

GLAAS 2010

**UN-WATER GLOBAL ANNUAL ASSESSMENT
OF SANITATION AND DRINKING-WATER**

Targeting resources for better results



World Health
Organization

UN WATER

WHO Library Cataloguing-in-Publication Data :

UN-water global annual assessment of sanitation and drinking-water (GLAAS) 2010: targeting resources for better results.

1.Sanitation - economics. 2.Water supply. 3.Potable water - supply and distribution. 4.International cooperation. 5.National health programs. 6.Millennium development goals. I.World Health Organization. II.UN-Water.

ISBN 978 92 4 159935 1

(NLM classification: WA 675)

© World Health Organization 2010

All rights reserved. Publications of the World Health Organization can be obtained from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: bookorders@who.int). Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to WHO Press, at the above address (fax: +41 22 791 4806; e-mail: permissions@who.int).

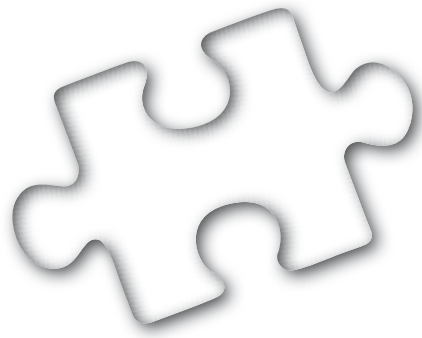
The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

Printed in Switzerland

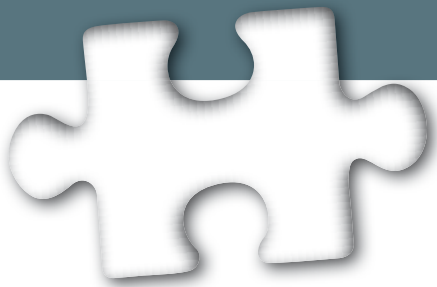
Design and layout: www.paprika-annecy.com



GLAAS₂₀₁₀

UN-WATER GLOBAL ANNUAL ASSESSMENT
OF SANITATION AND DRINKING-WATER

Targeting resources for better results



World Health
Organization

UN WATER

FOREWORD

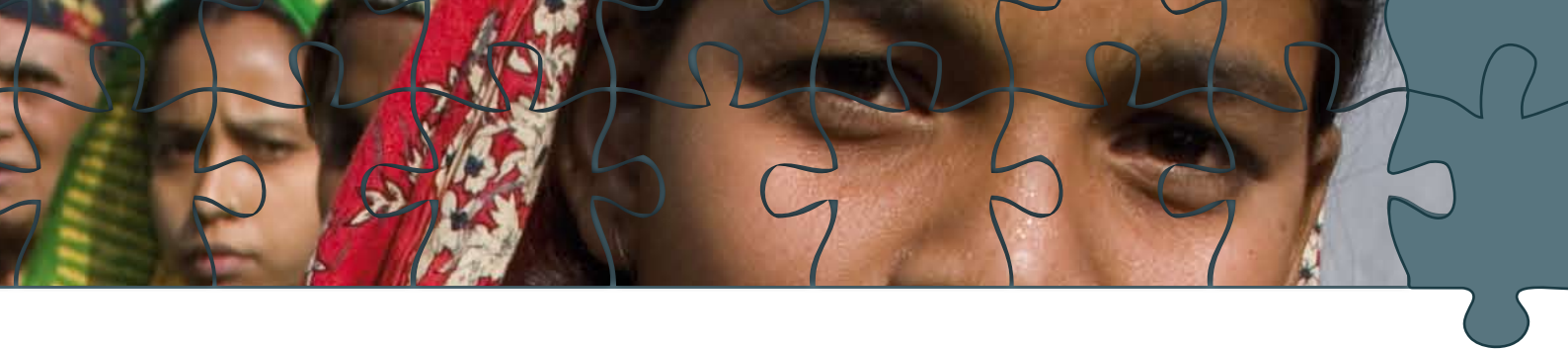
In 2008, over 2.6 billion people were living without access to improved sanitation facilities, and nearly 900 million people were not receiving their drinking-water from improved water sources. These stark figures are the headlines presented in *Progress on Sanitation and Drinking-water: 2010 Update*—the latest report of the World Health Organization (WHO)/United Nations Children’s Fund (UNICEF) Joint Monitoring Programme for Water Supply and Sanitation (JMP), published in March 2010. It describes a situation that is particularly grave with regard to sanitation, with less than half of the world’s rural population and only three quarters of its urban population using improved facilities.

Not surprisingly, diarrhoea is the second leading contributor to global burden of disease—ahead of heart disease and human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS). Two and a half billion cases of diarrhoea occur in children under five years of age every year, and an estimated 1.5 million children die from it annually. Diarrhoeal diseases impose a very significant burden on the public health resources in countries where unsanitary conditions prevail, overwhelmingly the poorer countries of the world. Diarrhoeal diseases also affect the nutritional status of children, indirectly adding to the disease burden. It is a burden carried by individual households (not least in economic terms), by the health services (which often are literally overburdened) and by national economies. Not without reason, the WHO Commission on Macroeconomics and Health rated the extension of access to safe drinking-water and basic sanitation as a highly cost-effective health intervention.

The JMP report gives us the hard facts: statistics about the global situation and about the important disparities between regions, between rural and urban populations and between different socioeconomic strata. One might ask why this unsatisfactory situation continues when the problems associated with poor sanitation and unsafe drinking-water have been known for so long and solutions seem readily at hand.

The big question is: Where are the real bottlenecks? Are they in the formulation and implementation of policies? In the process of optimizing institutions and the arrangements between them? In the translation of political will into action? In the decision-making on the allocation of resources at national and international levels? Or in the current education and training programmes for professionals working in water and sanitation? The answer may be: “All of the above.”





The **UN-Water Global Annual Assessment of Sanitation and Drinking-Water (GLAAS)** was established to enhance our evidence base for answering the above questions and to inform the actions undertaken by UN-Water members and partners. GLAAS is expected to elucidate where efforts stagnate in achieving the Millennium Development Goal Target 7.C—to halve, by 2015, the proportion of the population without sustainable access to safe drinking-water and basic sanitation. It also highlights the challenges that need to be addressed by the United Nations system to collectively support its Member States. These challenges are duly recognized by UN-Water, which seeks to inform ongoing global policy dialogues about available solutions and to support Member States in overcoming them.

The first GLAAS report brings together survey data from 42 countries and 27 external support agencies and overlays this information, together with information from other databases, on the data presented by JMP on access to and use of basic sanitation and safe drinking-water. This composite information source is quite central to the actions undertaken by UN-Water members and partners and is facilitating action by the development partners. For example, the new initiative Sanitation and Water for All: A Global Framework for Action, which aims to bring sanitation and drinking-water issues “to the top table of development”, will bring the GLAAS report as a key information source to the attention of decision-makers at the highest level.

This GLAAS report initiates a series that will increasingly reach out to more Member States in the coming years. We hope that you will find it interesting and stimulating, and that it will inform your decisions and actions to bring safe water and basic sanitation to everyone who is currently without access.

Maria Neira
Director
Public Health and Environment
World Health Organization

Zafar Adeel
Chair, UN-Water
Director
Institute for Water, Environment and Health
United Nations University

UN-Water

UN-Water is a mechanism to strengthen coordination and coherence among all United Nations (UN) bodies dealing with a variety of water-related issues, such as health, farming, environment, energy, food, climate, sanitation and disasters. UN-Water was set up in 2003 through a decision by the High Level Committee on Programmes of the UN Chief Executive Board for Coordination. The Chair of UN-Water is chosen from one of the UN agencies for a two- to three-year term (the current chair is with the UN University), whereas the Secretariat is hosted by the UN Department of Economic and Social Affairs. UN-Water evolved from many years of close collaboration among UN agencies and a firm belief that still more can be done to strengthen the UN system in its efforts to work more effectively on water and sanitation issues, which are among the most urgent challenges of our time. UN-Water is not another UN agency. Instead, UN-Water adds value to existing UN programmes and projects and fosters more cooperation and information sharing among UN agencies and their partners.

