 million people were reached through emergency programmes (see Section 4), and still others through WASH in schools programmes (see Section 3.3).

Major water supply interventions in 2007 included Nigeria (1.2 million beneficiaries), Sudan (420,000), Indonesia (350,000) and Afghanistan (200,000).

While the number of water points constructed through UNICEF funding is not insignificant, far more are constructed with resources from governments, development banks and other major donors. Relative to the resources needed to meet the MDG water target, UNICEF's resources are modest and so most water supply interventions are for specific purposes over and above providing water to beneficiaries, including:

- in support of national reconstruction efforts, for example in Afghanistan and Liberia;
- as part of area-based multi-sectoral programmes, such as in Nepal and the Philippines;
- as a component of special programmes to reach marginalised populations, such as in the Americas for indigenous communities and in Southern Africa for communities affected by HIV/AIDS;

- to provide safe water sources to communities affected by contaminated water supplies, such as in Bangladesh and Lao PDR;
- as the UNICEF contribution to national guinea worm eradication initiatives (see next section); and
- as part of pilot programmes to demonstrate new approaches and technologies (see below).

An example of a major water supply intervention with a dual purpose is the UNICEF-Netherlands partnership in Africa and Asia. Through this programme, over 4.3 million people will gain access to safe water supplies in six countries.<sup>19</sup> However, the more far-reaching outcome of the programme is expected to be its influence on national programmes in the area of sustainability (as discussed in detail in last year's progress report, the programme stresses the use of specific tools and techniques to ensure sustainable water sources). In a region where water system breakdown rates can be 50 per cent or higher, successfully demonstrating methodologies for tackling this problem will ultimately benefit far more people.

Sustainability of water points is a major focus of UNICEF's work in water supply in other countries as well, such as in Zambia where the Norwegian Government-funded Sustainable Operation and Maintenance Approach (SOMAP) initiative is building capacities at district and community levels.

The long-term sustainability of water supply programmes is linked to the cost of facilities. For many years UNICEF has been at the forefront of efforts to reduce the high costs of drilling boreholes, with major successes in India, Sudan and other countries. This work continued in 2007 through a new partnership with the Rural Water Supply Network (RWSN) involving an extensive review of UNICEF support to drilling around the world, and an analysis of the effectiveness of this support. At the end of the process, UNICEF's first-ever Code of Practice for Cost Effective Boreholes will be published, for use both by UNICEF and its partners.

Other areas where UNICEF is developing and demonstrating new approaches and technologies include rain water harvesting (in Lebanon, Lao PDR, Rwanda and other countries), solar-powered pumping (Afghanistan, Eritrea), manual borehole construction (Chad, Madagascar), gravity-feed water systems (DPR Korea, Lao PDR), and hand-dug well construction in difficult hydrogeological conditions (Nigeria). In Cambodia, UNICEF and the French NGO GRET demonstrated an innovative public-private partnership led by local government to build and manage a water supply system for a community in an arsenic-risk area.

### ***Guinea Worm Eradication***

The Global Guinea Worm Eradication Programme target for stopping transmission is 2009, with certified eradication worldwide in 2012. A major milestone towards meeting this target was reached in 2007: four of the remaining nine endemic countries recorded zero cases over one full year (Ethiopia, Cote d'Ivoire, Burkina Faso and Togo). Of the five endemic countries now remaining from the 20 endemic countries in 1980, only two still have large case loads: Sudan (6,298 cases from January-November 2007, and Ghana 3,358 cases for the year). The other three countries with some remaining cases are Mali, Nigeria and Niger. The total number of cases was reduced 61 per cent, from 25,197 cases in 2006 to 9,823 in 2007 (provisional figures)<sup>20</sup>.

<sup>19</sup> Currently signed agreements only. This programme will expand to include additional beneficiaries in more countries.

<sup>20</sup> WHO Collaborating Center for Research, Training and Eradication of Dracunculiasis. "Guinea Worm Wrap-Up #179", February 2008.

UNICEF continued to work with governments and its partners in the global programme in affected countries, primarily through support to water supply construction plus inputs in the area of case containment, monitoring and programme supervision. UNICEF's three largest programmes are in Nigeria, Sudan and Ghana. In these three countries, more than 500 sources were constructed or rehabilitated in guinea worm endemic villages in 2007 with UNICEF support. The Nigeria and Ghana Guinea Worm programmes were both evaluated in 2007, providing important lessons learned for fine-tuning programmes, including the finding from Ghana that the containment centres used for guinea worm patients are highly unpopular amongst women and alternatives are thus necessary. In Ghana, a major €20 million EU-UNICEF-Government partnership focusing on guinea worm eradication was launched in 2007.

### ***Water Quality***

UNICEF work in the area of water quality continued on several fronts in 2007, including mitigation programmes (arsenic and fluoride), water safety planning, water quality surveillance and mapping, and technology development.

In accordance with a new strategic emphasis on household water treatment and safe storage (HWTS), UNICEF stepped up activities at the global and country levels in this area. Along with WHO and other sectoral partners, UNICEF is a member of the International Network to Promote Household Water Treatment and Safe Storage, a clearing house for advocacy, research and information dissemination. As part of this effort UNICEF and WHO sponsored national stakeholder forums in Kenya and Ethiopia in 2007.

At the country level, UNICEF supported a range of activities, including the development and piloting of improved household treatment technologies such as biosand filters in Lao PDR, ceramic filters in Cambodia, and the "Chulli" system in Bangladesh which pasteurizes water using waste heat from household cooking stoves. In other countries, UNICEF continues to be involved in national household chlorination programmes and in the promotion of solar disinfection of water. Home water treatment is also promoted in communities prone to cholera outbreaks, including Angola, Burundi, DR Congo, Guinea, and Tanzania.

UNICEF also works with partners in promoting the institutionalization of water safety in national programmes. Examples in 2007 include a new approach to water safety in Sri Lanka that combines national planning and private sector participation, and a comprehensive water safety planning programme in India. In other countries UNICEF works to strengthen existing water quality surveillance systems. In the Government of Norway-supported Honduras programme, for example, capacity building and equipment inputs helped to strengthen the rural water quality monitoring network.

In the area of water quality surveillance and mapping, UNICEF and WHO completed the Rapid Assessment of Drinking Water Quality (RADWQ) project in 2007. The project, which piloted new assessment techniques in eight countries, has developed an accurate, rapid and inexpensive methodology for water quality assessment. It represents a significant contribution towards the problem of including water quality as a parameter within the global water coverage definition process.

UNICEF also finalized a new water quality handbook for field staff and partners, for publication in 2008.<sup>21</sup>

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<sup>21</sup> UNICEF (2008) (in press). *UNICEF Handbook on Water Quality*. UNICEF: New York.

Arsenic mitigation efforts continued in 2007, with activities in 12 countries (Table 4) as well as at the regional and global levels. Testing is the first step in mitigation programmes, and UNICEF supported the testing of hundreds of thousands of wells in 2007, including more than 300,000 in South Asia alone. Support to mapping of the arsenic threat also continued in 2007, including in Myanmar where a comprehensive water quality and arsenic GIS system was launched. In China, UNICEF's direct support for testing leveraged a much larger government-funded testing programme.

*Table 4: Countries with UNICEF support to arsenic detection and/or mitigation activities in 2007*

Bangladesh	Myanmar
Burkina Faso	Nepal
Cambodia	Nicaragua
China	Nigeria
India	Pakistan
Lao PDR	Viet Nam

In both Cambodia and Pakistan, national arsenic mitigation strategic plans developed with the technical assistance of UNICEF were launched in 2007. As part of the India International Learning Exchange (see Section 2.2), government and UNICEF participants from other countries learned about arsenic mitigation planning and took steps to initiate their own national planning processes. UNICEF also continues to be involved in arsenic mitigation technology development, including in Bangladesh, where the DART (Deployment of Arsenic Removal Technologies) project is examining the social acceptability of arsenic mitigation technologies.

