INVESTING IN WATER AND SANITATION:
INCREASING ACCESS, REDUCING INEQUALITIES

GLAAS 2014 findings —
Highlights for the European Region
The UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS), implemented by WHO, monitors the efforts and approaches to extend and sustain water, sanitation and hygiene (WASH) systems and services. It provides a global update on four key areas: policy framework, monitoring, human resources base, and international and national finance streams in support of drinking-water and sanitation.

Twelve countries1 with a total population of 118 million in the WHO European Region participated in the GLAAS 2013/2014 reporting cycle. Overall, access to improved drinking-water and sanitation services in these countries was 93 and 94 per cent in 2015, respectively. More than 2 million people gained access to an improved drinking-water source and nearly 3 million people gained access to improved sanitation in the 2005 to 2015 time period.2 However, there were still 6.8 million people without improved sanitation, and 7.6 million without access to an improved drinking-water source in 2015.

Despite service improvements, there is a substantial need to further strengthen government commitments and actions to implement national policies and plans for the provision of safe and sustainable water and sanitation services, with a particular focus on rural areas. As shown by Figure 1 and Figure 2, there are a number of challenges that need to be addressed, including:

- Geographic and economic inequalities in access to water and sanitation,
- Building capacity for surveillance of water supplies,
- Developing and implementing strategies for human resources, and
- A need to establish a comprehensive national system for planning and implementing WASH sector financing.

1 Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Lithuania, Republic of Moldova, Serbia, Tajikistan, the former Yugoslav Republic of Macedonia, Ukraine

Drinking-water, sanitation and hygiene overview

**Overview of policy, monitoring, human resources and financing in drinking-water (percentage of countries with the given indicator in place both for urban and rural areas)**

**ASSESSING INPUTS IN DRINKING-WATER**

**FINANCE**
- Finance budget/plan approved and consistently followed.
- Over 80% of operating and maintenance costs are covered by tariffs.
- Affordability schemes exist and are widespread.
- Financing allocated to drinking-water is sufficient to cover over 75% of what is needed to meet targets.

**NATIONAL PLANNING AND COORDINATION**
- National policy approved and plan being fully implemented.
- Coverage targets in place.
- Measures to ensure drinking-water meets national standards.
- High participation of users in planning.

**HUMAN RESOURCES**
- Human resource strategy exists.
- Action plan to fill human resource gaps is defined.
- Funds available for financing staff.
- Availability of skilled workers.

**MONITORING**
- Perform independent audits of drinking-water quality / inform remedial action.
- Data available and used for majority of decisions regarding policy and strategy.
- Data available and used for majority of decisions regarding resource allocation.
- Results of internal monitoring are reported to regulators and trigger corrective action.

Source: GLAAS 2013/2014 country survey.
Figure 2

Overview of policy, monitoring, human resources and financing results in sanitation (percentage of countries with the given indicator in place both for urban and rural areas)

ASSESSING INPUTS IN SANITATION

FINANCE
- Finance budget/plan approved and consistently followed
- Over 80% of operating and maintenance costs are covered by tariffs
- Affordability schemes exist and are widespread
- Financing allocated to sanitation is sufficient to cover over 75% of what is needed to meet targets

NATIONAL PLANNING AND COORDINATION
- National policy approved and plan being fully implemented
- Coverage targets in place
- High implementation of measures to reuse wastewater and/or septage
- High participation of users in planning

HUMAN RESOURCES
- Human resource strategy exists
- Action plan to fill human resource gaps is defined
- Funds available for financing staff
- Availability of skilled workers

MONITORING
- Data available and used for majority of decisions regarding policy and strategy
- Data available and used for majority of decisions regarding resource allocation
- Results of internal monitoring are reported to regulators and trigger corrective action

Source: GLAAS 2013/2014 country survey.
National policies for sanitation and drinking-water exist in each of the 12 respondent countries, however, the level of implementation of these policies is low. Only four to five countries indicate that policies are fully implemented in each subsector (Figure 3).