UN-Water web site: <http://www.unwater.org>



UN-Water fosters coordination

UN-Water GLAAS and the UN Economic and Social Commission for Asia and the Pacific (UNESCAP) worked together to ensure that there would be no duplication of data collection efforts in Asia and the Pacific in 2009. In 2008, UNESCAP carried out a survey on sanitation in the framework of the International Year of Sanitation (UNESCAP, 2009). In 2009, UNESCAP was asked to contribute to the planned Asian Development Bank (ADB) report, *Asian Water Development Outlook 2010*, on household water security (ADB, in press). WHO and UNESCAP agreed that instead of a separate survey for Asia, the GLAAS survey could provide an evidence base for UNESCAP's work and UNESCAP could facilitate GLAAS data collection in its region.





ACKNOWLEDGEMENTS

UN-Water and WHO would like to specifically acknowledge the critical role of all the officers and consultants in countries and external support agencies who participated in the 2009–2010 survey leading to this report, as well as the role of the WHO country offices to facilitate this process and the catalysing role of all the Sanitation and Water for All members at national, regional and global levels.

UN-Water and WHO would like to thank the following for their peer review of the report: Didier Allely-Fermé, WHO; Kader Asmal, University of the Western Cape, South Africa; Jamie Bartram, University of North Carolina, United States of America (USA); Joachim von Braun, University of Bonn, Germany; Clarissa Brocklehurst, UNICEF; Julia Bucknall, World Bank; Sue Cavill, Department for International Development (DFID), United Kingdom; Carol Chouchani Cherfane, UN Economic and Social Commission for Western Asia; Andrew Cotton, Loughborough University, United Kingdom; Oliver Cumming, London School of Hygiene and Tropical Medicine, United Kingdom; Barbara Evans, University of Leeds, United Kingdom; Richard Franceys, United Kingdom; Valérie Gaveau, Organisation for Economic Co-operation and Development (OECD), France; Dick van Ginhoven, Directorate-General for International Cooperation (DGIS), the Netherlands; David Gordon, University of Bristol, United Kingdom; Omar Hopkins, Millennium Challenge Corporation, USA; Rifat Hossain, WHO; Guy Howard, DFID, United Kingdom; Andrew Hudson, United Nations Development Programme (UNDP); José Hueb, Switzerland; Guy Hutton, Water and Sanitation Program, World Bank (WSP); Pete Kolsky, World Bank; Ingeborg Krukkert, IRC, the Netherlands; Johan Kuylenstierna, UN-Water; Jon Lane, Water Supply and Sanitation Collaborative Council; Rolf Luyendijk, UNICEF; Meera Mehta, Centre for Environmental Planning and Technology University, India; Christoph Merdes, Federal Ministry for Economic Cooperation and Development (BMZ), Germany; Carl Mitchell, United States Agency for International Development (USAID), USA; Alastair Morrison, UNDP; Toru Nishimura, Ministry of Foreign Affairs, Japan; Hendrik van Norden, UNICEF; Letitia Obeng, Global Water Partnership; Cecilia Piemonte, OECD; Frederik Pischke, UN-Water; Helen Richards, DFID, United Kingdom; Ian Ross, WaterAid, United Kingdom; Tom Slaymaker, WaterAid, United Kingdom; Véronique Verdeil, Ministry of Foreign and European Affairs, France; Sanjay Wijesekera, DFID, United Kingdom; Mari Williams, Tearfund, United Kingdom; Dano Wilusz, United States Department of State, USA; Stephen Young, DFID, United Kingdom.

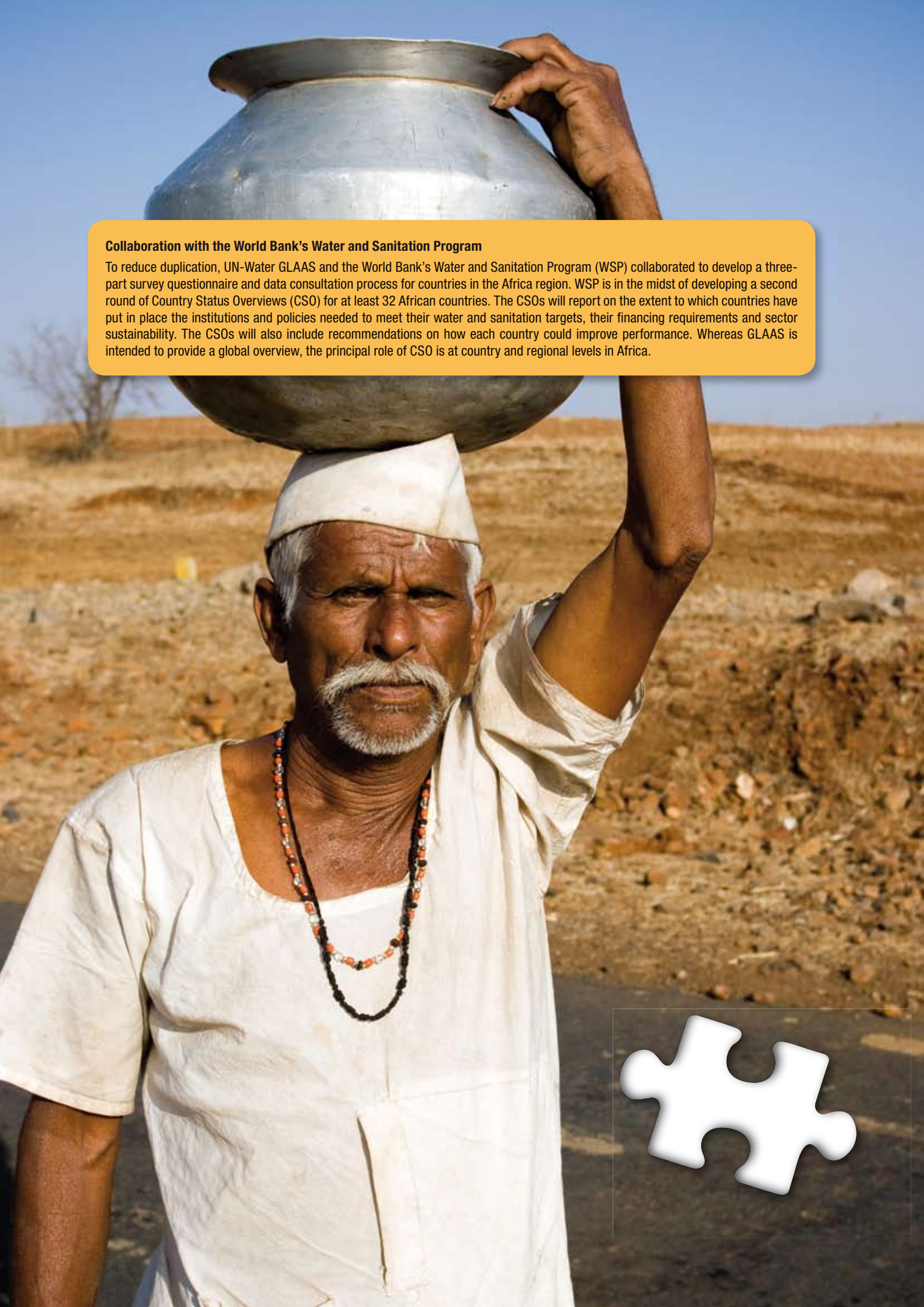
Additionally, UN-Water and WHO would also like to acknowledge the role of a large number of professionals and institutions that have contributed in different ways to this assessment and report: Nicole Bella, United Nations Educational, Scientific and Cultural Organization (UNESCO); Julia Benn, OECD; Philippe Castermans, France; Piers Cross, South Africa; Cédric Estienne, Hydroconseil, France; Cynthia Guttman, UNESCO; Julia Heiss, UNESCO; Edward Kairu, African Civil Society Network on Water and Sanitation, Kenya; Cindy Kushner, UNICEF; Ti Le-Huu, UNESCAP; Leila Loupis, UNESCO; Debashree Mukherjee, Switzerland; Edgar Quiroga, Universidad del Valle, Colombia; Jean Herivelo Rakotondrainibe, Madagascar; Lovy Rasolofomanana, WaterAid, Madagascar; Annie Savina, France; Christine Sijbesma, IRC, the Netherlands; Jae So, WSP; Ermina Sokou, UNESCAP; Pasquale Steduto, Food and Agriculture Organization of the United Nations (FAO); Aminata Sylla, IRC, the Netherlands; Bai-mass Taal, African Ministers' Council on Water (AMCOW); Jérémie Toubkiss, Hydroconseil, France; Clémentine Tribouillard, Hydroconseil, France; Chloé Tuot, UNESCO; Erma Uytewaal, IRC, the Netherlands; Bruno Valfrey-Visser, Hydroconseil, France; Carolien van der Voorden, Water Supply and Sanitation Collaborative Council; Adeel Zafar, UN University.