At the global level, UNICEF teamed up with a pre-eminent expert on arsenic contamination prediction modelling to produce a major report on the potential global occurrence of arsenic.<sup>22</sup> The report will be used by UNICEF field staff to inform government about the risks to public health posed by exposure to arsenic from groundwater used for drinking. To complement this report, UNICEF also initiated the development of a manual on arsenic mitigation as a tool to help guide and advise government counterparts on appropriate detection and mitigation measures. The 'Arsenic Primer' will be available in 2008.

Excess fluoride in drinking water is a problem that also affects millions of people. UNICEF supports mitigation and testing programmes for fluoride in countries around the world, the largest being in China and India.

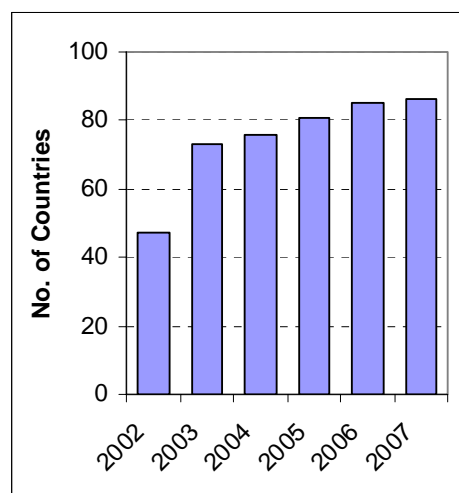
### 3.3 WASH in Schools

WASH in schools continued to be a key component of the overall UNICEF WASH programme in 2007. UNICEF worked with partners in countries around the world to educate children about hygiene, to build safe sanitation and water systems, and to promote schools as catalysts for hygiene behavioural change in communities.

In 2007, UNICEF supported WASH in schools in 86 countries in 2007 (85 in 2006 – see Figure 6).

This year's first-ever global estimate of the number of children covered by UNICEF-supported WASH in schools activities underlines the scale of this WASH programme component. A total of 12,588

*Figure 6: Countries with UNICEF WASH in schools activities*



<sup>22</sup> Ravenscroft, P. and UNICEF (2007). *Predicting the Global Extent of Arsenic Pollution of Groundwater and Its Potential Impact on Human Health*. UNICEF: New York.

schools were equipped with water and/or sanitation facilities in 2007, benefiting an estimated 3.6 million children. Examples of significant work across the UNICEF regions include India (6,453 schools), DR Congo (236), Indonesia (227) and Guatemala (215).

Progress was documented through assessments in several countries. In Afghanistan, for example, where the joint UN Healthy School Initiative (a comprehensive programme including WASH components) has increased sanitation coverage in schools from 15 per cent in 2005 to 40 per cent in 2007 (including 500 schools in 2007), and in Myanmar, where an assessment of the large UNICEF-supported WASH in schools programme (involving 975 schools) showed that the number of schools with a student-latrines ratio of over 60 students per latrine decreased from 46 per cent of schools to 13 per cent.

Many more children and schools were reached through school hygiene education programmes including through hygiene modules in core subjects, through life-skills programmes and through participation in school sanitation clubs and other extra-curricula activities.

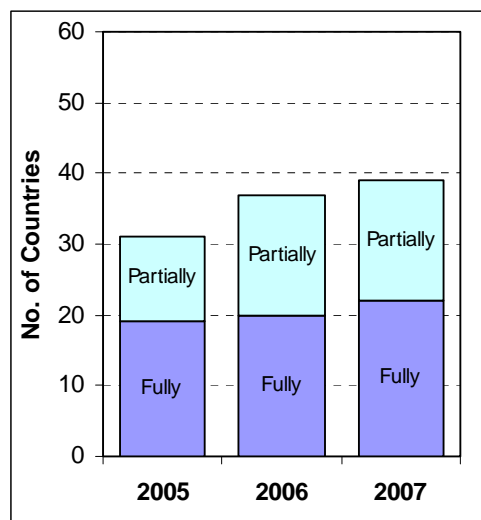
The formation and support of school sanitation clubs is a key strategy to help school children become agents of change for promoting improved hygiene and sanitation practices in their communities and homes. In Nepal, for example, the active participation of school sanitation clubs helped to achieve open-defecation-free status for communities in 61 school catchment areas in 2007, and in Viet Nam school children are fully involved in national sanitation and hygiene promotion events. In other countries, such as Sierra Leone and the Philippines, UNICEF is scaling up school-led total sanitation (SLTS) approaches. However, as is being discussed in the ongoing participatory review of the UNICEF WASH programme in Ethiopia, new approaches are still needed to effectively link school and community WASH programmes.

In other countries the number of schools and school children directly reached by UNICEF programmes is smaller, but the influence on national programmes is significant. In Viet Nam, for example, a set of child-friendly sanitation designs developed with UNICEF support based on years of pilot project experience has now been adopted as the government national standard. Another example is India, where UNICEF's work in the area of menstrual hygiene management in schools is now being expanded on a large scale (see Section 7).

Elsewhere, UNICEF has helped to develop policies, formulate national plans (Figure 7) and ensure child-friendly WASH facilities are integrated into major school building programmes. For example, UNICEF's small inputs in the Belize programme (funded by the Government of Norway), has helped to secure a policy commitment by government to construct new WASH facilities when schools are expanded.

In Angola, Kenya, Sierra Leone, Thailand and other countries UNICEF is helping to develop new child-friendly toilet and hand-washing facility designs that incorporate key criteria such as privacy and security for girls and suitability for small children. Schools are also used by UNICEF and partners to demonstrate new technologies – such as “ecological sanitation” toilets (see Section 6) and rooftop rain water harvesting systems – taking

*Figure 7: Priority countries with national plans to provide water, sanitation and hygiene education in all primary schools*



advantage of the receptiveness of children to new ideas and the visibility of schools within communities.

The institutionalization of hygiene education within the primary school curricula is a cornerstone of WASH in schools programmes, and UNICEF helped to make significant progress in this area in 2007 in DPR Korea, Madagascar, Sudan and Angola, where the UNICEF-promoted life skills-based hygiene education manual has now been incorporated into the national curriculum. In these and other countries, UNICEF also supports teacher training for hygiene promotion.

Guideline development and programme support is an area where UNICEF is very active, at both the national and global levels. UNICEF continued to support the main WASH in schools website in association with IRC<sup>23</sup> and publish the WASH in schools 'Notes and News' newsletter. In October 2007, UNICEF and IRC published the new WASH in schools manual.<sup>24</sup>

Surveys, evaluations and studies sponsored by UNICEF are helping to build a firmer evidence base for WASH in schools and underpin advocacy and policy development initiatives. At the country level, UNICEF sponsors a wide range of studies. In Ethiopia, for example, a UNICEF-sponsored national assessment of facilities in schools (which showed, amongst other findings, that less than one-third of schools have water points and only 5 per cent of schools have hand-washing facilities) is a key input for the development of national guidelines. In Kenya, a study showed that girl absenteeism during menstrual periods due to lack of access to sanitary napkins and other factors was as high as 30 per cent. In Madagascar, a programme assessment showed that current latrine designs do not sufficiently take privacy for girls into account.

In the South Asia region, the first phase (a desk study) of a UNICEF-sponsored study on WASH-related exclusion in schools was completed. The study identified three key factors contributing to the exclusion of children from school (caste, menstruation and communicable diseases). The Regional Office will pursue these areas with further study in 2008.

The global WASH in Schools Impact and Sustainability Study, initiated in 2006, is nearing completion, and will be published in 2008. Conducted in association with IRC and LSHTM, the study included extensive field work in India (Kerala) and Kenya, and will provide data on the links between WASH in schools interventions and girls' education indicators, as well as lessons on programme design, for sustainability.

