

Protocol on Water and Health to the Convention  
on the Protection and Use of Transboundary  
Watercourses and International Lakes



# NO ONE LEFT BEHIND

GOOD PRACTICES TO ENSURE EQUITABLE ACCESS TO WATER  
AND SANITATION IN THE PAN-EUROPEAN REGION



UNITED NATIONS



World Health  
Organization  
REGIONAL OFFICE FOR  
Europe



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**UNITED NATIONS**

New York and Geneva, 2012



**World Health  
Organization**

REGIONAL OFFICE FOR

**Europe**



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# FOREWORD

*"No one left behind. Good practices to ensure equitable access to water and sanitation in the pan-European region."* The title of this publication reflects its objectives, content and aspirations: to provide guidance on how to ensure that all members of the population benefit from access to water and sanitation in an equitable manner.

Left behind in the pan-European region are 12 per cent of population, nearly 110 million people who do not have access to safe drinking water. The World Health Organization estimates that 13,000 children under the age of 14 die every year in the region from water-related diarrhoea, mostly in Eastern Europe and Central Asia.

While the situation is particularly severe for a major part of the population in Eastern Europe, the Caucasus and Central Asia, many citizens in Western and Central Europe also suffer from the lack of or inequitable access to water and sanitation services. Inequities are frequently related to socio-cultural differences, socio-economic factors and the geographical context. Persons belonging to vulnerable and marginalized groups often face additional barriers to access compared with ordinary citizens, in particular ethnic minorities, migrants, illegal settlers and persons with disabilities. For people with low incomes, the price of water and sanitation services may be unaffordable and prevent them from enjoying a basic level of services. The increasing level of poverty throughout the region places pressure on household incomes available for basic utilities. In many countries, rural residents do not enjoy the same level of access to safe water and adequate sanitation compared with urban dwellers.

Ensuring equitable access to water and sanitation contributes to raising standards of living, promotes societal cohesion and benefits investment, economic growth and sustainable development. The United Nations Economic Commission for Europe (ECE)/ World Health Organization Regional Office for Europe (WHO-Europe) Protocol on Water and Health stipulates that "equitable access to water and sanitation, adequate in terms both of quantity and of quality, should be provided for all members of the population, especially those who suffer a disadvantage or social exclusion", with "special consideration ... to the protection of people who are particularly vulnerable to water-related disease". This publication provides guidance to policy and decision makers on how to comply with these obligations. Relying on the many efforts already carried out in the region, it presents good practices and lessons learned on the policies and measures aiming to provide access to water and sanitation to vulnerable and marginalized groups, to reduce geographical disparities in access, and to address affordability issues.

One year after the recognition by the United Nations General Assembly and the Human Rights Council of the human right to safe water and sanitation, and with less than four years left until the 2015 Millennium Development Goals (MDGs) deadline, the time is ripe to promote the perspective of equitable access and to identify good practices that can inspire faster progress. MDG 7 engages Governments to halve, by 2015, the proportion of people without access to safe drinking water and basic sanitation. The Protocol on Water and Health and the human rights treaties go beyond the 50 per cent reduction, requiring that States ensure universal access to water and sanitation, within time frames tailored to each situation and capacity.

At the Parma Ministerial Conference on Environment and Health in 2010, countries in the pan European region committed to ensure public health by improving access to safe water and sanitation by taking advantage of the approach and provisions of the Protocol on Water and Health. Setting forth a robust framework to review and streamline national policies and institutional structures, the Protocol on Water and Health offers a structured approach to promote equity aspects in access to water and sanitation. In particular, the broad participatory approach fostered by the Protocol ensures that all voices of society, including those who suffer a disadvantage or social exclusion, are heard and taken into account in the establishment of water and health-related targets.

The examples contained in this document demonstrate that action on different levels is possible. We hope that policy and decision makers, at the national and local levels, find inspiration in these good practices to review and, where appropriate, replicate existing approaches and put in place new or additional measures to ensure that no one is left behind in accessing safe water and adequate sanitation. We hope to also inspire other concerned actors such as private and public operators, non-governmental organizations and international donors in the pursuit of equitable access.

As water is life and sanitation is dignity, France is honoured to lead and to continue leading activities to promote equitable access to water and sanitation for all members of the population under the Protocol's programme of work. The joint ECE/ WHO-Europe secretariat to the Protocol on Water and Health will continue supporting countries in their efforts to achieve equitable access. Jointly, we encourage countries to make good use of the information contained in this publication when reviewing and improving their national situation and to continue sharing good practices to ensure equitable access to water and sanitation.



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# PREFACE

Human Rights are universal, inalienable, interdependent and interrelated. The Universal Declaration of Human Rights stipulates that “all human beings are born free and equal in dignity and rights”. Having access to safe drinking water and sanitation is central to living a life in dignity and upholding human rights.

Yet, there are billions of people who do not enjoy their fundamental rights to access to safe drinking water and sanitation. Many of them face significant barriers to access due to where they live and who they are - Are they women? Do they belong to an ethnic minority? Are they poor? Do they live in a slum or in an impoverished rural area? Governments have an obligation to ensure access to water and sanitation for all members of the population, whether rich or poor, male or female, or whether they are living in formal or informal settlements or in urban or remote rural areas.

On 28 July 2010, an important milestone in international efforts to improve the global situation in water supply and sanitation was achieved when the United Nations General Assembly adopted resolution 64/292, recognizing access to clean water and sanitation as a human right. The resolution calls on States and international organizations to provide financial resources, build capacity and transfer technology to scale up efforts to provide safe and clean drinking water and sanitation for all. On 30 September 2010, in resolution 15/9 the United Nations Human Rights Council further specified that this right is derived from the right to an adequate standard of living. The right to water and sanitation requires that these services are available, accessible, safe, acceptable and affordable for all without discrimination.

The human rights to water and sanitation and the United Nations Economic Commission for Europe/World Health Organization Regional Office for Europe Protocol on Water and Health both enshrine the principle of universal access and the commitment to ensure equality and non-discrimination in access to water and sanitation. The Human Rights Council in its resolution 15/9 positively referred to the Protocol as a regional commitment that promotes the further realization of human rights obligations related to access to safe drinking water and sanitation. Assuring the realization of these rights requires an explicit focus on the most disadvantaged and marginalized, as well as an emphasis on their participation and empowerment. States must fully integrate the principle of non-discrimination in their policies and programmes to eliminate disparities in access.

The human rights framework requires that States progressively realize the rights to water and sanitation. They must move as expeditiously and effectively as possible towards their full realization. In this endeavour, they must use the maximum available resources, nationally and from the international community. Resources should be directed, as the first priority, to meet obligations of immediate effect, namely targeting those who still do not have access.

Realizing the rights to water and sanitation also makes sense from an economic perspective. Investing in water and sanitation has a crucial impact on the realization of other human rights, including through improved health, reduced child mortality, increased productivity of adults and school attendance of children, a positive impact on women's rights and reduced environmental degradation. In developed nations, advances in life expectancy and child mortality accompanied economic growth only after Governments began making substantial investments in water supply and, more importantly, in sanitation. For every \$1 spent on sanitation, there is an average return of \$9 in averted costs and productivity gains. Especially in a period of economic crisis, it is fundamental to invest in sectors with multiplier effects and to spend the available resources most efficiently while targeting the most excluded and marginalized.