The financial support of the United Kingdom DFID is gratefully acknowledged.

For their crucial support to all phases of the assessment and report development, special thanks are extended to Catarina Fonseca, IRC, the Netherlands, and to Dominick de Waal, WSP. And finally, for his key role in the whole project, a special and grateful mention goes to Mark Hoeke, France.

WHO staff in headquarters: Jamie Bartram (until April 2009), Carmen Bays, Robert Bos, Catherine Jung, Maria Neira, Nada Osseiran, Federico Properzi, Janet Siberry-Dumenil, Peregrine Swann, Elizabeth Woolnough. WHO staff in the regions: Lucien Manga, Regional Office for Africa; Paulo Teixeira, Regional Office for the Americas/Pan American Health Organization; Hamed Bakir, Regional Office for the Eastern Mediterranean; Roger Aertgeerts, Regional Office for Europe; Ms Payden, Regional Office for South-East Asia; Terrence Thompson, Regional Office for the Western Pacific.

Editorial support: Marla Sheffer, Canada.



Collaboration with the World Bank's Water and Sanitation Program

To reduce duplication, UN-Water GLAAS and the World Bank's Water and Sanitation Program (WSP) collaborated to develop a three-part survey questionnaire and data consultation process for countries in the Africa region. WSP is in the midst of developing a second round of Country Status Overviews (CSO) for at least 32 African countries. The CSOs will report on the extent to which countries have put in place the institutions and policies needed to meet their water and sanitation targets, their financing requirements and sector sustainability. The CSOs will also include recommendations on how each country could improve performance. Whereas GLAAS is intended to provide a global overview, the principal role of CSO is at country and regional levels in Africa.









ACRONYMS AND ABBREVIATIONS

ADB	Asian Development Bank
AFD	Agence Française de Développement
AfDB	African Development Bank
AfDF	African Development Fund, African Development Bank
AMCOW	African Ministers' Council on Water
AsDF	Asian Development Fund, Asian Development Bank
AusAid	Australian Agency for International Development
BMZ	German Federal Ministry for Economic Cooperation and Development
BRAC	(formerly) Bangladesh Rural Advancement Committee
CIS	Commonwealth of Independent States
CREPA	Regional Centre for Low Cost Water Supply and Sanitation
CSO	Country Status Overviews
DALY	disability-adjusted life year
DANIDA	Danish International Development Agency
DFID	Department for International Development, United Kingdom
DGIS	Directorate-General for International Cooperation, Netherlands
EC	European Commission
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GDP	gross domestic product
GLAAS	Global Annual Assessment of Sanitation and Drinking-Water
GNI	gross national income
GoAL WaSH	Governance, Advocacy and Leadership for Water, Sanitation and Hygiene
HIV/AIDS	human immunodeficiency virus/acquired immunodeficiency syndrome
HR	human resources
IDA	International Development Association, World Bank
IDB	Inter-American Development Bank
IPAD	Portuguese Institute for Development Assistance
IRC	IRC International Water and Sanitation Centre
JMP	WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation
LDC	least developed country
LMIC	lower middle income country
MDG	Millennium Development Goal
NGO	nongovernmental organization
NORAD	Norwegian Agency for International Development
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
OECD-CRS	OECD Creditor Reporting System
OLIC	other low-income country
PDR	People's Democratic Republic
PIU	project implementation unit
PRSP	poverty reduction strategy paper
TICAD IV	Fourth Tokyo International Conference on African Development
UMIC	upper middle income country
UN	United Nations
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
USA	United States of America
USAID	United States Agency for International Development
WASH	water, sanitation and hygiene
WHO	World Health Organization
WSP	Water and Sanitation Program, World Bank



TABLE OF CONTENTS

Executive summary	2
Purpose and overview	4
Report guide	5
 Part 1. Priorities, targeting and adequacy of financial flows	7
1.1 The benefits of investing in sanitation and drinking-water	8
1.2 Prioritization of sanitation and drinking-water	13
1.3 Adequacy of financial flows	17
1.4 Targeting of sanitation and drinking-water funding	22
 Part 2. Country capacity to sustain progress	37
2.1 Policies and institutions	38
2.2 Setting national coverage goals and monitoring progress	40
2.3 Budgets and expenditures	43
2.4 Human resources development	48
 Part 3. Partnerships and external support to accelerate and sustain progress	53
3.1 Stakeholder coordination and harmonization	55
3.2 Aid channelling and alignment	58
3.3 Towards mutual accountability	65
 Conclusions and recommendations	70
Looking ahead	72
References	74
Appendix A: Glossary	77
Appendix B: Method	80
Appendix C: Summary of 2009–2010 CSO and GLAAS country survey responses	84
Appendix D: Summary of 2009–2010 GLAAS external support agency survey responses	88
Appendix E: OECD Development Assistance Committee list of ODA recipients, by income group, effective for reporting on 2008 flows	90



EXECUTIVE SUMMARY

Increasing people's access to sanitation and drinking-water brings large benefits to the development of individual countries through improvements in health outcomes and the economy. From recent World Health Organization (WHO) reports, we know that the impact of diarrhoeal disease on children is greater than the combined impact of human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), tuberculosis and malaria; we also know that the provision of improved sanitation and drinking-water could reduce diarrhoeal diseases by nearly 90%. Latest estimates indicate that improvements in sanitation and drinking-water could reduce the number of children who die each year by 2.2 million. Huge savings in health-care costs and gains in productive days can therefore be realized by improving access to safe water and basic sanitation. As well, investing in sanitation and drinking-water brings very large economic returns—estimated by the World Bank to average approximately 2% of gross domestic product (GDP), rising to over 7% in some specific country contexts. However, the current status—as described in the recently published report by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP)—of over 2.6 billion people not using improved sanitation and nearly 900 million people not using an improved source of drinking-water is surely unacceptable.

Recommendation 1

Developing countries and external support agencies to demonstrate greater political commitment to sanitation and drinking-water, given their central role in human and economic development

Despite these clear benefits for human development, many countries seem to allocate insufficient resources to meet the Millennium Development Goal (MDG) target for sanitation and drinking-water. When compared with other sectors, particularly the other major social sectors of education and health, sanitation and drinking-water receive a relatively low priority for both official development assistance (ODA) and domestic allocations. The total aid for all aspects of water, as measured by the Organisation for Economic Co-operation and Development (OECD), fell from 8% to 5% of total ODA between 1997 and 2008. During this same period, ODA for health increased from 7% to 12% of total ODA, while for education, the level remained at around 7%.