While WASH in schools has been a flagship component of the overall UNICEF programme for several years now, it is often not yet firmly on the agenda of education ministries or entrenched within the development community. For example, it is still common for major school building programmes – including those financed by the large development banks – to neglect the inclusion of budgets for adequate water, sanitation and washing facilities. While UNICEF regularly undertakes advocacy in this area, it is an uphill battle. However, IYS is an opportunity to step up these advocacy efforts in 2008, and to this end UNICEF has ensured that WASH in schools figures prominently within the IYS agenda (for example, by ensuring that the IYS website includes material on WASH in schools).

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<sup>23</sup> <http://www.schools.watsan.net>

<sup>24</sup> IRC and UNICEF (2007). *Towards Effective Programming for WASH in Schools: A manual on scaling up programmes for water, sanitation and hygiene in schools*. IRC: Delft, The Netherlands.

## 4 Emergency Coordination and Response

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In 2007, UNICEF continued to play a key role in emergency programming for WASH through direct emergency response, support to capacity building and preparedness, and response coordination at the global and country levels.

The total value of UNICEF support to emergency WASH programmes rose by approximately nine per cent over last year, to a total of US\$ 142 million. However, for the first time in several years, emergency expenditure was less than half of overall UNICEF WASH expenditures. Over 95 per cent of emergency funds were spent for country-level response.

### 4.1 UNICEF Emergency Coordination and Response

Fulfilling the Core Commitments for Children through the provision of humanitarian assistance for children and their families in acute and complex emergencies continues to a major part of UNICEF's work around the world. And in countries in transition from emergencies, UNICEF continues to provide support both for reconstruction of physical facilities as well as the re-building of national sectoral institutions and human resource capacity.

In 2007, UNICEF supported emergency interventions in countries around the world. Large scale support was provided in response to floods in South Asia and DPR Korea, to the hurricanes in Latin America and the Caribbean, and to the ongoing humanitarian crises in Darfur, DR Congo, northern Uganda, Somalia and Iraq. UNICEF and its partners also provided assistance in many other emergencies around the world ranging from the earthquake in Peru, economic collapse in Zimbabwe, floods in Mozambique, the cyclone in Papua New Guinea and the tsunami in the Solomon Islands.

UNICEF and its partners also continued to support prevention and response programmes to minimize outbreaks of cholera and acute watery diarrhoea (AWD), mainly in Africa. These efforts are paying off: morbidity and mortality were significantly down in countries in West and Central Africa (Angola: 67,255 cases in 2006, to 17,842 in 2007; Eastern DR Congo: 4,349 to 1,980; Sierra Leone: 3,522 to 956), in Sudan (zero cases in Darfur and an 83 per cent reduction in the rest of the country) and in Somalia where an outbreak was successfully contained. These 2007 successes notwithstanding, the cholera threat remains significant, especially in countries in, or emerging from, emergency situations.

UNICEF reached an estimated 9.4 million people (1.9 million children under five) through the construction and rehabilitation of emergency water systems as well as 2.6 million people (0.8 million children under five) through sanitation facilities in 2007 (see Section 2.3 for additional information on beneficiaries). Tens of millions more were reached through emergency hygiene promotion programmes and water treatment. In Ethiopia, for example, UNICEF support to emergency hygiene promotion programmes in response to the AWD and flood emergencies reached three-quarters of a million people in 2007, while in DPR Korea more than five million were reached through the procurement and distribution of water purification chemicals.

Not included in these coverage figures is the massive UNICEF-supported government-led response to the major 2007 flood and cyclone events in Bangladesh that affected over 14 million people<sup>25</sup>. UNICEF coordinated the response through the declared WASH cluster and supported its government counterpart (DPHE) in a major programme of response including the

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<sup>25</sup> The figures are not included in the UNICEF direct beneficiary totals since this was primarily a government programme, albeit with UNICEF support including coordination, cash for mobilisation and some pre-positioned supplies and equipment

construction, repair or raising<sup>26</sup> of 44,500 water points (benefiting 7 million people), the distribution of 110,000 jerrycans and over 9 million water purification tablets, the deployment of mobile treatment plants, the distribution of soap and sanitary napkins, and an ongoing hygiene promotion programme. The success of the response programme was attributed to preparedness measures including the joint UN pre-qualification of NGO partners, the pre-positioning of supplies, and staff capacity building efforts.

UNICEF also continued to provide support to major recovery efforts in countries in transition from emergencies in 2007, notably in the tsunami-affected countries through the “build back better programme” and in southern Sudan where a major reconstruction programme is gearing up. Other significant transition programmes include Liberia, Pakistan and Sierra Leone.

In no emergency programme of response does UNICEF work alone. All emergency-related activities are carried out in close cooperation with government counterparts, UN partners, NGOs and/or other partners, in accordance with preparedness plans and the capacities of response stakeholders. Coordination and preparedness planning is thus of critical importance for efficient and effective programmes of response.

In 2007, UNICEF consolidated its role as lead agency for emergency WASH coordination through both the IASC Cluster approach and other coordination mechanisms at country level. UNICEF took the lead for WASH response coordination in declared clusters in 12 countries in 2007, including cluster pilot countries of DR Congo, Liberia, Somalia and Uganda and in newly declared cluster approach countries including Bangladesh, Mozambique and Chad. In other countries (where the cluster approach was not formally declared) UNICEF also led cluster-inspired coordination mechanisms.

UNICEF also continued to lead the Global WASH Cluster through the Cluster Advocacy and Support Team based in UNICEF offices in New York and Geneva. This team promoted and facilitated inter-agency and inter-cluster collaboration, managed the global cluster workplan, provided extensive support to UNICEF and cluster partners in emergencies around the world, and coordinated capacity building activities (see Section 4.2, below).

In DR Congo, Philippines, Somalia and other countries, UNICEF country office assessments show that the cluster approach improved emergency preparedness and response effectiveness. The OCHA-led multi-agency real time evaluation of the 2007 flood and cyclone emergency response in Mozambique<sup>27</sup> found that the cluster approach significantly improved coordination (over previous emergencies) and that the WASH and logistics clusters were particularly effective.

Clusters and other coordination bodies set up in emergencies often continue to play a role during the transition and reconstruction phases, and even beyond. In both the Philippines and Honduras, for example, emergency coordination mechanisms have led to improved overall sectoral coordination.

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<sup>26</sup> Raising the height of hand-pump tubewells above the level of flood waters.

<sup>27</sup> Cosgrave et al. (2007). *Inter-agency real-time evaluation of the response to the February 2007 floods and cyclone in Mozambique*. OCHA: New York.  
<http://ochaonline.un.org/OchaLinkClick.aspx?link=ocha&docId=1060136>

## 4.2 Preparedness and Capacity Building

The UNICEF WASH Cluster Advocacy and Support Team stepped up efforts to improve UNICEF emergency WASH coordination and response effectiveness in 2007, as part of the broader programme to develop global cluster capacity. Capacity building efforts center on a framework of action consisting of five key strategic areas (box) designed to both enhance skills of existing staff and to develop an effective surge capacity of trained resource people.

Capacity building progress was made on several fronts in 2007:

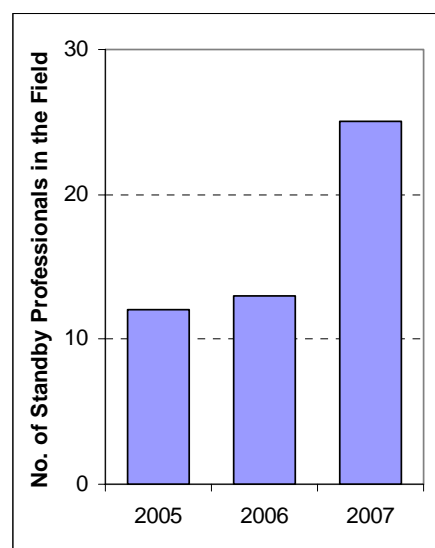
- A global mapping survey of UNICEF staff was launched, a set of screening tools were developed to assess external candidates, and generic job profiles have been updated;
- Three UNICEF WASH staff members were trained as cluster coordinators (through participation in the OCHA-led Cluster/Sector Lead Training), and 15 WASH country office focal points in Eastern and Southern Africa received training on coordination, information management, capacity building, preparedness planning;
- A new comprehensive training programme for WASH cluster coordinators was developed, and will be used to train a minimum of 70 potential coordinators;
- A consolidated Nutrition, Health and WASH rapid assessment tool was developed in 2007, and is currently under field testing in six countries in collaboration with the UN Country Teams;
- Three separate projects for the development of good practice guidelines are underway: reviews of past cluster emergency response programmes focusing on lessons learned (three carried out to date in Liberia, Indonesia and DR Congo), the development of a comprehensive information management toolkit, and the development of a training package on hygiene promotion in emergencies (draft package was pilot-tested in August 2007 in Sri Lanka).