I am proud to introduce this publication, which provides the necessary guidance on measures to be taken to ensure that everybody living in Europe benefits from access to water and sanitation services. Addressing different facets of the issue of equitable access — specifically affordability and non-discrimination — this publication is a practical tool for Governments and decision makers to inspire progress in the realization of the human rights to safe water and sanitation. I particularly welcome the focus on Europe, as this highlights that a lack of adequate access to water and sanitation is not just an issue for developing countries, but also strikes the heart of some of the richest nations in the world. This document also complements the Book of Good Practices prepared by my mandate, which presents cases of how the rights to water and sanitation are being implemented around the world.



Catarina de Albuquerque  
Special Rapporteur on the human right  
to safe drinking water and sanitation







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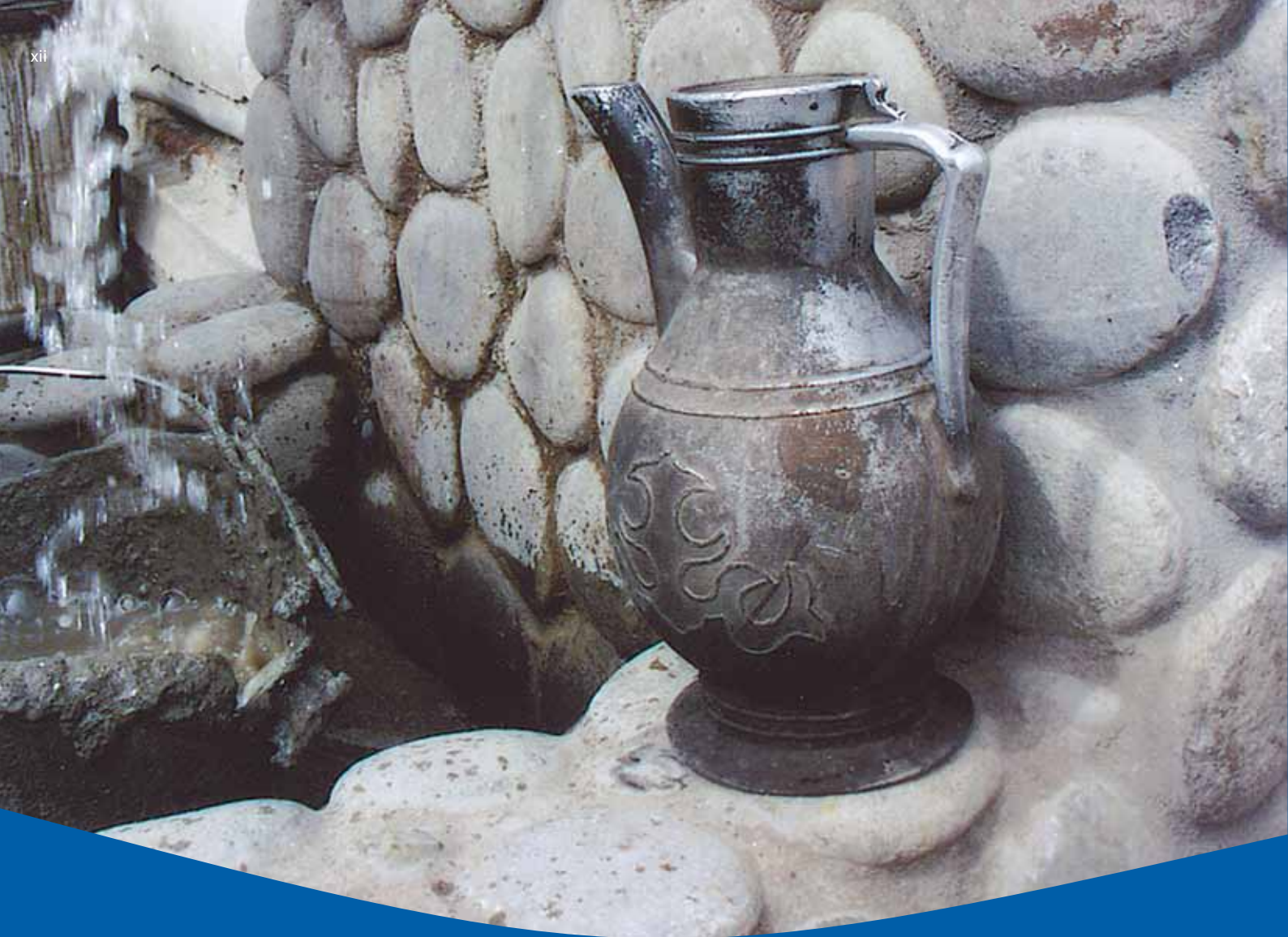


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# LIST OF ACRONYMS AND ABBREVIATIONS

<b>CCWater</b>	Consumer Council for Water (England and Wales)
<b>CEE</b>	Central and Eastern Europe
<b>CEHAPE</b>	Children's Environment and Health Action Plan for Europe
<b>ECE</b>	United Nations Economic Commission for Europe
<b>EEA</b>	European Environment Agency
<b>ERSAR</b>	Entidade Reguladora dos Serviços de Águas e Resíduos
<b>EU</b>	European Union
<b>GDP</b>	Gross domestic product
<b>GEF</b>	Global Environment Facility
<b>GWP</b>	Global Water Partnership
<b>IBT</b>	Increasing block tariff
<b>NGO</b>	Non-governmental organization
<b>OECD</b>	Organization for Economic Cooperation and Development
<b>OIEau</b>	Office International de l'Eau
<b>pS-Eau</b>	Programme Solidarité Eau
<b>UNDP</b>	United Nations Development Programme
<b>UNICEF</b>	United Nations Children's Fund
<b>WECF</b>	Women in Europe for a Common Future
<b>WHO</b>	World Health Organization
<b>WHO-Europe</b>	WHO Regional Office for Europe



*We have at our disposal the policy tools to ensure that strong advances towards universal access to water and sanitation are not made at the expense of putting those populations that require special attention at the end of the access queue.*



# EXECUTIVE SUMMARY

Access to water and sanitation has been recognized as a human right by the United Nations General Assembly and the Human Rights Council. This means that ensuring access to water and sanitation for all is a legal obligation. And in order to comply with this obligation, special attention needs to be paid at an early stage to ensure that access to water and sanitation is equitable for all members of the population. This publication distinguishes three key dimensions in the concept of equitable access to water and sanitation: geographical differences in service provided; discrimination or exclusion in access to services by vulnerable and marginalized groups; and financial affordability for users. The strong linkages between the provision of water supply services and the provision of sanitation services demand a holistic approach to promoting equitable access to water and sanitation.

In the pan-European region,<sup>1</sup> the Parties to the United Nations Economic Commission for Europe/World Health Organization Regional Office for Europe Protocol on Water and Health have committed to ensure equitable access to safe drinking water supply and adequate sanitation through accession to or ratification of the Protocol. Currently, there are important differences among countries of the pan-European region as regards ensuring equitable access to water and sanitation as a result of differences between countries in terms of availability of water resources, socio-economic development, historic levels of access and public policies.

The aim of this publication is to support policymakers at the national and local levels in fulfilling their commitments to ensure equitable access to water and sanitation. It also aims to inspire practitioners, civil society and private sector organizations on the role they can play and the activities they can carry out in achieving equitable access to water and sanitation. Rather than attempting to issue formal guidelines, the document adopts a good practices approach. The intention is that, by providing examples of how different countries have attempted to reduce inequities in access to water and sanitation services, policymakers will find inspiration to try similar or other innovative measures. It is not the intention of this publication that the practices identified in it should be automatically replicated, as good practices are country and situation specific and need to be adapted to the national and local circumstances. Substantial additional efforts are needed to systematically evaluate practices from an equitable access perspective.