Furthermore, domestic and foreign aid resources for sanitation and drinking-water are not necessarily well targeted to where the needs are greatest (e.g. the poorest and unserved populations). In addition, less than half of the funding from external support agencies for water and sanitation goes to low-income countries, and a small proportion of these funds is allocated to the provision of basic services, where it would have the greatest impact on achieving the MDG target.

Recommendation 2

External support agencies and developing countries to consider how to better target resources to accelerate progress towards meeting the sanitation and drinking-water MDG target

Although nearly all the countries surveyed have clearly defined policies for urban and rural drinking-water, this is not always the case for sanitation. Sound policies, allied to effective institutions, are important for optimizing service delivery. Establishing clear roles and responsibilities for the different institutions involved in sanitation and drinking-water is also important, if good progress is to be made. Although many countries are strengthening their plans to meet the MDG sanitation and drinking-water target, much more rapid progress on their implementation is required if there is any chance of meeting the target in all regions and globally.



Even though information on budget allocations and expenditures is not always available, especially at the subnational level, the general picture shows that some countries are unable to absorb the current level of aid for sanitation and/or drinking-water. This needs to be addressed if donors are to be persuaded to commit more to these countries, which are often the ones with the greatest need. Funding from donors is, however, becoming more predictable, with more long-term projects and programmes being funded. Human resource capacity constraints also need to be considered by both external support agencies and developing countries, as the improvements required are likely to take a long time.

Spending on recurrent costs, as a percentage of the total spending for sanitation and drinking-water, varies considerably from country to country. There are also big variations in the proportion of recurrent costs allocated to salary and non-salary expenditures for replacement parts and essential operating inputs (e.g. fuel, electricity, transport).

Donors are increasing their coordination efforts, which is important, considering the large number of donors that operate in some recipient countries. Developing countries, however, need to strengthen multistakeholder inputs to planning, budgeting, implementation and monitoring. Untying of aid is also increasing, and donor harmonizing and alignment behind government processes are making some progress. A relatively new development is that donors are increasingly making specific commitments to increasing coverage and appear to be good at translating commitments into disbursements.

The large number of country and external support agency initiatives and partnerships reflects an important level of fragmentation over various sectors, adding a layer of complexity. The new initiative Sanitation and Water for All: A Global Framework for Action is trying to strengthen the international architecture and bring stronger political commitment to bear on water and sanitation, given that this is seen by many development partners as one of the major constraints to accelerating progress towards achieving the MDG target.

This report contains a large number of data and analyses on sanitation and drinking-water, making it a resource that can be used to strengthen policies and assist decision-makers.

Recommendation 3

Developing countries and external support agencies to strengthen national and subnational systems to plan, implement and monitor the delivery of sanitation and drinking-water services, especially to unserved populations

Recommendation 4

All stakeholders to work in partnership to support the development and implementation of national plans for sanitation and drinking-water, using their particular skills and resources and aligning with national systems



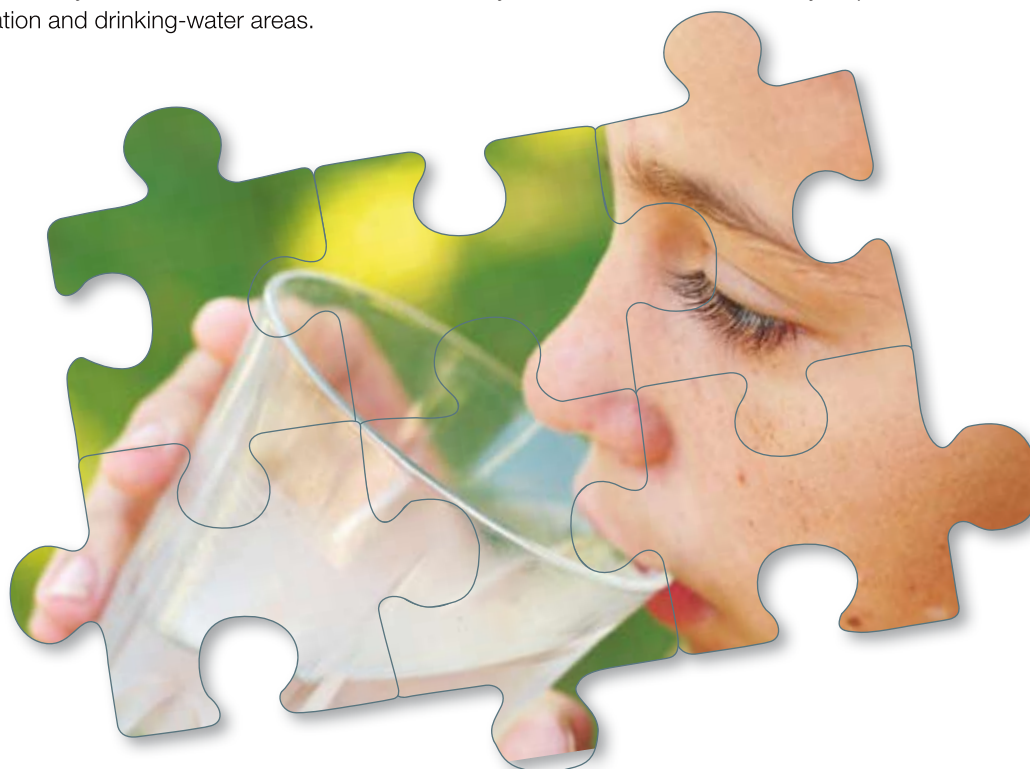
PURPOSE AND OVERVIEW

The purpose of the UN-Water Global Annual Assessment of Sanitation and Drinking-Water (GLAAS) is to provide key information, based on data collected from a large number of sources, concerning sanitation and drinking-water in the developing world: specifically, the use of sanitation and drinking-water services, government policies and institutions, investments of financial and human resources, foreign assistance and the influence of these factors on performance. UN-Water GLAAS strives to enable comparisons to be made across countries and regions and is expected to achieve global reporting within the coming years. This first report covers 42 countries and 27 external support agencies.

GLAAS is a UN-Water initiative, led by WHO. Launched as a pilot in September 2008, GLAAS aims to provide added value to sanitation and drinking-water monitoring efforts by integrating and strengthening the evidence base and helping to improve policy-making towards and beyond the MDG target. The characteristics of the assessment include:

- complementing existing initiatives, such as the JMP and the World Water Development reports, with a comprehensive, global and periodic analysis of sanitation and drinking-water, bringing together national, regional and global data (e.g. from the OECD, the World Bank, national agencies, bilateral and multilateral donors, international nongovernmental organizations [NGOs] and private foundations);
- focusing on the capacity of countries, with the support of donors, to improve sanitation and drinking-water service delivery and levels;
- recognizing the value of ongoing MDG monitoring initiatives being conducted at various levels within the United Nations (UN) system and by NGOs, multilateral agencies and governments;
- providing a situational analysis of donor aid activities, with a focus on trends, prioritization, targeting and coordination;
- developing a summary report of sanitation and drinking-water inputs and outputs, with the participation of country governments, donors, multilateral agencies and other partners;
- supporting evidence-based policy-making on sanitation and drinking-water at national, regional and global levels;
- being a technical resource for the political initiative Sanitation and Water for All: A Global Framework for Action, to accelerate progress towards achieving the water and sanitation MDG target.

UN-Water GLAAS is intended to reach senior-level policy-makers. It aims to help reduce the reporting burden of countries and external support agencies and to harmonize their different reporting mechanisms. By so doing, UN-Water GLAAS hopes to continually increase the information available to key decision-makers and thereby help to enhance accountability in the sanitation and drinking-water areas.