*Strategic framework for building UNICEF capacity for WASH cluster leadership and emergency response*

Key strategic areas:

1. Effective surge capacity development
2. Emergency policies and tools development
3. Skills development for coordination and response
4. Preparedness planning
5. Best practices dissemination and learning

*Figure 8: Emergency placements in the field under UNICEF standby arrangements with partners*



Under emergency standby partnership arrangements, 25 WASH professionals from NGOs, governmental bodies and private organizations were in the field supporting UNICEF programmes in 2007 (22 recruited in 2007, and 3 recruited in 2006 but still in the field in 2007). Professionals were provided by seven different organizations and posted in 16 countries.

This is more than double the placements in previous years (see Figure 8). The standby system now represents an important part of UNICEF WASH organizational capacity for emergency response. Not only does it improve emergency programming, it also helps regular programmes: the standby mechanism means that there is a reduced need for the deployment of existing UNICEF staff on secondment to emergency postings, thus minimizing the disruption to ongoing development programmes.

Progress was made in 2007 to improve UNICEF performance in the area of the emergency WASH supply chain. A review process has determined the CCC global supply obligation requirements, and 70 new commodity kits with advanced specification were developed. Based on this review, a global contingency stockpile will be established in 2008. These efforts will feed into a broader ongoing initiative by the global WASH cluster to map existing WASH stockpiles maintained by UN agencies, NGOs, governments and other respondents.

At the country level, UNICEF continued to improve emergency preparedness planning. Most UNICEF country offices review and update their emergency preparedness and response plans annually: in 2007 this was carried out in 111 of UNICEF's 126 country (and multi-country) offices. In addition, UNICEF continues to support government WASH preparedness planning in countries around the world through technical and material support including the procurement of supplies for pre-positioning.

UNICEF also contributed to the WASH component of the ongoing "Machel +10" strategic review of the impact of armed conflict on children in 2007. The WASH section of the review – written by UNICEF – assessed the sector-specific programming context and made recommendations for improved responses for children.

UNICEF uses its coordinating role for emergency WASH to promote balanced responses amongst partners, with a focus on ensuring that hygiene is included in response packages. In Nicaragua, for example, UNICEF sponsored a regional meeting for the development of emergency hygiene education materials and in Somalia UNICEF supported the training of 3,500 hygiene promoters. UNICEF also completed a comprehensive training package on hygiene in emergencies in 2007, with versions in English, French and Spanish under preparation.

Finally, UNICEF worked on improving emergency WASH technologies on two fronts: improving designs for effective response programmes, and designs to better withstanding natural disasters. In Bangladesh, for example, a UNICEF study is examining new designs for latrines in flood-prone areas.

## **5 Progress in Other Countries**

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In 2007, the bulk of UNICEF resources for WASH programming was used in WASH priority countries, and in countries in emergencies. However, some support continued to be provided in non-priority countries. WASH activities were clustered mainly within the categories of sector monitoring, water quality and environmental programming, hygiene promotion, WASH in schools, emergency preparedness planning and WASH activities in support of overall country programme priorities (such as integrated development initiatives and HIV/AIDS).

In Latin America and the Caribbean, UNICEF's smaller WASH programmes continue to focus squarely on reaching marginalized populations (including indigenous children) in line with UNICEF's rights-based approach to programming. In Paraguay, for example, UNICEF

advocacy and technical support resulted in the adoption by government of a new single-family appropriate technology water and sanitation model for isolated arid communities, a development that will significantly lower costs and promote rapid increases in coverage. In El Salvador and Honduras, UNICEF worked with municipalities and government departments and other stakeholders to improve coordination and the equity of resource allocation mechanisms.

Also common in non-priority countries in Latin America and the Caribbean is support to WASH emergency preparedness planning (e.g. in Colombia and the Dominican Republic), due to the region's propensity for severe tropical storms and hurricanes (and the leadership role UNICEF usually assumes in response programmes).

UNICEF's growing organizational capacity in the area of water quality monitoring and mitigation was utilized in several non-priority countries in 2007. In Mongolia, for example, support from the regional office helped with the development and implementation of an arsenic and microbiological water quality monitoring support programme (at the request of government partners).

Hygiene promotion initiatives were supported in several countries, including Bolivia (where both hygiene and sanitation are part of the Integrated Local Development programme) and in Lebanon (as an offshoot of last year's emergency programme in response to assessed needs within the regular programme).

Finally, support continued for WASH activities as part of the overall country office programme of support in many non-priority countries. In Swaziland, for example, UNICEF continued to support water and sanitation activities as part of nutrition and HIV/AIDS programmes. In Djibouti, a WASH component is included in the programme of support because it is an identified priority of rural communities. And in other non-priority countries (e.g. Comoros, Gambia, Namibia), WASH activities are included in within high-impact health and nutrition interventions projects because diarrhoea is one of the main causes of child mortality nationally.

## **6 Environmental Programming**

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In 2007, the small UNICEF WASH environment component continued to focus on activities closely related to the overall water and sanitation programme. Staff changes in the WES Section in New York reflect this focus, with the approval of a new senior advisor post, which will be filled in the first half of 2008.<sup>28</sup> The new post holder will be responsible for developing and supporting environmental activities including watershed protection, waste water management, alternative water source development, excreta reuse and sustainable sanitation. This will be the first time in ten years that the WES Section will have a senior professional working exclusively on environment-related activities.

The new environment senior adviser will also be responsible for coordinating cooperation with UNEP in general, and on moving ahead with the UNICEF-UNEP joint strategy (which was discussed in last year's report, but – for a variety of reasons – has not yet been finalised and signed).

At the field level, country offices continued to support WASH-related environment activities on a number of fronts.

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<sup>28</sup> The existing TFT (temporary fixed-term) environment post was moved from the WES Section in 2007 to provide support to UNICEF on broader environmental issues. This section of the report on environmental programming is limited to activities within the narrower WASH-related environment context.

In India, UNICEF is placing a greater focus on water conservation in accordance with the global WASH strategy and in response to growing concerns and requests from counterparts, especially in water-stressed areas. In three states (Bihar, Madhya Pradesh and Tamil Nadu), UNICEF is piloting water re-use systems in schools and has helped to establish a “wise water management” programme run by trained teachers and students. The India office also carried out a critical review of its role and future involvement in the area of water resource management in 2007, in consultation with government and other partners. The results of the review informed the development of its new country programme starting in 2008. The Ethiopia office initiated a similar process in 2007.

Other countries where UNICEF is involved in water resource management include Liberia and Sudan where UNICEF contributed to efforts to develop national integrated water resources management (IWRM) policies.

In many countries UNICEF supports the development and promotion of alternative water sources, such as rain water harvesting and gravity-fed water systems in support of overall water conservation efforts.

At the other end of the spectrum, UNICEF works on initiatives to protect the freshwater resource base from excreta contamination. A significant example of this is UNICEF’s introduction of decentralized waste water treatment systems in DPR Korea: a simple, gravity-based solution for handling waste water that effectively addresses a growing problem in the country. In other areas (such as low-lying tsunami-affected regions in Indonesia, the flood-prone Mekong delta, and islands in the Maldives), UNICEF works with partners on more environmentally-friendly designs for excreta disposal.