## THE CHALLENGE OF ENSURING EQUITABLE ACCESS

Specific approaches are needed to redress inequities in access to water and sanitation. A person may lack access to water

and sanitation simply because there is no access to safe water and sanitation in the community. Sometimes this is due to the degradation of water resources (scarcity, pollution), but more commonly to a lack or poor management of water and sanitation infrastructure. Additionally, a community may have access to safe water and sanitation, but those services are not adapted to the particular needs of certain groups (e.g., disabled people), or are not adequately available in the institutions that those groups rely on (e.g., schools, prisons, refugee camps) or certain groups (e.g., ethnic minorities, illegal settlers) may be denied access to water and sanitation due to unintended or intended discrimination practices. Finally, a person may have access but may not be able to afford to pay the water and sanitation bill without curtailing consumption of other basic goods and services.

Four contextual challenges frame current inequities to access in the pan-European region:

**Water resources availability.** The degradation of the quality of water resources means that many towns and villages that rely on local water sources do not have access to safe water, while water scarcity can deprive some towns and villages from access altogether. Polluted water can be treated to make it suitable for drinking purposes and freshwater can be transported over long distances, but these technical solutions can entail great expense that may render water and sanitation unaffordable.

**Urban-rural gap.** Rural areas in the pan-European region have significantly lower levels of access to water and sanitation services than urban areas and may face higher water tariffs.

**Vulnerable or marginalized groups.** Persons from vulnerable or marginalized groups do not enjoy the same levels of access to water and sanitation as the rest of society. The situation differs across groups, such as persons with special physical needs (such as the disabled or the sick), those who rely on public facilities (such as Travellers or the homeless), users of institutional facilities provided by institutions (such as hospitals, schools, prisons or refugee camps) or those living in unsanitary housing.

**Affordability.** The cost of water is a growing concern for all countries. For the poorest countries, either a large part of the population already devotes an important share of their income to pay for water and sanitation services, or they may be facing this situation in the future if tariffs are increased to ensure financial sustainability. In European Union countries, more stringent water quality objectives and progress towards full cost recovery also means that paying for water and sanitation services has become a real concern for lower income families.

<sup>1</sup> For the purposes of this publication, pan-Europe is understood to include the 56 States members of the United Nations Economic Commission for Europe and the 53 States in the WHO European Region.



## INTERNATIONAL OBLIGATIONS TO ACHIEVE EQUITABLE ACCESS

The human right to water and sanitation entitles everyone to water and sanitation which is available, accessible, affordable, acceptable and safe.<sup>2</sup> As with any other human right, a fundamental principle is every person's right to enjoy this right without discrimination, which opens space for affirmative action or special measures to guarantee de facto equity. This principle can be used as a justification to provide first access before improving the conditions of access for those that already have it.

The Protocol on Water and Health provides a sound framework for the translation of the human right to water and sanitation into practice, in particular through the setting of specific targets and target dates. In addition to other key components of the human right to water, such as access to information, public participation and accountability provisions, the Protocol specifically commits its Parties to promote equitable access to water and sanitation.

Each country has the obligation to provide access to water and sanitation for all. Thus the brunt of the financial cost is to be borne primarily by national and local budgets. At the same time, both in relation to the application of human rights and the implementation of the Protocol, the international community acknowledges a legal obligation of assistance and cooperation.

Significant financial resources are already being devoted by the international community to improve access to water and sanitation, but there is a need to enhance the contribution of those resources to achieving equitable access.

## STEERING GOVERNANCE FRAMEWORKS TO ENSURE EQUITABLE ACCESS

The realization of the right to water and sanitation requires political commitment and a long-term vision for reaching those who do not yet have access. In many cases, current national and local water governance frameworks are failing to deliver equitable access for the following reasons: broader governance frameworks may limit or undermine efforts in the water sector; weak water governance and management results in poor sector performance, and current water governance frameworks are often "equity blind".

Yet, good water governance and management can go a long way towards achieving equitable access objectives — examples include transparency and access to information, inclusive participation of stakeholders in decision-making, incentives for operators to improve efficiencies and keep costs down, and accountability and redress mechanisms that are effectively accessible to all people.

That is unlikely to be enough, however. Applying an "equitable access lens" will speed up progress. This does not necessarily require setting up new legal and institutional mechanisms and processes, since many existing mechanisms can be used to promote equitable access. It does require, however, a results-oriented action plan building on country situation analysis and context-specific equity indicators. The present document therefore provides a checklist to help countries develop a strategic framework for achieving equitable access.

All water and sanitation stakeholders need to be engaged and roles and responsibilities identified and allocated. Water users must participate as key actors and not only as beneficiaries. Transparency, access to information, education and participatory mechanisms must be institutionalized to ensure equitable and sustainable outcomes, but the participation of the members of vulnerable and marginalized groups constitutes a real challenge in all countries and must be given special attention. Water operators also need to be more responsive to delivering equitable access, and local government and civil society organizations need to play a greater role.

## REDUCING GEOGRAPHICAL DISPARITIES

The levels of service received by users in different geographical areas within the same country can be very different. According to the United Nations Children's Fund/World Health Organization Joint Monitoring Programme, access to improved water and sanitation solutions in rural areas in the pan-European region is 10% lower than for urban areas. Rural households are many times more likely to lack access to piped water at home than urban households. Access and price gaps between geographical areas can be attributed to underlying cost structures, but also to political influence and decisions.

<sup>2</sup> General Assembly resolution 64/292; Human Rights Council resolution 15/9.

Reducing access gaps requires political, financial and technical efforts. International cooperation can play an important role in closing access gaps by focusing support on the areas that lag behind. Importantly, geographical disparities in access are not just a water policy issue, but also a regional policy issue.

Public policies have a fundamental role to play in reducing price disparities between geographical areas by: (a) targeting investment programmes and subsidies to areas with higher costs of service; (b) enabling cross-subsidization from high-income low-cost areas to low-income high-cost areas; and (c) promoting efficiency and rational prices through sector organization reform and the use of information tools such as benchmarking and tariff reference values.

### **ENSURING ACCESS FOR VULNERABLE AND MARGINALIZED GROUPS**

Water and sanitation for all will not be achieved without paying particular attention to the needs of vulnerable and marginalized groups. Human rights principles highlight the need to actively design water and sanitation policies that prioritize and address the needs of vulnerable and marginalized groups, rather than treating all persons as facing identical challenges in accessing safe water and improved sanitation. Water and sanitation for vulnerable and marginalized groups is often a social exclusion issue, not just a water issue.

There are many vulnerable and marginalized groups, each with their own needs and facing different barriers to achieving equitable access and thus requiring differentiated solutions. It is important for policymakers and all the actors involved in policy implementation, such as regulatory agencies, asset-holders and service providers (whether public or private), to dedicate time and resources to reviewing whether vulnerable and marginalized groups are being included, and that their particular needs are being taken into account.

In many cases, adequate solutions require an integrated response combining policies and ensuring collaboration across public agencies. Ensuring access to water and sanitation for vulnerable and marginalized groups requires targeted financial resources, which in many cases can be mobilized by reprogramming existing budgetary resources for the sector (since in many cases needs are not massive in comparison with a country's water and sanitation budget). This, in turn, requires increased awareness among policymakers and technical staff.

### **KEEPING WATER AND SANITATION AFFORDABLE FOR ALL**

To achieve equitable access to water and sanitation, it is also necessary to ensure that the bill for water and sanitation services is affordable. In Western European countries, increases in water and sanitation costs (due primarily to higher wastewater treatment requirements) have been and will continue to be reflected on water and sanitation bills. In Eastern European countries, where water prices have been traditionally low, the water bill is likely to increase. Affordability is thus a common and increasing concern in the pan-European region, although with differences among countries, and requires adopting a long-term strategy in each country.