REPORT GUIDE

The UN-Water GLAAS 2010 report attempts to provide a deeper understanding of the catalysts for, and obstacles to, progress by integrating and summarizing sanitation and drinking-water data and trends in new ways that not only provide insight but also generate questions and new ideas for improving upon sanitation and drinking-water inputs and outputs.

There are three main parts to the GLAAS 2010 report:

- Part 1 presents an analysis of priority-setting, examines targeting of sanitation and drinking-water funds and external aid, and discusses the adequacy of financial flows.
- Part 2 discusses the sustainability of drinking-water and sanitation services along with current status and trends concerning sanitation and drinking-water policies, institutions, planning and monitoring, budgets and human resources in developing countries.
- Part 3 examines opportunities for improving performance through stakeholder coordination, aid alignment and mutual accountability.

Each part of the report begins with the key observations from the analysis. Highlights or examples are provided throughout the text and are shown in orange boxes. This report also provides conclusions, recommendations and a look into future assessments, as well as appendices containing the glossary, method, country and external support agency data, and the country income group categories as defined by the OECD.

This report presents charts and descriptive tabular summaries for numerous drinking-water and sanitation indicators and benchmarks. Financial data presented in the tables or charts are, in a majority of cases, for 2008. Tabular summaries present country data using a three-step ranking scale (green, yellow or red dots) that indicates a level of capacity or implementation. Where trend information is available, different shapes are used (e.g. up arrow, down arrow or equals sign) that will provide the reader with an indication of increasing, decreasing or static trends. If only a coloured dot is shown, there is no trend information available. Colour and shape keys are provided at the end of each table for clarity.

An aggregated progress score for each of the four areas reported (urban drinking-water, rural drinking-water, urban sanitation, rural sanitation) is calculated as a percentage of the total responses. The score is based on the individual country rankings, and its purpose is to allow the reader to quickly make comparisons between countries, between sanitation and drinking-water, and between urban and rural areas. It is not meant to measure absolute progress, but is included as a guide for the reader and for potential future tracking of progress. A green colour means a score of 1, a yellow colour is a score of 0.5 and a red colour represents a score of 0. For example, if urban sanitation receives a total of 11 responses (e.g. 4 greens, 5 yellows and 2 reds), the progress score would be $(4 \times 1) + (5 \times 0.5) + (2 \times 0) = 6.5$ out of 11, or 59%. Trend information is not assessed in determining a progress score.

Charts and tabular summaries will also generally indicate the number of responses that were considered in the analysis or particular question. This number will not necessarily equal the total number of respondents to the survey, as not every country or external support agency answered all parts of the surveys, and in many cases the data were collected from an already existing source (e.g. the OECD Creditor Reporting System [OECD-CRS]).

About hygiene

Hygiene promotion and education are essential to achieve health gains associated with improvements in basic coverage and increased service levels of sanitation and drinking-water. In GLAAS, we consider hygiene an important component of the “software” part of sanitation and drinking-water projects.



PART 1

PRIORITIES, TARGETING AND ADEQUACY OF FINANCIAL FLOWS

There is increasing evidence available concerning the priorities, targeting and adequacy of financial flows in sanitation and drinking-water. Part 1 of this report looks at the case for investing in sanitation and drinking-water (section 1.1), at whether evidence shows that sanitation and drinking-water are prioritized by domestic and aid funds (section 1.2), at whether there are adequate financial resources to meet the internationally agreed target for sanitation and drinking-water (section 1.3) and at whether the resources available are well targeted (section 1.4).

KEY OBSERVATIONS

- 1.1 Unsafe water, inadequate sanitation and insufficient hygiene are the major risk factors for diarrhoeal disease, which is the second leading contributor to global burden of disease. For children under 15, this burden is greater than the combined impact of HIV/AIDS, malaria and tuberculosis.
- 1.2 In 2008, over 2.6 billion people did not use improved sanitation facilities, while nearly 900 million people did not use drinking-water from an improved source. Large urban and rural disparities exist in both sanitation and drinking-water; for example, less than half of the rural population used improved sanitation facilities in 2008, compared with 76% of the urban population.
- 1.3 The amount of development aid is increasing in absolute terms. Nevertheless, relative to other sectors, the sanitation and drinking-water share of development aid has markedly decreased over the period 1998–2008, despite its relevance to the achievement of almost all of the MDGs.
- 1.4 The median reported government spending on sanitation and drinking-water is 0.48% of GDP.
- 1.5 According to country respondents, the total allocation to sanitation and drinking-water is much less than that required to meet the MDG target.
- 1.6 Donor aid prioritization for sanitation and drinking-water is influenced by many factors. Coverage, poverty levels and established in-country presence are the factors most cited by responding external support agencies.
- 1.7 Aid for drinking-water and sanitation is generally not well targeted. Low-income countries receive only 42% of the total aid, and aid for basic sanitation and drinking-water services decreased from 27% to 16% over the period 2003–2008.
- 1.8 Countries indicate that they have generally not developed or applied criteria for the distribution of funding to unserved populations, especially with respect to sanitation.

PRIORITIES, TARGETING AND ADEQUACY OF FINANCIAL FLOWS

1.1 THE BENEFITS OF INVESTING IN SANITATION AND DRINKING-WATER

Unsafe water, inadequate sanitation and insufficient hygiene are important factors contributing to poor health. Diarrhoea is caused mainly by the ingestion of pathogens, especially from unsafe drinking-water, contaminated food or unclean hands. Eighty-eight per cent of cases of diarrhoea worldwide are attributable to unsafe water, inadequate sanitation or insufficient hygiene. Childhood malnutrition causes about 35% of all deaths of children under the age of five years worldwide; it is estimated that 50% of childhood malnutrition is associated with repeated diarrhoea or intestinal nematode infections as a result of unsafe water, inadequate sanitation or insufficient hygiene (WHO, 2008a).

Diarrhoeal disease is the second leading contributor to global disease burden

TABLE 1: Global burden of disease, measured in DALYs, 2004

	Disease or injury	DALYs, all age groups (millions)	DALYs, children 0–14 years (millions)	Percentage of total DALYs, all age groups	Percentage of total DALYs, children 0–14 years
1	Lower respiratory infections	94.5	73.6	6.2	13.4
2	Diarrhoeal diseases	72.8	65.2	4.8	11.9
3	Unipolar depressive disorders	65.5	2.8	4.3	1.0
4	Ischaemic heart disease	62.6	0.3	4.1	0.06
5	HIV/AIDS	58.5	8.5	3.8	1.9
...					
11	Tuberculosis	34.2	3.4	2.2	0.6
12	Malaria	34.0	32.4	2.2	5.9

Source: WHO (2008b)

In a recent report by WHO (2008b), diarrhoeal disease is cited as the second leading contributor to global disease burden, which is measured in disability-adjusted life years (DALYs) (Table 1). For children under 15, this burden is greater than the combined impact of HIV/AIDs, malaria and tuberculosis. In 2009, WHO published a report on global health risks that shows that unsafe water, inadequate sanitation and insufficient hygiene contribute to 64 million DALYs and ranked fourth in the list of leading health risk factors in the world, behind childhood underweight, unsafe sex and alcohol use (WHO, 2009).

Reducing deaths of children ... 2.2 million deaths of children are preventable through improvements in hygiene behaviour and in the provision of basic sanitation and safe drinking-water

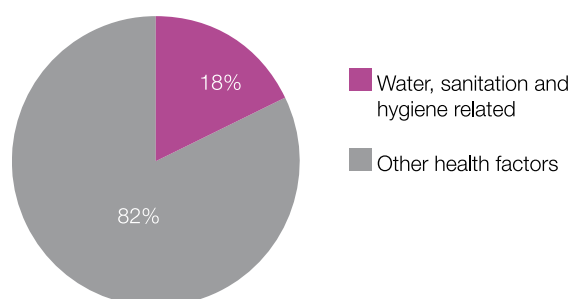


FIGURE 1: Percentage of deaths of children (0–14 years) attributable to unsafe drinking-water, inadequate sanitation or insufficient hygiene (from a total of 11.9 million deaths of children worldwide)

Source: WHO (2008a)

Increasing the number of people with access to safe drinking-water and improved sanitation brings health and broader livelihood benefits, while saving millions of lives each year. In 2008, WHO estimated that more than 2.2 million deaths of children per year could be prevented by the reduction of diarrhoeal and malnutrition impacts related to unsafe water, inadequate sanitation or insufficient hygiene (Figure 1) (WHO, 2008a).