**Improved coordination across different stakeholders and more participatory planning are needed to strengthen the implementation of national commitments.**

![National policy implementation in drinking-water (12 country respondents)](image)

- Plan is fully implemented with funding and regularly reviewed for both urban and rural areas (Azerbaijan, Belarus, Estonia, Kazakhstan).
- Plan is fully implemented with funding and regularly reviewed for urban areas only (the former Yugoslav Republic of Macedonia).
- Policy and plan are costed and partially implemented for both urban and rural areas (Republic of Moldova, Serbia and Tajikistan).
- Policy and plan are costed and partially implemented for urban areas only (Ukraine).
- Implementation plan is developed based on approved policy for both urban and rural areas (Kyrgyzstan and Lithuania).
- National policy is formally approved and communicated through public announcement for both urban and rural areas (Georgia).
- Not applicable.
- Data not available.

Source: GLAAS 2013/2014 country survey.
DRINKING-WATER QUALITY - A moderate to high level of monitoring and enforcement measures to ensure drinking-water quality are reported to be in place in 10 out of 12 countries (Figure 4).

SUSTAINABILITY - All countries report to be implementing measures to improve the reliability and continuity of urban water supplies, however, measures to ensure the functioning of rural water supplies are less robust. Five countries indicate a low level of implementation to ensure the sustainability of rural water services over the long-term (Figure 4).

WASTEWATER REUSE - Only Kazakhstan reported a moderate level of reuse for treated wastewater and/or septage.

Whilst the majority of the urban populations in the participating European countries report to be served by formal service providers, there is still a considerable number of people served by other means—examples of sources of drinking-water cited as used by European countries were springs, rivers and wells (Figure 5).
Equity measures lacking in several countries

Although three quarters of the respondent countries recognize the human right to water and sanitation, gaps remain in establishing equity measures to reach disadvantaged populations.

A majority of respondent countries have legislation in place that outlines user participation in WASH planning. However, the extent of user participation remains limited with only one country reporting to have a high level of user-involvement in WASH planning.

### Indicators of policies and measures to ensure equity in WASH services by country

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Human right recognized in law</th>
<th>Specific measures are included in national plan to reach disadvantaged groups</th>
<th>Participation procedures are defined in law or policy</th>
<th>Extent to which service users participate in planning</th>
<th>Existence of a public complaint mechanism for populations served</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Drinking-water</td>
<td>Sanitation</td>
<td>Drinking-water and sanitation</td>
<td>Drinking-water sanitation</td>
<td>Drinking-water</td>
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<tr>
<td>National</td>
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<td>National</td>
<td>National</td>
<td>National</td>
<td>National</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Belarus</td>
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<td>Yes</td>
<td>Yes</td>
<td>No</td>
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</tr>
<tr>
<td>Estonia</td>
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</tr>
<tr>
<td>Georgia</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Kazakhstan</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Kyrgyzstan</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Lithuania</td>
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<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Republic of Moldova</td>
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<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Serbia</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>The former Yugoslav Republic of Macedonia</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ukraine</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

* No difference between urban and rural areas apart from Georgia (only in urban areas).

Source: GLAAS 2013/2014 country survey.
Monitoring of drinking-water and sanitation

Oversight and operational monitoring of drinking-water and sanitation services (e.g. quality, cost recovery, line breaks, affordability, costs) are conducted to ensure the continuity of service, inform decision-making for implementing improvements, provide accountability to the public, and ensure services meet expected standards.

In over 80% of surveyed European Region countries (10 out of 12), formal service providers in urban areas provide the results of their internal (operational) monitoring to regulatory authorities for comparison against required service standards, and are subject to corrective action as needed. However, there is no well-established mechanism of reporting by informal service providers (Figure 6).

Service standards for drinking-water monitored by service providers in the European Region include quality and pressures, however, the exact requirements vary between countries. For sanitation, service requirements include percentage of wastewater collected and treated.