Affordability concerns are not merely linked with tariff levels; they are actually driven by five sets of variables: the income level and income distribution in a given country or area, the cost of provision in a given country or area, the subsidy policies in place, the tariff policies in place and the individual behaviour of users. Compliance with national affordability indicators is not enough to ensure that the low-income groups in each country have affordable access — specific policies need to be developed to that end. Affordability is not just a water issue; it is a social protection issue that requires incorporating water and sanitation aspects within social policy discussions.

There are many policy options available to deal with affordability concerns, both in-tariff and out-of-tariff. Criteria to select them should include their effectiveness in reaching the target groups and their demands in terms of administrative capacity and costs. Relying only on tariff design is not enough to ensure affordability: social tariffs and social protection measures are required. To adopt such social tariffs and social protection measures in turn requires the existence of a social policy infrastructure. The options to address affordability concerns will demand financing from other water users or from taxpayers. However, user-financed systems are already under increasing pressure and may be reaching their limits in some cases. And water governance already in place in many cases may dictate the terms of possible policy options — for example, the fragmentation of service provision in many service areas limits the scope for cross-subsidies between users.





*Upholding the human right to water and sanitation requires paying special attention to geographical differences in access, access by vulnerable and marginalized groups, and affordability issues.*

# INTRODUCTION

## KEY MESSAGES

- » Access to water and sanitation has been recognized as a human right by the United Nations General Assembly and the Human Rights Council and ensuring access to water and sanitation for all is now a legal obligation. In order to comply with this obligation, special attention needs to be paid at an early stage to ensure that access to water and sanitation is equitable for all members of the population.
- » In the pan-European region, the Parties to the Protocol on Water and Health have committed to ensure equitable access to safe drinking water supply and adequate sanitation through accession to or ratification of the Protocol.
- » There are important differences among countries of the pan-European region as regards ensuring equitable access to water and sanitation — this is the result of differences between countries in terms of availability of water resources, socio-economic development, historic levels of access and public policies.
- » This publication distinguishes three key dimensions in the concept of equitable access to water and sanitation: geographical differences in service provided; discrimination or exclusion in access to services by vulnerable and marginalized groups; and financial affordability for users. The strong linkages between the provision of water supply services and the provision of sanitation services demand a holistic approach to promoting equitable access to water and sanitation.
- » Good practices on ensuring equitable access to water and sanitation do exist and can be used as a source of inspiration. At the same time, substantial additional efforts are needed to systematically evaluate practices from an equitable access perspective.

## **I.1 ENSURING EQUITABLE ACCESS TO WATER AND SANITATION: BACKGROUND AND RATIONALE**

### **I.1.1 Equitable access to water and sanitation**

Policymakers responsible for water and sanitation<sup>3</sup> are under pressure. There are new obligations. The expectations are very high, the engagements very demanding, and the financial resources limited. Solutions to current challenges facing the sector require significant increases in investments and in many cases radical reforms in policies and governance frameworks. Technical advice can guide investment and reform decisions. But the make-or-break decisions are political, not technical.

Many of those political questions revolve around the concept of equitable access to water and sanitation. Is it acceptable for society at large that some people get sick because they have no access to safe water and adequate sanitation? What is the minimum level of water and sanitation services that the State should ensure for all citizens? Is there a limit to how much poor households should have to pay for basic access to water and sanitation? Is it acceptable that some powerful territories and social groups capture most of the public expenditures on water and sanitation? Should particular efforts be made to ensure that vulnerable and marginalized groups also have access to water and sanitation? What role should solidarity play in the financing of water and sanitation services?

Without addressing those political questions, real progress will not happen. For example, a well-performing water and sanitation sector needs to be financially sustainable, and that will require in many cases increases in tariffs. But those increases in tariffs in turn raise issues of affordability. If affordability concerns (a key dimension of equitable access) are not addressed, overall progress in the sector is in jeopardy.

This document aims to support policymakers in addressing those key political questions by raising the issues, discussing the options to address them and providing examples from different countries.

Ensuring access to water and sanitation for all is a common aspiration and obligation for all countries, as demonstrated by the inclusion of water and sanitation targets in the Millennium Development Goals and the recognition of water and sanitation as human rights by the UN General Assembly and the Human Rights Council. Progress to fulfil those aspirations and obligations is uneven across the pan-European region. At present, about 110 million people in the region, or 12% of the population, still live in homes which do not have access to safe drinking water. According to the best estimates of the World Health Organization (WHO), in the pan-European region more than 13,000 children under the age of 14 die every year from water-related diarrhoea, mostly in Eastern Europe and Central Asia. Thus, contrary to common perceptions, access to safe drinking water and to improved sanitation remains a

challenge in several countries of the pan-European region, with the situation in some countries actually regressing instead of progressing.

Furthermore, those figures hide important inequities in access to water. A major inequity is related simply to the place where people live: in many countries people living in rural areas have significantly lower levels of access to safe water and improved sanitation. Another major inequity is related to the socio-cultural characteristics of people: people belonging to vulnerable and marginalized groups (such as disabled persons, ethnic minorities, or illegal settlers) often face additional barriers to access than those of ordinary citizens. In addition, inequities in access may be related to socio-economic characteristics: for people with low incomes, the regular price of water and sanitation services may be unaffordable and prevent them from enjoying a basic level of services.

If water and sanitation for all is to be achieved, special attention needs to be paid to redress such inequities early on. Some policymakers are not aware of these inequities. Other policymakers are aware, but trust that the general approach to improve access will deal with them. Still others recognize that business as usual will unjustly leave certain people unserved for a longer time than other citizens, but are afraid that the specific efforts needed to deal with those inequities are unaffordable and will result in slower aggregate progress. Enlightened policymakers recognize progress is not real unless it is progress for all, and make a point of fighting inequities in access to water and sanitation head-on.

### **I.1.2 Equitable access in the pan-European region: diverse challenges and a common tool**

Providing equitable access to water and sanitation services is a key challenge for the pan-European region as a whole. Nevertheless, it is important to recognize the significant disparities among countries — including the large differences in gross domestic product (GDP) per capita.<sup>4</sup> In Western Europe, while there can be specific localized problems in terms of physical access, the main emerging issue is affordability for certain groups given the progress towards full cost recovery and the increases in costs related to the achievement of certain environmental objectives. In the Eastern part of the region, physical access to water and sanitation remains a major challenge and affordability considerations are more acute or will become so as cost recovery increases. In all countries in the region, certain vulnerable and marginalized groups face additional barriers, although the situation tends to be more acute in those countries with fewer financial resources. Chapter 1 provides a brief overview of the current situation and key challenges on these issues.

The United Nations Economic Commission for Europe (ECE)/WHO Regional Office for Europe (WHO-Europe) Protocol on Water and Health<sup>5</sup> to the 1992 ECE Convention on the Protection and Use of Transboundary Watercourses and

<sup>3</sup> In accordance with the definition in the Protocol on Water and Health, in this publication "sanitation" means the collection, transport, treatment and disposal or reuse of human excreta or domestic wastewater, whether through collective systems or by installations serving a single household or undertaking.

<sup>4</sup> Using the Atlas method, the World Development Indicators show how the difference can exceed 100 to 1: in 2010 the GDP per capita of Tajikistan was USD 800 while that of Norway was USD 85,340. For comparison, some other examples are: Denmark, USD 59,210; France, USD 42,390; Portugal USD 21,850; Czech Republic USD 17,890; Russian Federation, USD 9,910; Ukraine, USD 3,010; Republic of Moldova, USD 1,810.