Importance of sanitation and drinking-water is highlighted in the MDGs

MDG 7, which aims to ensure environmental sustainability, includes a target to “Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.” Indicators for monitoring progress towards this target include the proportion of the population using an improved drinking-water source and the proportion of the population using an improved sanitation facility. In determining progress towards the target, current coverage levels are compared against coverage levels estimated in the 1990 baseline year.

Cost effectiveness ... a WHO study shows a potential of US\$ 3–34 in economic benefits for every US\$ 1 invested in sanitation and drinking-water

The economic benefits of investing in drinking-water and sanitation have been investigated by WHO (Hutton & Haller, 2004) and come in several forms:

- health-care savings by health agencies and individuals;
- productive days gained per year (for those 15–59 years of age) and increased school attendance;
- time savings (working days gained) resulting from more convenient access to services;
- value of deaths averted (based on future earnings).

The study showed that achieving the water and sanitation MDG target could bring economic benefits, ranging from US\$ 3 to US\$ 34 per US\$ 1 invested, depending on the region. Additional improvement of drinking-water quality (e.g. point-of-use treatment), if sustained, could lead to a benefit ranging from US\$ 5 to US\$ 60 per US\$ 1 invested.



Economics of sanitation initiative

The World Bank's Water and Sanitation Program (WSP) has conducted studies in five South-east Asian countries—Cambodia, Indonesia, the Lao People's Democratic Republic, Viet Nam and the Philippines—to assess the economic impacts of poor sanitation. It was estimated that these countries lose an estimated US\$ 9 billion a year because of poor sanitation (based on 2005 prices). This equates to approximately 2% of their combined GDP, varying from 1.3% in the Philippines and Viet Nam to 2.3% in Indonesia, 5.6% in the Lao People's Democratic Republic and 7.2% in Cambodia (World Bank, 2008).

PRIORITIES, TARGETING AND ADEQUACY OF FINANCIAL FLOWS

Global coverage levels ... nearly 900 million people do not use drinking-water from an improved source, and over 2.6 billion people do not use improved sanitation facilities

While progress in providing access to sanitation and drinking-water services continues to be made in some countries, many are still struggling to achieve coverage goals and reduce the disease burden on their populations. The GLAAS 2010 report has been prepared within the context of the known status of the global coverage for sanitation (Figure 2) and drinking-water (Figure 3).

Use of improved sanitation

From 1990 to 2008, approximately 1.3 billion people gained access to improved sanitation, while the world's population increased by over 1.5 billion (from 5.3 to 6.8 billion) over the same period. Despite this considerable progress, the world is not on track to meet the MDG sanitation target by 2015. Only 62% of the world's population uses improved sanitation facilities, compared with 55% in 1990. Over 2.6 billion people do not use improved sanitation facilities, compared with an estimated 2.4 billion in 1990.

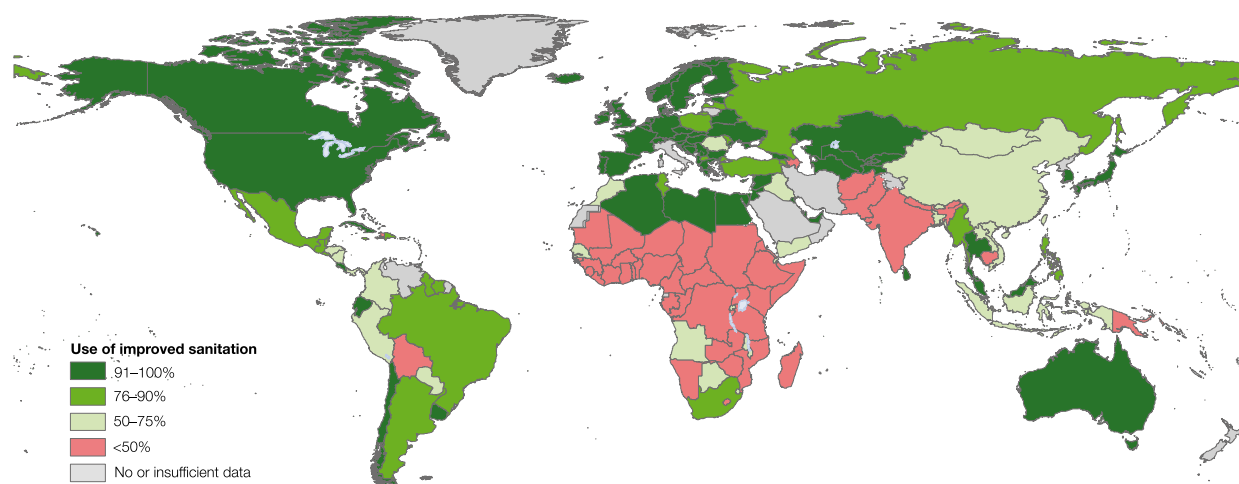


FIGURE 2: Use of improved sanitation, 2008

Source: WHO/UNICEF (2010)



Use of improved drinking-water sources

From 1990 to 2008, approximately 1.8 billion people gained access to drinking-water from an improved source. Currently, 87% of the world uses drinking-water from improved sources, compared with 78% in 1990. Nearly 900 million people do not use drinking-water from an improved source, compared with an estimated 1.2 billion in 1990.

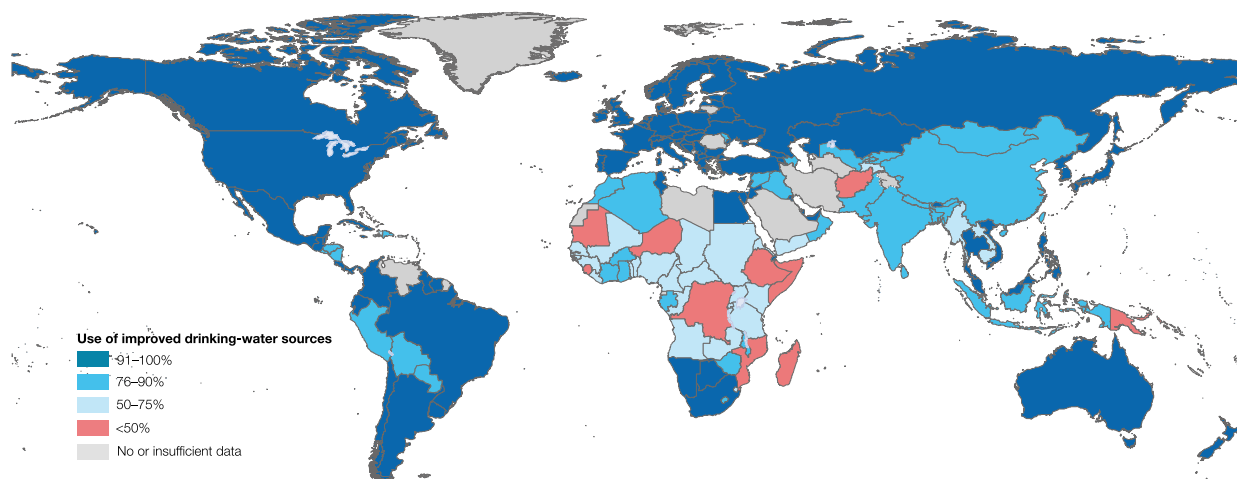


FIGURE 3: Use of improved drinking-water sources, 2008

Source: WHO/UNICEF (2010)