Elsewhere efforts in this area focus on the containment and re-use of excreta as fertilizer through “ecological sanitation (ecosan)” or “sustainable sanitation” approaches. In 2007 UNICEF initiated or continued pilot ecosan projects in Rwanda, Togo, Zimbabwe and other countries. A UNICEF partnership with the Stockholm Environment Institute and Plan International resulted in a national consultation and action to promote ecosan in India.

Finally, UNICEF continued its involvement in the area of solid waste management in select countries, including in Iraq (in a joint project with UN Habitat in Basra) and in several countries in the Americas where the focus is on support to decentralised and participatory waste management initiatives.

## **7 Gender and WASH**

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UNICEF continues to stress gender-aware programming approaches in recognition of women’s central role in the management and provision of WASH services and of the direct links between improved WASH services and women’s empowerment.

Country programmes address gender in the sector through advocacy and through examples within UNICEF-sponsored activities. UNICEF is a key advocate for better representation of women in WASH-related institutions and forums at all levels: from government WASH departments at the national level, to local government water and sanitation units. In many countries, UNICEF is an especially strong proponent of equal representation of women and men on community WASH committees. In some of these countries (e.g. Eritrea, Nicaragua, Pakistan) there are documented positive impacts in terms of the effectiveness of these bodies

when women are present, especially when they hold management positions. And there are also instances where the interaction of women and men within these committees leads to broader discussions on gender and empowerment within communities. In other countries, however, it remains a challenge to move beyond simply filling gender quotas and moving towards active and meaningful participation by women.

In communities where traditional practices and norms can hinder the full participation of women on management committees, new and creative ways of working are necessary. In northern Nigeria a UNICEF-supported programme has found a way to facilitate the participation of women in *purdah* in community WASH committees through a mechanism in which women and men hold separate meetings but integrate their reports and actions through a secretariat.

A key area where UNICEF works to influence gender relationships through sector activities is in WASH in schools programmes. To meet the objective of increased enrolment and retention of girls in schools, most UNICEF-supported programmes are designed to ensure that sanitation and washing facilities for girls are user-friendly, safe, separate and private (and have adequate facilities for menstrual hygiene – see below). Other programmes go beyond this by using school WASH activities to address and in some cases challenge stereotypical attitudes. This can mean, for example, strongly promoting girls' active participation in school clubs or challenging the practice of girls automatically being assigned "women's work" such as latrine cleaning.

An innovation pursued by UNICEF in several countries, including India, Madagascar, Malawi and Nigeria, is urinals for girls in schools. Urinals are much cheaper than toilets or latrines to construct and maintain, and thus more can be installed in schools. Since children are far more likely to urinate than to defecate during school hours, urinals are a good solution – girls are no longer limited to choosing between waiting in long queues at toilets or "holding it in" (and risking urinary tract infections, common amongst girls and women in some areas). The biggest challenge in introducing girls' urinals is behaviour change amongst decision-makers (including project managers from international agencies), not amongst girls – when introduced in schools, urinals are readily accepted by most girls as an obvious solution to a frustrating problem.

UNICEF is also active in promoting the use of gender sensitive methodologies in sector participation tools, such as PHAST and within community based sanitation promotion processes. In Bolivia, for example, the community hygiene promotion manual includes a module on gender and self-esteem, which identifies stereotypes and includes SARAR (self-esteem, associative strength, resourcefulness, action planning and responsibility) exercises to challenge traditional assignment of duties.

Where UNICEF supports technical training and other sectoral capacity building initiatives, women candidates are promoted. In Iraq, for example, continued advocacy with government has resulted in an increase of women participants in training programmes from 26% in 2006 to 34% in 2007. In other countries UNICEF sponsors specific gender-focused training programmes.

UNICEF country programmes are beginning to place a greater emphasis on facilitating menstrual hygiene for women and girls. Sanitary napkins are becoming more of a standard supply item: in Bangladesh and Iraq, for example, they were part of the humanitarian assistance packages distributed to families and in Kenya napkins have been supplied through an arrangement with Proctor and Gamble. In the Government of Norway-supported schools programme in Uganda special washing facilities are included in girls' toilet blocks, while in Nigeria, a manual on menstrual hygiene was developed in 2007 and has been integrated as a module in the national community-based hygiene promotion manual.

In some countries – notably in South Asia – a menstrual hygiene management component is being introduced into WASH in schools programmes. The most comprehensive programme is in India, involving advocacy and policy development, backstopped by demonstration projects. In the state of Tamil Nadu a variety of tools are used to raise awareness amongst girls on menstrual hygiene, and sanitary napkin incinerators have been installed in schools. The initiative is now being expanded to all supported states in the country. UNICEF is also using the International Learning Exchange Programme (see Section 2.2) to promote the idea of menstrual hygiene management to other countries.

UNICEF also continues to support sectoral gender analysis processes (either a specific WASH sector-only analysis or as part of a broader analysis such as within PRSP development processes). However, as shown in Figure 9, progress is slow. UNICEF also sponsors gender reviews of sectoral policies, guidelines and manuals. In DPR Korea, for example, a gender review of national hygiene promotion tools was completed in 2007.

UNICEF also supports gender disaggregation of sector data for more effective advocacy and programme design. A major step forward in 2007 was the addition of disaggregated data on water collection into the JMP (in a sub-set of countries). The fact that women bear the brunt of the task of hauling water home from often distant sources is well known. However, for the first time, a global picture of the full extent of this has become available with new data that will be released in 2008: in 71 per cent of households in the developing world, women or girls have the primary responsibility for water hauling (see Figure 10). In some countries, this percentage is much greater, for example, in Guinea Bissau, women and girls haul the water in 99 per cent of households.

These new figures are somewhat surprising in two ways. One is the fact that men and boys have primary responsibility for fetching water in 29 per cent of households - some observers thought that this figure would be lower. Secondly, the figures show that children play a more minor role in water collection than previously assumed. This varies significantly from country to country, of course (and varies within countries as well), but it is a factor that should be taken into account in the development of WASH strategies and programmes.

Figure 9: Gender analyses undertaken in priority countries in the current programme cycle for the water and sanitation sector

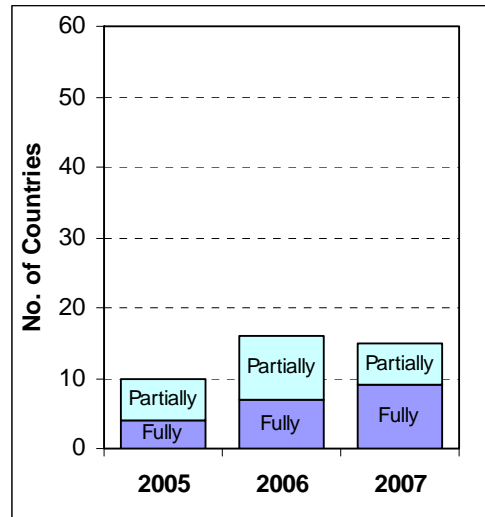
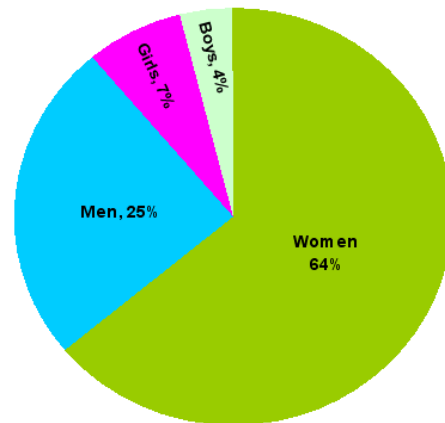


Figure 10: Gender and water hauling – water collection responsibility breakdown by women, men, girls and boys, JMP 2006 data



UNICEF continues to try to reflect its advocacy position on women in the sector within its own staff cadre. The WES Section in New York continues to engage with both the Gender Task Force and the Department of Human Resources on the issue of improving the female to male staff ratio in the sector. Acting on a 2006 task force recommendation, the WES section conducted a global search of qualified women WASH professionals, rated the candidates and submitted them to DHR to raise the ratio of women on recruitment shortlists. In 2007, three new women professionals were recruited as a result of this process, and more are expected in 2008. There are efforts at other levels as well. For example, the Norwegian Government-funded recruitment drive in West and Central Africa (which funded the recruitment of 13 new posts) allowed UNICEF to assess candidates – including women candidates – as a group to better control factors including gender balance.<sup>29</sup> And within the UNICEF standby arrangement for emergency programming, a better than average record was achieved in 2007 (32 per cent of professionals posted in 2007 are women ).