<sup>5</sup> See [http://www.unecce.org/env/water/text/text\\_protocol.html](http://www.unecce.org/env/water/text/text_protocol.html).



International Lakes is an international legal instrument that promotes equitable access. The Parties to the Protocol are legally committed to promote equitable access, since the Protocol specifies that “equitable access to water, adequate in terms both of quantity and of quality, should be provided for all members of the population, especially those who suffer a disadvantage or social exclusion” (article 5). Beyond the Parties to the Protocol, a larger number of countries are indirectly committed to the promotion of equitable access through other international agreements. This is further discussed in chapter 2.

### 1.1.3 The need for a holistic approach

Achieving equitable access to water and sanitation requires a holistic approach. Such an approach needs to work at two different levels. First, it needs to integrate solutions for access to safe water and solutions for access to improved sanitation. While popular demand and the attention of public authorities is usually stronger for water supply than for sanitation, to ensure sustainability water and sanitation need to be approached together. This general precept is also relevant from an equitable access perspective.

The second level refers to the different dimensions of equitable access. This publication distinguishes three key dimensions: geographical disparities; specific barriers faced by vulnerable and marginalized groups; and affordability concerns. A range of policy options are available to fight inequities of access in each of those key dimensions. However, it is also necessary to consider an overall policy package, since there are important linkages between the different dimensions.

## 1.2 ABOUT THIS PUBLICATION

### 1.2.1 Aim, limitations, scope and target audience

The aim of this publication is to provide policymakers at national and local levels with guidance on how to fulfil their commitments to ensure equitable access to water and sanitation. Rather than attempting to issue formal guidelines, the document adopts a good practices approach. The intention is that, by providing examples of how different countries have attempted to reduce inequities in access to water and sanitation services, policymakers will find inspiration to try similar or innovative measures. It is not the intention of this publication that the practices identified in it should be automatically replicated, as good practices are country and situation specific and need to be adapted to national and local circumstances.

The term “good practice” is used in this document in a loose way, as no evaluation has been undertaken to assess the impact and efficiency of the measures adopted based on equity indicators. This limitation is an indication of the current shortage of knowledge on equitable access to water and sanitation. Hopefully, those countries inspired to adopt equity-oriented measures will also invest in evaluating their real impact in terms of equity.

There are many documents, reports and publications analysing many different aspects of access to water and sanitation services. The scope of this text is limited to the three



dimensions of access to water and sanitation services that can be most easily linked to ensuring equitable access: financial affordability for users, geographical disparities in access and access by marginalized and vulnerable groups.

While the primary target audience of this document are policymakers at the national and local level, ensuring equitable access to water supply and sanitation services involves many stakeholders. These other actors — whether from civil society, the private sector or public administration — that are working to reduce inequities in access to water and sanitation will also find inspiration to guide their efforts in this publication.

### 1.2.2 Structure

This publication is structured in six chapters.

The first chapters provide the context and general approaches to promote equitable access to water and sanitation. Chapter 1 describes the current challenges in ensuring equitable access to water and sanitation in the pan-European region. Chapter 2 describes the international responses. In chapter 3 national governance frameworks are examined and options for them to address equitable access more decidedly are identified.

The last three chapters look at the three main dimensions of equitable access. Chapter 4 looks at reducing geographical disparities in access to water and sanitation services. Chapter 5 examines how access by vulnerable and marginalized groups can be ensured. Chapter 6 focuses on ensuring financial affordability of water and sanitation services.



*Specific approaches are needed  
to redress current inequities in  
access to water and sanitation.*



## Chapter 1

# THE CHALLENGE OF ENSURING EQUITABLE ACCESS

## KEY MESSAGES

- » The degradation of the quality of water resources means that many towns and villages that rely on local water sources do not have access to safe water, while water scarcity can deprive some towns and villages of access altogether. Polluted water can be treated to make it suitable for drinking purposes and freshwater can be transported over long distances, but these technical solutions can entail great expense that may render water and sanitation unaffordable.
- » Rural areas in the pan-European region have significantly lower levels of access to water and sanitation services than urban areas and may face higher tariffs.
- » People belonging to vulnerable or marginalized groups do not enjoy the same levels of access to water and sanitation as the rest of society. The situation differs across groups, such as persons with specific physical needs, those who rely on public facilities, users of institutional facilities, or those living in unsanitary housing.
- » Affordability is a growing concern for all countries. For the poorest countries, either a large part of the population already devotes an important share of their income to pay for water and sanitation services, or they will likely be facing this situation soon as tariffs increase to ensure financial sustainability. In European Union countries, more stringent water quality objectives and progress towards full cost recovery also means that paying for water and sanitation services has become a real concern for lower income families.



1.1 A SIMPLE CONCEPTUAL FRAMEWORK

This document aims to identify practical approaches to redress inequities in access to water and sanitation. Table 1.1 provides a simple conceptual framework to inform the discussion.

A person may lack access to water and sanitation simply because there is no access to safe water and sanitation in the community. Sometimes this is due to the degradation of water resources (scarcity, pollution), but more commonly it is due to the lack or poor management of water and sanitation infrastructure.

A community may have access to safe water and sanitation, but those services are not adapted to the particular needs of certain groups (e.g., disabled people), those services are not adequately available in the institutions that those groups rely on (e.g., schools, prisons, refugee camps) or certain groups (e.g., ethnic minorities, illegal settlers) may be denied access to water and sanitation due to unintended or intended discrimination practices.

Finally, a person may have access but may not be able to afford to pay the water and sanitation bill without curtailing consumption of other basic goods and services.

This document will look at the policy options and good practice examples for each of the three dimensions that pose challenges to equitable access in chapters 4, 5 and 6. The remainder of this chapter introduces briefly four contextual challenges that frame inequities to access and that are highlighted in table 1.1. These are: the availability of water resources, the availability of water supply and sanitation infrastructure, specific barriers faced by vulnerable or marginalized groups, and affordability constraints.



1.2 AVAILABILITY OF WATER RESOURCES

There are often significant differences at the regional and national level regarding the availability of water resources, both in terms of quantity and quality. Overall, the pan-European region uses a relatively small portion of its total renewable water resources each year (EEA, 2007). However, because available water resources and people are unevenly distributed, the amount of water available per capita varies widely. The Mediterranean islands of Cyprus and Malta, some of the densely populated central European Union (EU) member States, including Germany, Italy, Poland, Spain and the southern part of the United Kingdom, and some of the Central Asian countries have the least available water per capita. The available data suggests an improvement of water quality in rivers in recent years, especially in the Western part of the region, but some large rivers and many smaller watercourses remain severely polluted.

TABLE 1.1 Equitable access to water and sanitation: A conceptual framework

BASIC CHARACTERISTICS OF WATER AND SANITATION SERVICES	CHALLENGES REGARDING ACCESS	EQUITABLE ACCESS DIMENSION
No physical access (no water available, water sources polluted, no facilities)	Certain areas of a country (rural areas, poor urban neighbourhoods, areas affected by environmental degradation or scarcity) have no physical access or have access of lower quality than other areas	Geographical disparities
Low quality of physical services (water contamination, discontinuous service)		
Good quality of physical services	Physical services are not adapted to the physical or cultural needs of certain groups (people with disabilities, schoolchildren, nomadic people)	Access by vulnerable or marginalized groups
	Persons belonging to certain groups are discriminated against in the provision of physical and customer services (e.g., due to unsafe tenure, ethnicity or illiteracy)	
	The water and sanitation bill represents too large a share of disposable income for some households	Affordability for users

### BOX 1.1 PRIORITIZING WATER FOR DOMESTIC USE IN FINLAND

As in other countries, water legislation in Finland prioritizes water use for domestic consumption over other uses. The new Finish Water Act, adopted in Finland in March 2011, lists four categories of water uses, in the following order of priority:

1. Domestic use in the vicinity of the abstraction site.
2. Local community water supply services.
3. Local industrial use, as well as transfers outside the locality for community water supply services.
4. Transfers outside the locality for purposes other than community water supply.

