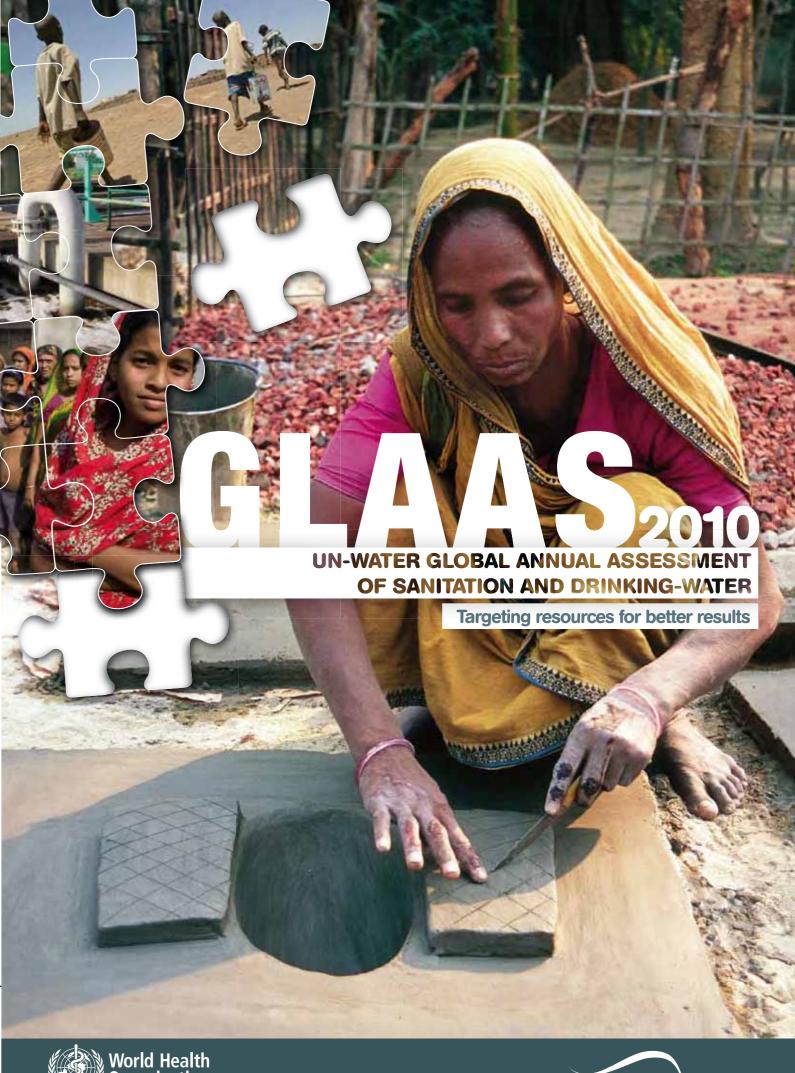
Dear Reader!

The publication of this document does not pursue for itself any commercial benefit. But such documents promote the most rapid professional and spiritual growth of readers and are advertising of paper editions of such documents.

You can download (copy) this file for educational purposes only. PLEASE NOTE that ANY COMMERCIAL USE of this file IS STRICTLY FORBIDDEN You should delete it immediately after your reading is completed. Under international legislation you are responsible for prorer use of this file. All copywrite reserved by owner.





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

© 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).

(NLM classification: WA 675)

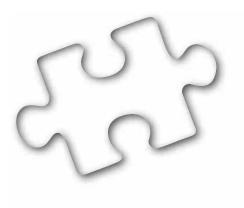
The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation 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





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 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.