*Table 5: Gender balance of UNICEF professional WASH officers*

	2007	2006
Male	274	230
Female	76	59
% Female	22%	20%

These efforts notwithstanding, the number of women WASH staff in professional positions throughout UNICEF remains low, still less than 25 per cent. However, as shown in Table 5, the percentage has improved slightly from 2006 to 2007.

## **8 Sector Monitoring and the JMP**

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UNICEF continued to support sector monitoring in a variety of ways in 2007. Activities ranged from managing the JMP with WHO at the global level, regional level capacity building exercises and a wide range of support at national and sub-national levels.

The work within the JMP in 2007 focussed on processing and synthesizing the new data set for global sectoral coverage, in preparation of the 2008 report, which will focus on sanitation in support of IYS. For the first time, this data set includes a trend analysis of sanitation practices, including the practice of open defecation, at global, regional and country level. It also presents data disaggregated by the proportion of the population that shares improved sanitation facilities with other households and by the proportion of the population that has piped water on premises (see Section 1.1 for a snapshot preview of the data).

The JMP also continued to work in the area of improving the range of high quality sectoral data and harmonization of indicators, especially with the two major global survey instruments: the UNICEF Multiple Indicator Cluster Surveys (MICS) and the USAID-supported Demographic and Health Surveys (DHS). Consequently, the new JMP data set now includes data on the gender dimension of hauling water (see Section 7) and on the practice of household water treatment.

In fulfilment of its mandate, the JMP continued to support improved sector monitoring at the national level in addition to processing and disseminating global coverage figures. In this context, the JMP organized two regional workshops in 2007 – one in West Africa and one in East Africa – that engaged staff from statistical offices and departments responsible for monitoring progress towards the national drinking water and sanitation targets, comparing national level monitoring techniques with the JMP monitoring methodology. The workshops proved to be highly successful, helping to create a mutual understanding amongst participants of different monitoring methods and ways to harmonize definitions and indicators. A key

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<sup>29</sup> This process is still ongoing.

additional output of the two workshops was a tested curriculum that will be used for planned workshops in 2008 (in French and Spanish).

In a related development, the EU-supported three-country “JMP Platform” project got under way in 2007 with the recruitment and training of country teams (or platforms) and a group of international mentors. These JMP platforms – which work independently from UNICEF and WHO – will be focal points for national monitoring harmonization and improvement efforts as well as the dissemination of data-driven information products, to feed into sector advocacy initiatives.

The consultative process on improving the effectiveness and utility of the JMP globally also continued in 2007, with a “sounding board meeting” with key sector stakeholders including the World Bank, the Water Supply and Sanitation Collaborative Council (WSSCC), IRC along with WHO and UNICEF. In this and other fora, a wide range of issues was addressed, such as the periodicity of reporting, disaggregation and technical issues like how to reflect the rapidly expanding use of bottled water in coverage data and how water quality criteria should be included in the process (see Section 3.2 on the UNICEF/WHO Rapid Assessment of Drinking Water Quality initiative, which is informing this latter discussion).

At the country level, UNICEF supports national sectoral monitoring efforts in a variety of ways, both in priority and other countries. In Bangladesh, for example, UNICEF initiated a consultation on the disconnect between MICS and government sanitation coverage figures that has resulted in a better understanding of the issues related to the definitions of improved sanitation and the formation of a sub-committee to oversee sanitation monitoring. In Sudan, UNICEF has helped establish a WASH monitoring system (based on internal systems) that is being adopted by government and UN partners. Other monitoring initiatives include the Ethiopia programme’s comprehensive survey of WASH facilities in schools, support to a major restructuring of Viet Nam’s national sectoral monitoring system, the introduction of a GPS-based monitoring system in Myanmar and capacity building support in Iraq, São Tomé and Príncipe and other countries.

## **9 Partnerships**

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UNICEF works extensively with a wide range of partners within a variety of partnership frameworks at the global, regional and country levels.

As chair of the UN-Water Task Force on Sanitation, and a core team member for the preparation and launch of IYS, UNICEF actively partners with key sectoral organizations, at the global, regional and country levels. Similarly, UNICEF is an active participant in partnership frameworks for the promotion of handwashing with soap, ranging from global initiatives such as the Public-Private Partnership on Hand-washing with Soap and the Project Champion partnership with Unilever, to country partnerships such as the national ‘Washing With Soap’ campaign run by the Government of Indonesia.

UNICEF stepped up its collaboration with the international development banks. An understanding was reached with the African Development Bank on key areas of collaboration (WASH in schools, sanitation, household water management and monitoring). Cooperation with the World Bank was extensive, ranging from joint programmes (such as the major new tripartite UNICEF, World Bank, DfID rural WASH project in China), sector coordination (e.g. in DR Congo where UNICEF and the World Bank co-chair the WASH section of UNDAF/CAF), advocacy (e.g. joint organization of the EASan ministerial conference by WSP,

WHO and UNICEF), policy formulation (in Indonesia) and other initiatives. The World Bank's multi-donor partnership WSP is a major operational partner at the regional and global levels, as well as in an increasing number of countries.

Along with WHO and other sectoral partners, UNICEF is a member of the International Network to Promote Household Water Treatment and Safe Storage, a clearing house for advocacy, research and information dissemination. UNICEF also continued the partnership with WHO and the Carter Centre in support of the Guinea Worm Eradication programme in Africa.

In 2007, UNICEF deepened its collaboration with the Rural Water Supply Network (RWSN). In one major initiative, RWSN is helping to develop the new Code of Practice for Cost Effective Boreholes for UNICEF programmes.

UNICEF also continued to work extensively with sister UN agencies in the sector in 2007, notably with WHO, WFP, UNDP, and UN Habitat. In some cases this was through formal joint projects such as in Afghanistan with WHO, UNESCO and WFP (healthy schools programme); in Eritrea with WHO (water quality monitoring), and in Lao PDR with WFP (WASH in schools). In many other countries cooperation is common with the UN system, through less formal arrangements.

In the UN "Delivering as One" pilot countries with significant UNICEF WASH programmes (Mozambique, Pakistan, Rwanda, Tanzania and Viet Nam), 2007 was the year for developing joint sectoral UN programming frameworks around the "Five Ones" (One Leader, One Programme, One Budget, One Premises/Services and Communicating as One). Joint structures for collaboration are now in place in all countries, with the full involvement of UNICEF. In Pakistan, UNICEF co-chairs the environment working group (with UNDP) while in Tanzania UNICEF leads the associated joint programme for emergency preparedness.

In 2007, UNICEF signed major funding agreements with the governments of the Netherlands, Norway and the United Kingdom for work in several countries in Africa and Asia, with the Hilton Foundation for guinea worm eradication in Africa and with American Express for home drinking water management in Africa. AusAID renewed its support to UNICEF for arsenic mitigation in East Asia, and the EU increased its funding levels for WASH programmes in several countries (see Section 10.2 for additional information of funding sources).