The order of priority between other local uses and water transfers for water supply purposes outside the locality has to be decided on a case-by-case basis. But this involves no risk to domestic water use for which there are no equally feasible alternatives available: public needs have substantial weight when conflicting interests in the use of water are considered in the water permit procedure.



Degradation of water resources, in terms of water quality, can have serious impacts on access to safe water. In some cases this is temporary (due to emergency episodes) and in other cases more permanent. However, physical unavailability is not usually a critical factor that limits access to water supply and sanitation services, when collective systems are in place, since water for human consumption usually has precedence over other uses (see box 1.1 for the case of Finland).

There are many technical solutions to deal with issues of water scarcity and water pollution to provide water that is fit for human consumption, but these technical solutions can entail great costs that can render water and sanitation unaffordable.

Inhabitants of rural areas are those most affected by scarce or low quality-water resources. Absolute water restrictions tend to affect small and isolated villages rather than cities — when cities face restrictions, they usually are limited to prohibitions against using potable water to water gardens or fill up swimming pools. Rural areas rely more on local water resources (such as shallow wells, ponds and irrigation canals) and have fewer alternatives when those sources are contaminated.

### 1.3 AVAILABILITY OF WATER SUPPLY AND SANITATION INFRASTRUCTURE

Around 110 million people in the pan-European region do not have access to safe drinking water and adequate sanitation, making them vulnerable to water-related diseases. The picture provided by basic statistics on access gets considerably darker when the quality of service (e.g., 24-hour service, safe water) is also considered — particularly in countries in Eastern Europe, the Caucasus and Central Asia. Indeed, in the region, unsafe water and poor sanitation

result annually in around 18,000 premature deaths — 13,000 of them children — representing a loss of 736,000 disability-adjusted life years or 1.18 million years of life. This is a situation which would be preventable were cleaner water and adequate sanitation available (EEA, 2007).

Access to water supply and sanitation varies greatly within the region. Most people in Western and Central European countries have continuous access to clean drinking water, and take that for granted, while their counterparts in Eastern and South-Eastern Europe, as well as the Caucasus and Central Asia, are likely only to have access to poor quality water, and in some places even the supply of that is intermittent.

Within each country, access to water supply and sanitation is also inequitable. Those inequities are not distributed randomly among the human populations in a given country; rather, they mostly affect the poor and rural populations. In Tajikistan, for example, less than one tenth of the poorest 40% of the population has access to piped water at home, compared with more than three quarters of the richest 20% (EEA, 2007). Rural areas have consistently lower levels of access than urban areas. The rate of access to water and sanitation by rural populations in the countries of Eastern Europe, the Caucasus and Central Asia is 10 percentage points lower than that of urban populations (WHO-UNICEF, 2010). Across the pan-European region, rural households are eight times more likely to lack access to piped water supply than urban households.

Even in those countries for which the basic statistics suggest there are no problems of access to water and sanitation, small subsections of the population (which over the whole pan-European region represent millions of people) face real access barriers.



Courtesy Global Water Partnership Central and Eastern Europe

#### 1.4 SPECIFIC BARRIERS FACED BY VULNERABLE AND MARGINALIZED GROUPS

There are a number of marginalized and vulnerable groups that face specific problems in enjoying the water and sanitation services available to the rest of society. Vulnerable groups are those, such as children and the disabled, who require special attention due to their developmental or physical limitations. Marginalized groups, such as women and ethnic minorities, require special attention due to the historical and cultural discrimination they face, as well as due to their general underrepresentation in political decision-making, which has often led to the neglect of their needs. The terms “vulnerable” and “marginalized” are not interchangeable. Children are intrinsically vulnerable, but they are not always marginalized, while women (particularly women living in poverty) are often marginalized but seldom vulnerable. Some people, such as those belonging to particular ethnic groups, can be marginalized because of social or cultural prejudices. Moreover, certain groups, such as people in custody or care, are both vulnerable and marginalized.

Persons belonging to vulnerable or marginalized groups face different access challenges. They may not be able to make use of facilities because they are not adapted to their physical or cultural needs. They may also be discriminated against in the provision of water and sanitation services, financial support or customer service. Inequities in access to water supplies for marginalized and vulnerable groups may be unintentional in most cases: sometimes it can be explained by a lack of awareness on the part of water and sanitation planners; and sometimes it is the result of pursuing cost-effective measures. Nevertheless, those inequities need to be recognized and redressed to guarantee equitable access and the enjoyment of the human right to water and sanitation.

#### 1.5 AFFORDABILITY CONSTRAINTS

To achieve equitable access to water and sanitation, it is not enough to ensure that the services are provided to the population and that the population can actually make use of them; it is also necessary to ensure that the price of those services is affordable. Affordability concerns relate to whether a household has enough income to pay for water and sanitation services without forcing serious trade-offs in other essential goods and services.

Poverty represents a major challenge for ensuring affordable access to water and sanitation in the pan European region. In 2007, 17% of the EU population, or 84 million people, were at risk of falling into poverty, following the Eurostat definition of having an income below 60% of the national median income (Eurostat, 2010). By the more stringent poverty threshold of having an income below 40% of the national median income, 6% of the EU population, or 30 million people, were poor (Eurostat, 2010). Following the World Bank definition of poverty as having an income less than USD 2 per day, in 2005 more than 60 million people in Eastern Europe and Central Asia were poor (World Bank, 2005). Those figures include countries with high poverty rates — the Republic of Moldova has a poverty rate close to 30% and Tajikistan a poverty rate is close to 50% (World Bank, 2011) — as well as those with relatively low poverty levels, but with a large number of poor — for instance, 4 million people (5% of the population) in Germany have an income below 40% of the national median income. Dealing with the impacts of poverty on affordability requires a combination of service provision and social protection policies.

From an equitable access perspective, it is particularly important to distinguish “macro-affordability” from “micro-affordability”. Macro-affordability looks at the share of water and sanitation services in the household budget for the population as a whole. It is useful to detect whether there is a general affordability problem, as well as to identify possible inequities between different geographical areas. Micro-affordability looks at the share of water and sanitation services in the household budget