PRIORITIES, TARGETING AND ADEQUACY OF FINANCIAL FLOWS

Disparity between urban and rural areas ... only 45% of the world's population living in rural areas uses improved sanitation facilities, compared with 76% of the urban population

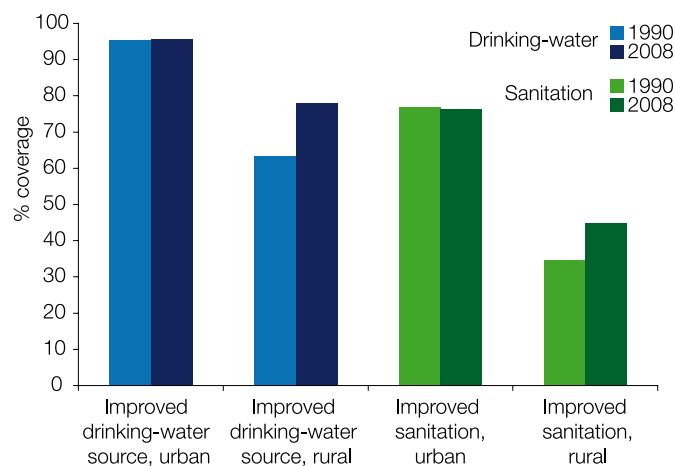


FIGURE 4: Global coverage levels, improved drinking-water sources and improved sanitation, urban and rural, 1990 and 2008

Source: WHO/UNICEF (2010)

Global coverage data suggest large urban/rural disparities in terms of the use of improved drinking-water sources and basic sanitation (Figure 4). While use of improved sanitation in rural areas has increased from 35% to 45% since 1990, there are still over 1.8 billion people in rural areas living without improved sanitation services. In comparison, 96% and 76% of people living in urban areas use improved drinking-water sources and improved sanitation, respectively. However, with the rapid urbanization that took place between 1990 and 2008, the urban population not using water from an improved source increased by 40 million, and the urban population not using improved sanitation increased by 260 million.

Children are at risk ... adequate sanitation and hygiene are lacking in rural schools

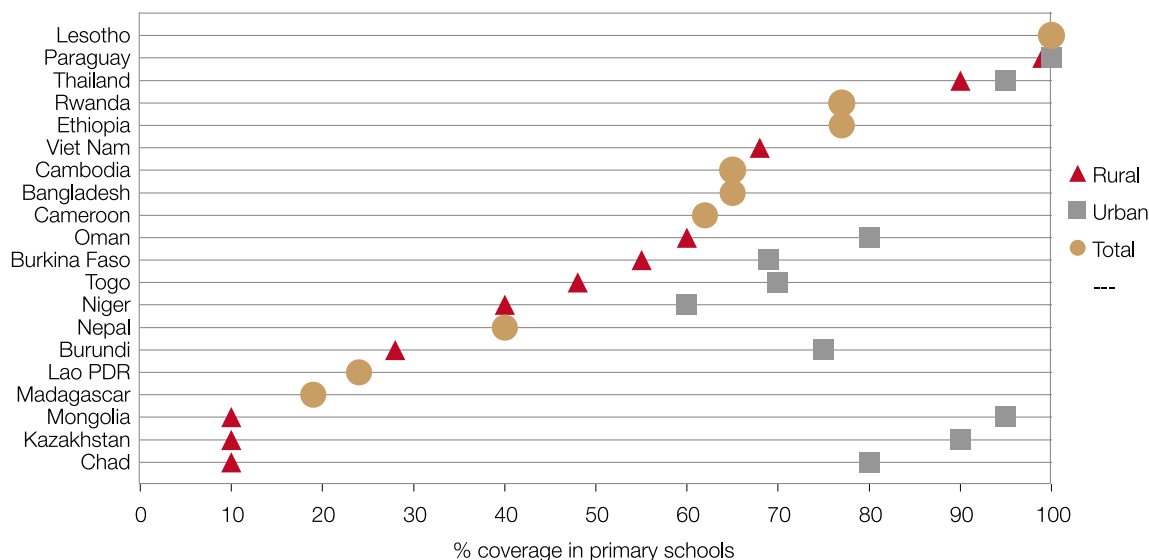


FIGURE 5: Access to sanitation and hygiene in primary schools: total, urban and rural

Sources: 2009–2010 CSO and GLAAS country survey results; WHO (2008c)

Countries have reported the estimated percentage of primary schools that have adequate sanitation facilities, including access to improved water and soap for hand-washing. For one half of the responding countries, the percentage of rural primary schools with adequate sanitation and hygiene facilities was less than 50%. All countries reported that over 60% of primary schools in urban areas have adequate sanitation and hygiene facilities, with four countries reporting that adequate sanitation and hygiene facilities are provided at 90% or more of urban primary schools. Figure 5 summarizes these data and is sorted by increasing rural primary school coverage. Twenty-four out of 26 countries report that hygiene education programmes are implemented in both urban and rural primary schools.

1.2 PRIORITIZATION OF SANITATION AND DRINKING-WATER

Establishing the priority of sanitation and drinking-water in relation to other aid sectors provides perspective for policy-makers. Sanitation and drinking-water have historically been perceived as relatively low in priority, compared with other social sectors, at both donor and developing country levels. Sanitation and hygiene education is especially difficult to place as a priority area due to the lack of clear identification of institutional roles and responsibilities for sanitation, the merging of sanitation with drinking-water services and the perception in some countries that sanitation is mainly a household issue.

Priority-setting ... drinking-water and sanitation are high priorities, but not among the top priority areas for external support agencies

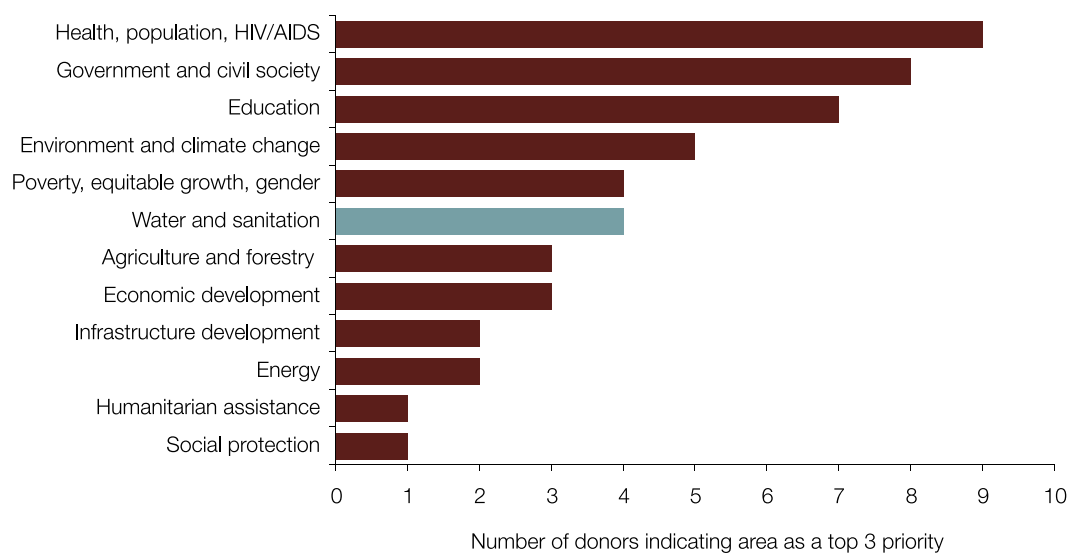


FIGURE 6: Priority areas for external support agencies (15 respondents)

Source: 2009–2010 GLAAS external support agency survey results

External support agencies were requested to indicate the top three priority areas for their organizations. As shown in Figure 6, the most frequently cited top-three priority sectors at donor level included 1) health, population and HIV/AIDS, 2) government and civil society and 3) education. Several external support agencies cited the use of criteria in selecting priority sectors, including 1) providing access to basic infrastructure services and 2) supporting the attainment of the MDG targets.