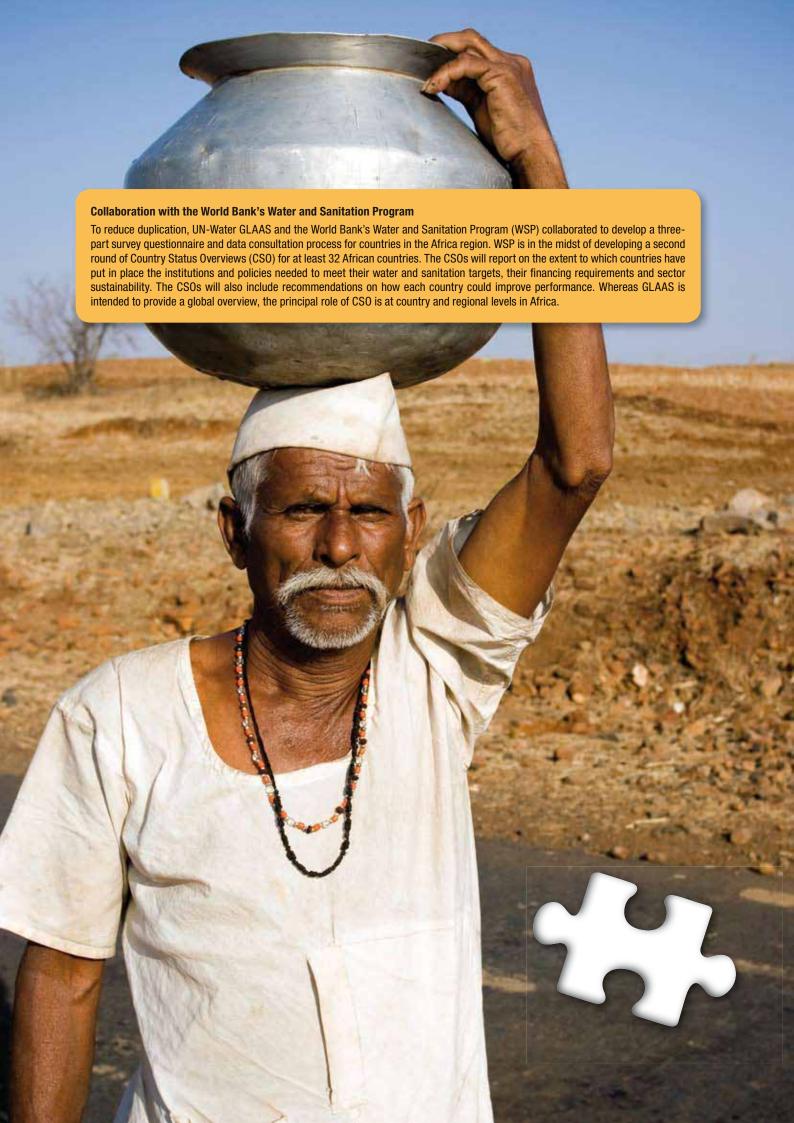
Additionally, UN-Water and WHO would also like to acknowledge the role of a large number of professionals and institutions that have contributed in different ways to this assessment and report: Nicole Bella, United Nations Educational, Scientific and Cultural Organization (UNESCO); Julia Benn, OECD; 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.



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

	Executive su	mmary	2
	Purpose and	overview	4
	Report guide	ş	5
*	Part 1. Priorit	ties, targeting and adequacy of financial flows	7
	1.2 Prioritization of 1.3 Adequacy of	of investing in sanitation and drinking-water of sanitation and drinking-water financial flows anitation and drinking-water funding	8 13 17 22
*	Part 2. Count	try capacity to sustain progress	37
	2.3 Budgets and	nal coverage goals and monitoring progress	38 40 43 48
¥.	Part 3. Partne	erships and external support to accelerate and sustain progress	53
	3.1 Stakeholder coordination and harmonization3.2 Aid channelling and alignment3.3 Towards mutual accountability		55 58 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 drinkingwater is surely unacceptable.

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.

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.

Recommendation 1

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

Recommendation 2

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



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 drinkingwater. 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 drinkingwater, 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 drinkingwater, using their particular skills and resources and aligning with national systems

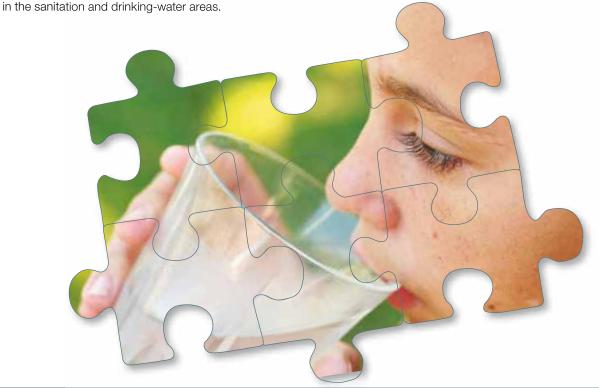
PURPOSE AND OVERVIEW

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



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.