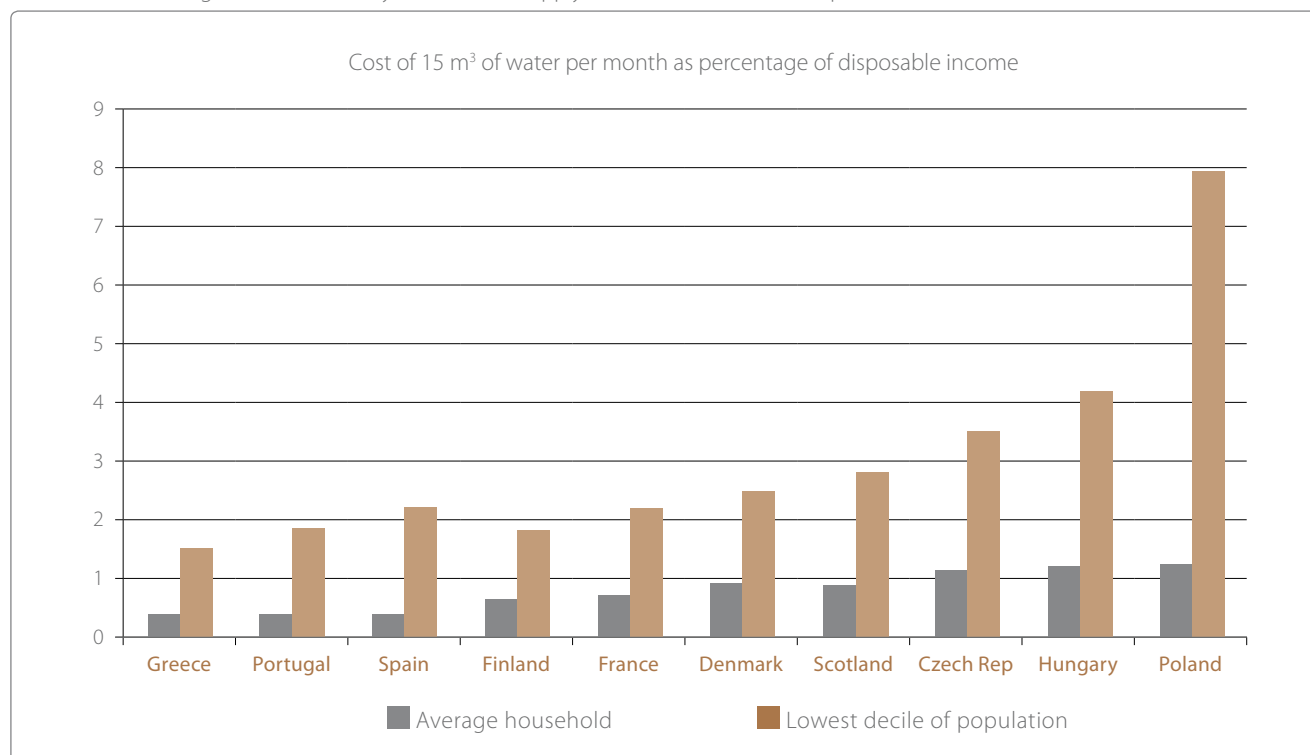
**TABLE 1.2** Challenges faced by persons belonging to vulnerable or marginalized groups

EXAMPLES OF VULNERABLE AND MARGINALIZED GROUPS	EXAMPLES OF CHALLENGES TO ACCESS TO WATER AND SANITATION SERVICES
Persons with disabilities, older persons, persons with serious and chronic illnesses	Standard water and sanitation facilities may not be adequate to their special physical needs.
Persons belonging to nomadic and travelling communities, homeless	Public facilities (fountains, showers and toilets) on which they rely may not be available.
School children, hospital patients, detainees, refugees, internally displaced persons	Institutions on which they rely (schools, hospitals, prisons, camps) do not always have adequate water and sanitation facilities.
Illegal settlers, illegal immigrants	Water and sanitation service providers may not serve undocumented persons or housing facilities located in untenured land.
Indigenous people, persons belonging to ethnic or other minority groups	Water providers and social services agencies may intentionally or unintentionally discriminate against these groups in terms of service provision, allocation of water-related aid or with regard to participation in decision-making.

of particular groups and is useful to identify groups that may be in need of public support to pay their water and sanitation bill.

Affordability is a growing concern for all countries. For the poorest countries, either a large part of the population already devotes an important share of their income to paying for water and sanitation services or they will be facing this situation in future, as tariffs will have to increase to ensure financial sustainability. In EU countries, more stringent water quality objectives and progress towards full-cost recovery also means that for those in the lower income brackets paying for water and sanitation services has become a real concern.

Options need to be explored and measures put in place to ensure that water and sanitation services are and remain both affordable to all and financially sustainable. In the Eastern countries of the pan-European region, full-cost recovery of water and sanitation services as currently designed and managed would represent too great a share of disposable income for a large section of the population. Even in richer countries, water and sanitation may not be affordable for the poorest segment of the population — in Poland, the water and sanitation bill represents 7.9% of the income of the lowest decile (OECD, 2010).

**FIGURE 1.1** Looking at the affordability of the water supply and sanitation bill in Europe

Source: OECD (2010)



*Each country has the obligation to provide water and sanitation to all, as well as the possibility to call upon the international community for assistance and cooperation.*



## Chapter 2

# INTERNATIONAL OBLIGATIONS TO ACHIEVE EQUITABLE ACCESS

### KEY MESSAGES

- » The human right to water and sanitation entitles everyone to water and sanitation which is available, accessible, affordable, acceptable and safe.
- » The Protocol on Water and Health, which commits its Parties to promote equitable access to water and sanitation, provides a sound framework for the translation of the human right to water and sanitation into practice, in particular through the setting of specific targets and target dates.
- » Each country has the obligation to provide access to water and sanitation to all. Thus the brunt of the financial cost is to be borne primarily by national and local budgets. At the same time, the international community acknowledges a legal obligation of assistance and cooperation.
- » Significant financial resources are being devoted by the international community to improve access to water and sanitation, but there is the need to enhance the contribution of those resources to achieving equitable access.



## 2.1 INTERNATIONAL HUMAN RIGHTS LAW AND ACCESS TO WATER AND SANITATION

International human rights law is a set of legally binding obligations that have been undertaken by States. The relevant rights are laid out in treaties and monitored by mechanisms established by the United Nations, at the international level. These treaties are monitored by expert bodies responsible for assessing States' compliance with the provisions of the human rights treaties, as well as interpreting the provisions of the treaties.

Water and sanitation issues are not explicitly mentioned in the International Covenant on Economic, Social and Cultural rights, adopted in 1966. Nevertheless, subsequent human rights treaties include explicit mention of water and sanitation — for example, the Convention on the Elimination of All Forms of Discrimination against Women, the Convention on the Rights of the Child and the Convention on the Rights of Persons with Disabilities. The WHO Constitution recognizes the right to health and hence implicitly the right to water and sanitation — a commitment reinforced by resolution WHA64.24, on “Drinking water, sanitation and health”, adopted by the World Health Assembly in 2011.

The relationship between access to water and sanitation and international human rights law has been clarified over the past decade. In 2002, in a General Comment on the right to water (E/C.12/2002/11), the Committee on Economic, Social and Cultural Rights expressed its interpretation that the right to water is implicitly included in the Covenant, reading it into article 11 on the right to an adequate standard of living and article 12 on the right to health. In 2008, the Human Rights Council established the mandate of the Independent Expert on the issue of human rights obligations related to access to safe drinking water and sanitation, and in 2009, the report of the Independent Expert focused explicitly on the right to sanitation in order to redress the lack of attention to that issue. In July 2010, the United Nations General Assembly recognized the human right to water and sanitation, and two months later, the United Nations Human Rights Council provided further guidance by affirming the right to access to clean water and sanitation as a human right. In 2011 the Human Rights Council renewed the mandate on water and sanitation for a period of three years and changed the mandate's title to Special Rapporteur on the human right to safe drinking water and sanitation.



### BOX 2.1 THE HUMAN RIGHT TO WATER IN PRACTICE

**AVAILABILITY:** Under human rights law, there must be a sufficient number of water and sanitation facilities and water must be available continuously and in a sufficient quantity to meet personal and domestic needs, which includes drinking, bathing, hygiene, cooking and washing clothes and dishes. Determining the required amount of water and number of toilets will depend on a local assessment of community and individual needs.

**ACCESSIBILITY:** Water and sanitation facilities must be physically accessible within the vicinity of each household, school, health institution, public building and workplace. Accessibility requires taking account of the special needs of those with reduced mobility, including people with disabilities and elderly people.