Overall, more European countries have developed a full cycle of monitoring, reporting and corrective action for drinking-water than for sanitation (Figure 6).
Use of monitoring data for resource allocation

Half of respondent countries (six out of 12) reported that they collect and analyze data through a management information system and regularly use the results for resource allocation in both sanitation and drinking-water (Figure 7). There is less data for decision-making and resource allocation available in general for sanitation.

![Data availability for decision-making in resource allocation (12 respondent countries)](image)

Source: GLAAS 2013/2014 country survey.

Communicating performance data to the public

Over two thirds of respondent countries report that performance and customer satisfaction reviews are publicly available for most formal service providers in urban areas for both sanitation and drinking-water. However, less than 60% of countries reported that reviews are publicly available for most service providers in rural areas.
Most countries in the European Region have established some performance indicators for water and sanitation

Though three quarters of countries reporting from the European Region have established performance indicators for water and sanitation, less than a third report to be using a comprehensive set of performance indicators for either drinking-water supply or sanitation services (Table 2).

### Table 2: Performance indicators used to track progress - main indicators and extent of usage of indicators (12 respondent countries)

<table>
<thead>
<tr>
<th>CATEGORY TYPE</th>
<th>PERCENTAGE OF COUNTRIES REPORTING USE OF STANDARD INDICATORS FOR DRINKING-WATER</th>
<th>MOST COMMONLY CITED INDICATORS FOR DRINKING-WATER</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINANCIAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenditure</td>
<td>33%</td>
<td>% or ratio spent/allocated</td>
</tr>
<tr>
<td>Cost-recovery</td>
<td>33%</td>
<td>Coverage of costs, recovery of billing</td>
</tr>
<tr>
<td>Cost-effectiveness</td>
<td>25%</td>
<td>Operation and maintenance costs, costs per unit volume produced</td>
</tr>
<tr>
<td>EQUITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equitable service coverage</td>
<td>58%</td>
<td>Access coverage by geographical area (e.g. broad regions or administrative units)</td>
</tr>
<tr>
<td>Affordability</td>
<td>25%</td>
<td>Ability of the poor to pay for service</td>
</tr>
<tr>
<td>SERVICE PROVIDER INDICATORS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service quality</td>
<td>42%</td>
<td>Quality of water, service time</td>
</tr>
<tr>
<td>Functionality of systems</td>
<td>25%</td>
<td>Working/non-working infrastructure, working/non-working hours</td>
</tr>
<tr>
<td>Institutional effectiveness</td>
<td>25%</td>
<td>Non-revenue water, total staff/per 1000 connection</td>
</tr>
</tbody>
</table>

Source: GLAAS 2013/2014 country survey.
Human resources

Even where national strategies are well developed, government institutions are well coordinated and sufficient financing is available, progress on sanitation and drinking-water relies on adequately trained, capable staff and a work environment conducive to effective outputs.

Countries in the European Region report a shortage of skilled workers (e.g. engineers, chemists, mechanics, hygienists, etc.) in WASH, especially in rural areas. Countries surveyed cited several problem areas in human resource development, including:

- Limited staff training;
- Insufficient number of educational institutions;
- Low financial resources resulting in low salaries;
- Poor operating practices; and
- Poor condition of infrastructure.

As a result of these constraints, the sector’s ability to recruit and retain skilled workers is limited.

Most surveyed countries in the European Region cited the lack of skilled graduates and insufficient educational institutions as severe constraints on WASH human resources (Figure 8).

Despite staff shortages, only one third of countries surveyed in the European Region have an overall strategy to develop and manage human resources for drinking-water and sanitation, and half of countries have a human resources strategy for hygiene promotion.
Extending and sustaining water and sanitation programmes, and infrastructure, especially in the context of reducing inequalities, requires adequate funds and effective financial management.