PRIORITIES, TARGETING AND ADEQUACY OF FINANCIAL FLOWS

Aid commitments to water and sanitation comprised 5% (US\$ 7.4 billion) of reported development aid in 2008

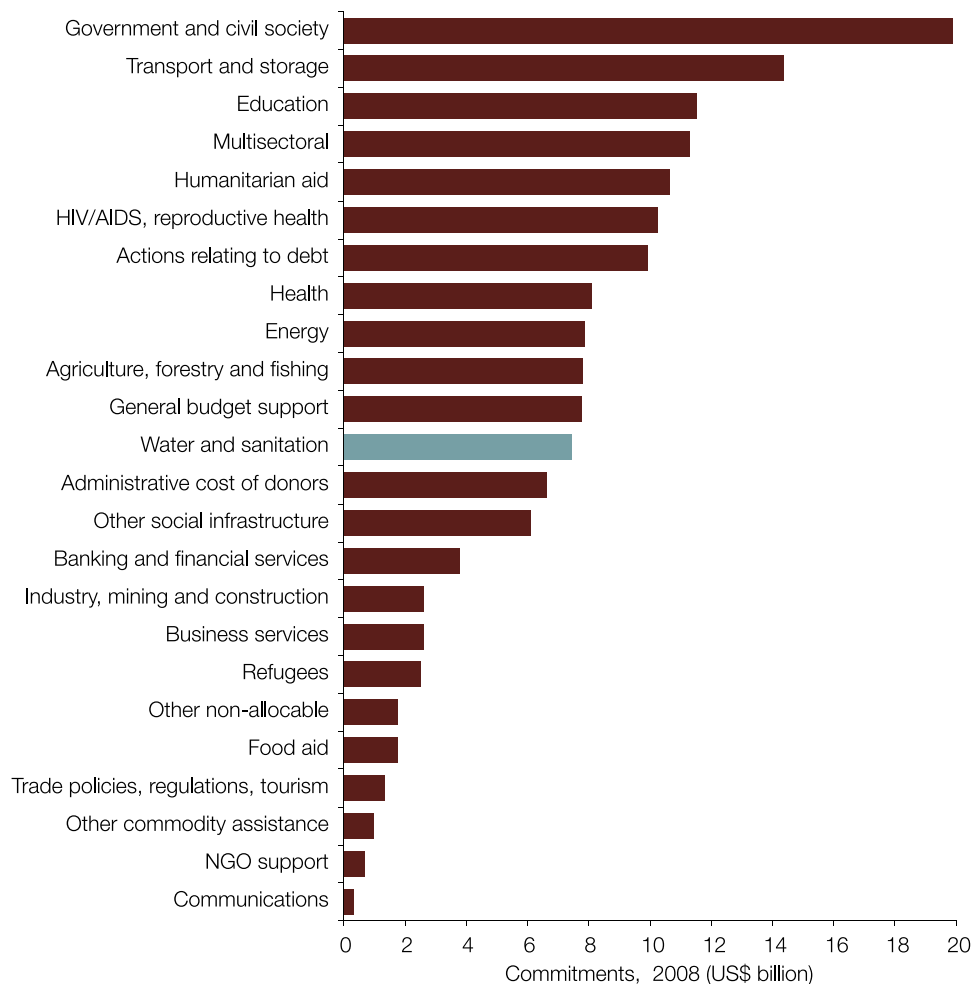


FIGURE 7: Sanitation and drinking-water aid commitments in relation to all other ODA commitments, 2008

Source: OECD (2010a)

A total of US\$ 158 billion in development aid commitments was reported for 2008. Commitments to water and sanitation comprised US\$ 7.4 billion (Figure 7), or 5% of all reported development aid. When compared with other development aid commitments, commitments to sanitation and drinking-water were lower than all other commitments for the social sectors, which include health and education, and lower than those for government and civil society, transport and storage, energy and agriculture.

Sanitation and drinking-water aid levels provide a relative measure of priorities, but investments in other areas are also beneficial

It should be recognized that considering only the total amount of allocable aid to sanitation and drinking-water will under-represent development efforts designed to ensure that improvements in access are sustainable. For instance, improving governance, strengthening local capital markets, improving regulatory policy-making and implementation, ensuring personal safety and community development not only benefit a wide range of sectors, but for some countries can be viewed as contributory first steps in the progression to sustainable access to drinking-water and sanitation services. Likewise, investments in water and sanitation provide wide-ranging benefits in other sectors as well, such as improved health, increased school attendance, and increased worker productivity and economic activity.

In comparison with health and education, the sanitation and drinking-water share of development aid has markedly decreased over the past decade

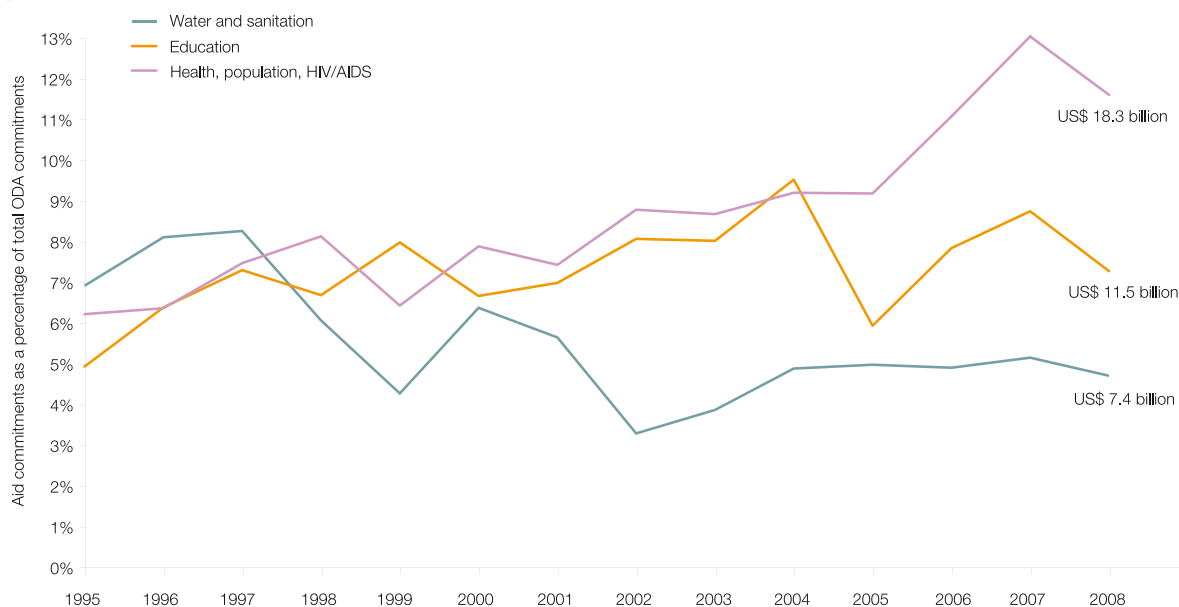


FIGURE 8: Trends in aid for water and sanitation, education, and health/population/HIV/AIDS, as a percentage of total ODA commitments, 1995–2008

Source: OECD (2010a)

Historical data show that sanitation and drinking-water enjoyed more than 8% of total ODA in 1997. At that time, other social infrastructure sectors, such as health, education, population and reproductive health, received lower proportions of aid compared with sanitation and drinking-water. During the 11 years since 1997, however, the proportion of development aid allocated to sanitation and drinking-water fell from 8% to 5%, while development aid allocated to health increased from 7% to 11.5% and that for education remained steady at around 7% (Figure 8).