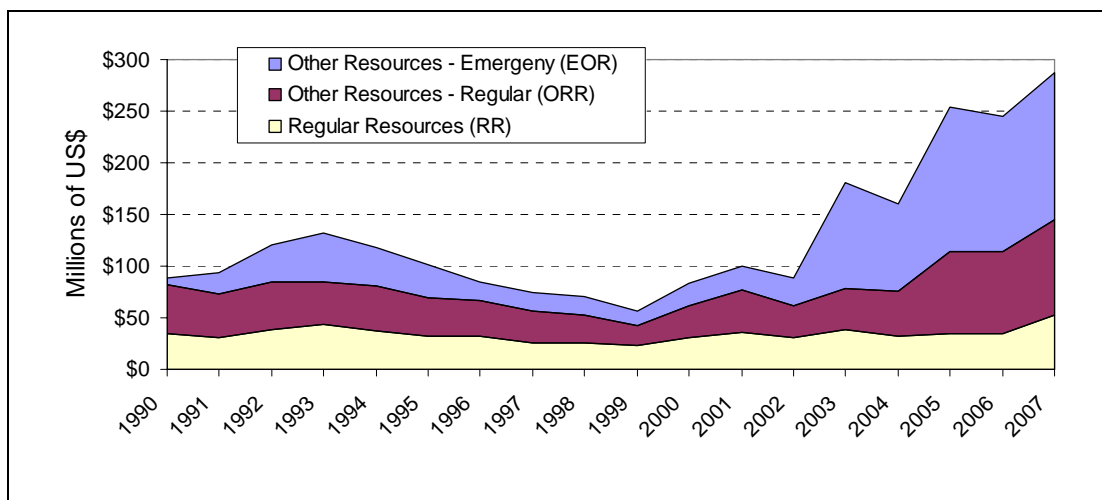
Finally, UNICEF participated in the development and implementation of WASH SWAPs in Madagascar, Malawi, Mozambique, Nicaragua, Rwanda, Sri Lanka and Zambia. In other countries – such as Bolivia and Niger – discussions on the formation of SWAPs are ongoing.

## 10 UNICEF Expenditure for WASH

### 10.1 Expenditure Patterns and Trends

UNICEF expenditure on WASH in 2007 was US\$ 287 million, the highest level to date. Unlike in the previous several years, more of the increase in expenditure was in regular programming budgets, not emergency budgets.

Figure 11: Total UNICEF WASH expenditure, 1990 – 2007



Since 1990, WASH expenditure was, on average, 12 per cent of the total UNICEF expenditure on all programmes. In 2007, WASH expenditure was 10 per cent of total expenditure.

The list of top ten countries by expenditure remained relatively unchanged over the last three years (see Table 6). Resources continue to be heavily concentrated in these 10 countries, which in 2007 accounted for 54 per cent of total expenditure (about the same as 2006, but much lower than the high of 70 per cent in 2005). Expenditure is highest in these countries because the needs are great: a combination of high absolute numbers of unserved people (e.g. India for sanitation, Nigeria for water and sanitation) and/or low coverage percentages (e.g. Ethiopia for sanitation, DR Congo for water).

Table 6: Top ten countries by WASH expenditure, 2005, 2006, 2007 (in alphabetical order)

2007	2006	2005
Bangladesh	DR Congo	Bangladesh
DR Congo	Ethiopia	Ethiopia
Ethiopia	India	India
India	Indonesia	Indonesia
Indonesia	Iraq	Iraq
Iraq	Nigeria	Nigeria
Nigeria	Pakistan	Pakistan
Pakistan	Somalia	Sri Lanka
Sri Lanka	Sri Lanka	Sudan
Sudan	Sudan	Uganda

For the second year in row, the largest expenditure was in Sudan: in 2007 a total of US\$ 31.7 million was spent in the southern reconstruction programme, the Darfur emergency programme and the regular WASH programme in other areas of this country.

The vast majority of expenditure was in the 60 priority countries: a total of US\$ 231 million, or 82 per cent of total expenditure at the country level. However, the number of priority countries that exceed the US\$ 1.5 million target (set in the WASH strategy paper) is stagnant at 28 countries (compared to 29 in 2006). Increasing the WASH budgets for more WASH priority countries remains a challenge.

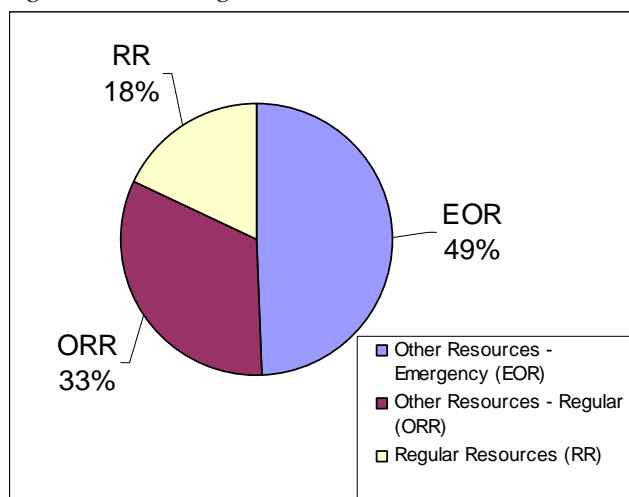
## 10.2 Funding Sources

Of the 2007 total WASH expenditure of US\$ 287 million, US\$ 52 million – or 18 per cent of the total expenditure – was from UNICEF’s core budget (regular resources). This is a significant increase over previous years, and is an indication of greater commitment to sectoral programming by UNICEF.

The bulk of the funds continue to be from donor partners. In 2007, a total of US\$ 235 million were from Other Resources (US\$ 142 million for emergency programmes and US\$ 93 million for the regular WASH programme).

The Government of the United Kingdom continued to be the largest single donor overall (emergency and regular resources) to the UNICEF WASH programme, followed by the EU (Table 7). The largest emergency donor country is the Netherlands, followed by Japan. (Table 8).

Figure 12: Funding sources, 2007



Most donor funding (EOR and ORR) is earmarked for specific projects, usually at the country level. The Government of Norway continues to be the only donor that provides significant thematic funding for the UNICEF WASH activities. These funds were used in part for priority countries currently without other significant external funding sources. Examples include the Philippines, where the funds were used to expand the WASH in schools programme, in Haiti for the rural WASH programme (with a focus on hygiene education) and in Guinea Bissau for rural community and school programme.

Table 7: Top ten donors by total WASH expenditure, 2002 to 2007 (descending order by size of contribution)

2007	2006	2002-2005 (last MTSP period)
United Kingdom	United Kingdom	United Kingdom
EU	Japan	Japan
Netherlands	EU	USA (USAID + OFDA)
Japan	USA	EU (EC + ECHO)
USA	French NatCom	Netherlands
Australia	Norway	Canada
Canada	US NatCom	German NatCom
German NatCom	Netherlands NatCom	Norway
Norway	Belgian NatCom	Sweden
Sweden	Canada	Australia

Table 8: Top ten donors by total expenditure for UNICEF WASH, 2007

Regular Programmes		Emergency Programmes	
United Kingdom	25,771,772	Netherlands	11,897,309
EU	18,609,903	Japan	7,078,286
Netherlands	7,354,778	USA	6,992,662
Norway	3,515,899	United Kingdom	5,680,033
Canada	3,504,550	EU	4,962,495
German NatCom	3,219,588	Australia	3,714,928
Australia	2,743,486	Spain	2,198,927
Sweden	2,411,988	Ireland	1,840,391
French NatCom	2,375,618	Canada	1,594,503
Japan	2,124,688	Italy	1,593,683

## 11 Challenges for 2008 and Beyond

### Capitalising on the IYS opportunity

The greatest challenge facing UNICEF and its sectoral partners for 2008 and beyond is to transform the opportunity the International Year of Sanitation represents into real sustainable progress on behalf of the two and a half billion people still without improved sanitation. Solid efforts were made in 2007 with an international consensus on the need for action and on the way forward, with the formation of new partnerships and an improved framework for UN coordination, and with new interest being shown by decision-makers at all levels.