Nearly all respondent countries indicate they have an approved financing plan/budget for the WASH sector and approximately 60% of countries reported that it is consistently followed in both urban and rural areas. However, limited data was available in the region on WASH budgets and expenditures, with only five countries providing data on national WASH budgets and six countries providing data on total or partial WASH expenditures (Table 3).

The proportion of WASH expenditure as a percentage of Gross Domestic Product (GDP) could be estimated for the five countries providing total WASH expenditure (Figure 9). Total expenditure, however, may not be complete, as in the case of Serbia the expenditure does not include financing raised through tariffs.
Data on expenditure allocations are largely unavailable

A review of expenditure breakdowns can indicate potential issues with targeting of financial resources. However, only limited data were available for countries in the European Region.

- **WATER VERSUS SANITATION:** The disaggregation of expenditure data for water and sanitation was available for only two countries. The percentage of expenditure for sanitation of the total WASH expenditure was obtained for the Republic of Moldova (35%) and Serbia (22%).

- **RURAL VERSUS URBAN:** Disaggregation of expenditure data by rural / urban areas was provided by only two countries. The expenditure data from tariffs was available only for rural areas in Kyrgyzstan. For Tajikistan, the estimated expenditure for rural areas was reported to be 28% of total WASH expenditure.

The lack of data on expenditure allocations indicates a need for establishing a comprehensive system for planning, fund allocation and tracking WASH sector financing in countries.

Overall financing is reported to be insufficient to meet targets

From the information available, only three countries (Azerbaijan, Estonia, and Kazakhstan) out of the 12 respondents indicated that sufficient financing is available to meet water, sanitation and hygiene targets.

There is also an indication that basic costs for sustaining and maintaining services are not being met by tariffs. Only one quarter of countries report that tariffs cover over 80% of operating and maintenance costs in urban and rural areas (Note: data for Kazakhstan and Kyrgyzstan were not available). The financing gap needs to be met by alternative financing sources so as to ensure the safe and sustainable provision of services.

A majority of participating countries in the WHO European Region report utilization of over 75% of domestic commitments in WASH. Countries cited several reasons for under-utilization of domestic funds including:

- Delay in public procurement processes,
- Budget period being too short,
- Funding release procedures being too lengthy,
- Overly complicated tender procedures,
- Lack of technical and human capacity, and
- Lengthy and complex procedures when expropriating lands for new infrastructure.
External support

Supporting the achievement of country objectives in water and sanitation, external support agencies (ESAs) play a vital role in WASH programmes in many countries providing both financing and technical support (Figure 10).

Aid commitments to water and sanitation (US$ 614 million) comprised 5.0% of total reported development aid (US$ 12.4 billion) to the European Region in 2013.

**Figure 10**

Comparison of development aid to European Region countries for water and sanitation in 2013 relative to other sectors

Insufficient WASH coverage is not the only factor for prioritizing/targeting WASH aid

External support agencies use a number of criteria to select countries in which to allocate development aid for sanitation and drinking-water (Figure 11). Needs based on poverty or coverage levels, established in-country presence, and relevance of contributions are the most frequently cited criteria used by donors. Other targeting criteria used include existence of strategic dialogue, strength of sector plans/budgets, and quality of governance, among others.

* NOTE: Countries with an asterisk (*) had no data available to estimate sanitation coverage.

Important contributors to the European Region, in terms of aid amounts, include Germany, the European Commission, and the Asian Development Bank.

Eight ESAs contributed more than US$ 10 million per year on average to the European Region from 2011 to 2013. The highest proportion of aid for water and sanitation (45%) is targeted towards large systems, while 32% of development aid is targeted towards basic systems. Eighty (80%) of aid is in the form of concessional loans¹ and 20% of aid is in the form of grants (Figure 12).

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¹ For a loan to qualify as ODA, it must among other things, be concessional in character and must convey a grant element of at least 25 per cent. The grant element test is a mathematical calculation based on the terms of repayment of a loan (e.g. grace period, maturity and interest) and a discount rate of 10 per cent.