### Improving the sustainability of WASH services

Due to a variety of constraints, the sustainability of water supply and sanitation facilities continues to be poor in many countries. Breakdown rates of water supply systems in sub-Saharan African countries, for example, routinely exceed 50 per cent. As described in last year's report and Section 3 of this year's report, UNICEF is working towards improved sustainability in various ways, including the promotion of CBSA to improve the long-term sustainability of sanitation (see below). Another notable initiative is the emphasis on sustainability within the ongoing partnership with the Government of the Netherlands in Africa and Asia, which institutionalises responsibility for sustainability amongst project implementers and managers. These and other efforts must continue in the coming years.

### Scaling up sanitation through the expansion of community based approaches

In parts of South Asia and East Asia, community based sanitation approaches are contributing to unprecedented increases in the number of people who have moved away from open defecation. In 2007, UNICEF worked towards expanding the approach into Africa and the Americas through pilot activities in several countries and through capacity building efforts. However, these initiatives remain on a small scale, and must be accelerated in 2008.

### Putting WASH on the child survival and development agenda

In 2007, UNICEF took specific steps to build the evidence base linking WASH interventions to improved health and welfare of children (see Section 2.2). Clearly establishing these links and disseminating resulting messages to the public health and development communities is a prerequisite for the leveraging of more resources for high-impact sectoral programming. While this is an important initiative, it is only the first stage of a process that will take time to

complete, and it is important that UNICEF in partnership with allies continues this initiative into the future.

### **Improving integration with the health sector**

Related to the above, it is important to continue efforts to better integrate WASH and health programmes to achieve maximum benefits for children. Also important is that improved integration is realised both for upstream programming initiatives as well as at the operational level.

### **Responding to the global threat of arsenic contamination**

Now that the first clear information on the global extent of potential arsenic contamination of drinking water supplies has been compiled (with UNICEF support – see Section 3.2), the time has come to carry out more in-depth surveys, assess specific risks and initiate mitigation activities as necessary at the national level. UNICEF will not do this on its own, of course, but will play a pivotal role by working with governments and other partners to initiate action.

### **Articulating the UNICEF response to the impact of climate change on water resources**

Since it is clear that climate change will impact on the freshwater resource base, it is time for UNICEF to work with UNEP and other partners to estimate the likely severity of this impact and to map out strategic adjustments to programmes.

### **Increasing focus on household-based approaches**

More work is needed at both field and upstream programming levels to promote and support ‘home hygiene’ approaches, that include (and integrate) household-based water treatment, hygiene and sanitation

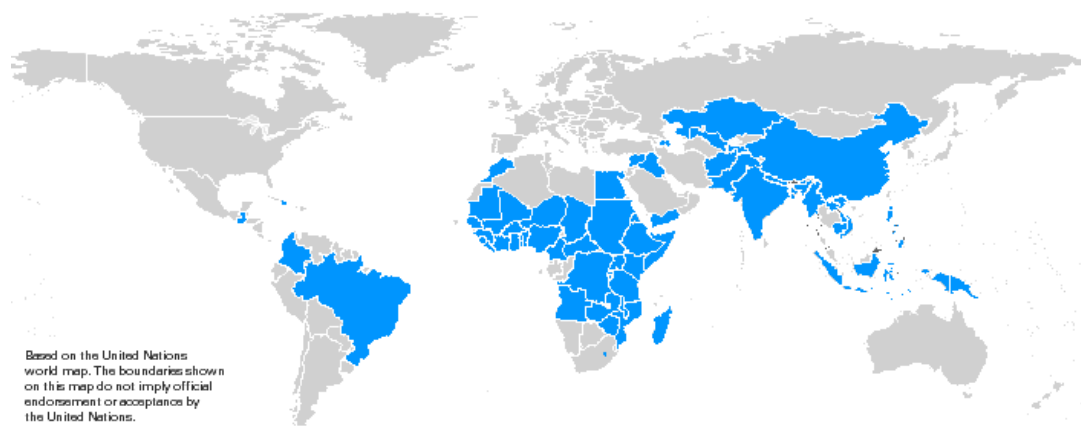
### **Building capacity within UNICEF**

UNICEF’s key comparative advantage in the sector is its global cadre of professional staff, which has risen to 350 professionals in 2007. Through a combination of carefully planned external recruitment and the training of existing staff, UNICEF is gradually broadening the skill mix required for more effective programming in the areas of sanitation and hygiene, in policy and budget analysis, and in capacity development at the sub-national level. This process needs to be pro-actively carried forward in 2008 and beyond to improve the effectiveness and impact of UNICEF WASH programmes.

Table 9: Progress on challenges discussed in 2006 report

Challenge discussed in 2006 report	2007 progress assessment	Report section references
Operationalizing UNICEF's Global WASH Strategies for 2006-2015	<ul style="list-style-type: none"> <li>• significant progress on staffing: overall WASH staff levels have increased by 21 per cent</li> <li>• capacity building efforts accelerated in 2007, notably in the areas of sanitation, monitoring, and emergency</li> <li>• overall funding has gone up, but increasing funding for under-funded priority countries remains a challenge</li> </ul>	2.1 3.1, 4.2, 8 3, 10.1
Integration of WASH into other activities supported by UNICEF	<ul style="list-style-type: none"> <li>• handwashing with soap, home drinking water treatment and sanitation promotion are increasingly a core part of the UNICEF flagship ACSD programme</li> <li>• UNICEF organizational commitment to WASH as a core programme illustrated by increasing levels of core (Regular Resources) funding</li> <li>• the mid-term review of Medium Term Strategic Plan in early 2008 is expected to re-affirm the central role of WASH within the Young Child Survival and Development and Gender Equality and Basic Education priorities</li> </ul>	3 10.2
Emergency work harmonized with, and contributes to long-term programmes	<ul style="list-style-type: none"> <li>• continuing reports from country offices that UNICEF's leadership role in emergencies is contributing to overall sector coordination</li> <li>• UNICEF is increasingly promoting balanced programming through influence in emergency programmes, especially in the area of hygiene</li> </ul>	4 4
Contribute more actively to plug the financing gap in the sector	<ul style="list-style-type: none"> <li>• a clear consensus among UN and other partners that a key emphasis of IYS is advocacy for increases in funding for sanitation</li> <li>• in 2007 sectoral partners and UNICEF have increased the evidence base for sanitation and hygiene cost-benefit ratios</li> <li>• UNICEF and partners' advocacy increasingly directed towards policy makers with authority related to influence budgets (notably through the ministerial conferences in East Asia and the Americas)</li> </ul>	1.2 1.2, 2.2 1.2, 2.2
Promoting gender equity	<ul style="list-style-type: none"> <li>• some progress made in the gender disaggregation of JMP data (but more is needed)</li> <li>• some progress made in improving representation of women in sectoral institutions (but more is needed)</li> <li>• continuing prioritisation of WASH in schools programme and increase in emphasis on menstrual hygiene management</li> <li>• a modest improvement in the gender balance among UNICEF WASH gender balance, but much more progress is needed</li> </ul>	7, 8 7 3.3, 7 7

## Annex: UNICEF WASH Priority Countries



### WASH priority countries by region

CEE/CIS	EAPRO	ESARO	MENA	ROSA	TACRO	WCARO
Azerbaijan	Cambodia	Angola	Egypt	Afghanistan	Brazil	Benin
Kazakhstan	China	Burundi	Iraq	Bangladesh	Colombia	Burkina Faso
Tajikistan	Indonesia	Eritrea	Morocco	India	Guatemala	Cameroon
Uzbekistan	Lao P.D.R.	Ethiopia	Sudan	Nepal	Haiti	Chad
	Myanmar	Kenya	Syrian Arabic Rep.	Pakistan		Central African Rep.
	Papua New Guinea	Lesotho	Yemen			Cote d'Ivoire
	Philippines	Madagascar				D. R. Congo
	Viet Nam	Malawi				Ghana
		Mozambique				Guinea
		Rwanda				Guinea-Bissau
		Somalia				Liberia
		Tanzania				Mali
		Uganda				Mauritania
		Zambia				Niger
		Zimbabwe				Nigeria
						Senegal
						Sierra Leone
						Togo