**AFFORDABILITY:** Water and sanitation and water facilities and services must be affordable to all people in a way that does not limit their ability to afford other essential basic services. The affordability of water and sanitation includes construction, connection, maintenance, treatment and delivery of services. Water and sanitation services do not need to be free of charge for everyone, but solutions must be found to ensure that those living in poverty are able to access these services despite their limited capacity to pay.

**ACCEPTABILITY:** Sanitation facilities must be constructed in a way which ensures privacy and which ensures separation of male and female toilets in most cultures. Water should be of an acceptable taste, colour and odour.

**QUALITY/SAFETY:** Sanitation facilities must be hygienically and physically safe to use. Water also must be of such a quality so that it poses no risk to human health.

*Based on General Comment No. 15 (2002) on the right to water by the United Nations Committee on Economic, Social and Cultural Rights and on the normative content of human rights obligations in relation to access to sanitation as outlined in the relevant independent expert's 2009 report to the Human Rights Council (A/HRC/12/24).*



UN Photograph by Eskinder Debebe

Understanding water and sanitation as a human right has significant implications. Water and sanitation are no longer matters of charity, which can be provided at the discretion of politicians in power, but instead rights which can be claimed by every individual. This right is defined at the international level, and obliges Governments to take concrete steps towards ensuring access to safe water and sanitation for all without discrimination. The human right to water and sanitation entitles everyone to water and sanitation which is available, accessible, affordable, acceptable and safe. Box 2.1 provides practical definitions of those concepts.

There are many misconceptions surrounding the debate on water and sanitation as a human right. Addressing these misunderstandings is an important first step to ensure the effective use of the human rights framework. Many people presume that human rights require that water and sanitation be provided for free. This is not the case — people who can afford to pay for water and sanitation should pay. Only when people cannot afford to pay do systems need to be put in place to ensure that such people are not excluded from the service simply because of their inability to pay. Some also assert that the human right to water excludes the possibility of private sector participation in water and sanitation service

delivery. This is also not true. States undertake human rights obligations by ratifying treaties and they may not excuse themselves from these obligations by delegating service provision responsibilities to private sector actors. Instead, they are obliged to ensure that people enjoy this human right regardless of the mode of service delivery.

Furthermore, the human right to water and sanitation should be implemented progressively and requires a local assessment of needs. Thus, it does not mean that everyone is entitled to piped water and a flush toilet immediately. Different technologies may be appropriate in different contexts, and a plan needs to be in place to outline the steps towards universal access.

While this publication does not aim to cover all aspects of the right to water and sanitation, the standards set by the human rights framework are fully relevant throughout the discussion in it. Ensuring affordable access is a central step towards guaranteeing the full enjoyment of the right to water and sanitation, and special attention to groups which experience disadvantage, social exclusion or are vulnerable is critical for ensuring that people are not excluded from enjoying this basic human right because of discrimination or neglect.





## 2.2 THE PROTOCOL ON WATER AND HEALTH

The Protocol on Water and Health clearly enunciates concern for sustainable management of water supply and sanitation. It states that “Parties shall take all appropriate action to create legal, administrative and economic frameworks which are stable and enabling and within which the public, private and voluntary sectors can each make its contribution” (article 4). The Protocol stresses the general principle that “efficient use of water should be promoted through economic instruments” (article 5 (h)), but immediately qualifies this by calling for “special consideration ... to the protection of people who are particularly vulnerable to water-related disease” (article 5 (k)) and clearly states that “equitable access to water, adequate in terms of both quantity and quality should be provided for all members of the population, especially those who suffer a disadvantage or social exclusion” (article 5 (l)). The Protocol therefore clearly recognizes the need to ensure economic viability, but also recognizes the need for support to disadvantaged population groups, a recognition which forms the basis for this work.

Even if no explicit reference may be found in the Protocol to the human right to water and sanitation — or to relevant international human rights instruments — the Protocol reflects

most, if not all, of the elements of this right and more broadly of a human rights-based approach (access to information, participation and access to remedies for local populations).

The requirement to provide safe water and sanitation to all, with special attention to the social exclusion of those who experience disadvantage and vulnerability, are directly related to the human rights requirement of non-discrimination. Furthermore, the participatory models called for in the Protocol encourage compliance with human rights requirements. The monitoring system and the compliance review established by the Protocol also ensure that States are held accountable for the steps they have taken to implement the Protocol.

Looking at the different components of the basic human right to water and sanitation, the Protocol is operational on all of the key elements:

- **Progressive approach.** The Protocol supports a progressive approach to the realization of the human right to water and sanitation through the obligation to “pursue the aims of ... access to drinking water for everyone and ... provision of sanitation to everyone” (article 6, paragraph 1).
- **Safety.** The Protocol requires Parties to ensure “adequate supplies of wholesome drinking water which is free from any micro-organisms, parasites and substances which, owing to their numbers or concentration, constitute a potential danger to human health” (article 4), thereby linking to the safety component expressed in the basic human right to water.
- **Implementation strategy.** As to the means for achieving the basic human right to water and sanitation, the obligation to set targets and target dates in a number of areas linked to the whole water and health nexus — in particular covering access to water and sanitation, quality of drinking water and performance of water supply and sanitation services — to publish such targets and to regularly review progress is in line with the human rights requirements to adopt and implement national water and sanitation strategy(ies) and plan(s) of action addressing the whole population which reflect human rights obligations.
- **Monitoring.** The Protocol requires Parties to establish and maintain arrangements, including legal and institutional arrangements, for monitoring, promoting the achievement and, where necessary, enforcing the standards and levels of performance for which targets are set. It also provides for the establishment of a compliance review procedure, in order to facilitate, promote and aim to secure compliance with the obligations under the Protocol. The Compliance Committee, composed of nine independent members elected by the Meeting of the Parties performs general tasks in relation to the monitoring of compliance while considering regular reports by States, as well as individual cases of non-compliance. The trigger mechanism for the compliance procedure may not only be set in motion by Parties, through submissions, or by the secretariat, through referrals, but, most importantly, can also be triggered by the public through communications.





## 2.3 THE ROLE OF INTERNATIONAL FINANCIAL SUPPORT

The right to water and sanitation must be progressively realized by States to the maximum of available resources. This means that States must take concrete and targeted steps towards ensuring universal access to water and sanitation.

Indeed, many States are devoting substantial financial resources to provide water and sanitation services — the median Government spending on water and sanitation among developing countries is 0.48% of GDP (WHO, 2010) — in addition to the contributions made by users via tariffs and other mechanisms. However, in many cases this is not sufficient. Where domestic resources are insufficient for such efforts, States can turn to international cooperation and assistance, which both the General Assembly and Human Rights Council resolutions on water and sanitation encourage States to provide.

The international community devotes significant financial resources to improve access to water and sanitation. Currently, the global partnership framework for this spending is given by the Millennium Development Goals, which even if achieved would leave hundreds of millions of people without access to water and sanitation. Aid commitments to water and sanitation comprised 5% (USD 7.4 billion) of reported development aid in 2008 (WHO, 2010). Within the region, the EU has shown strong commitment to international cooperation in the field of water and sanitation, as illustrated by the creation of the EU Water Facility (which supports African, Caribbean and Pacific countries). There is both a major need and opportunity to steer those resources to support more decidedly equitable access to water and sanitation. This will require looking at the specific requirements of those who currently remain unserved, going beyond blanket approaches to increase access. Vulnerable and marginalized groups are often neglected in traditional development interventions for fear that making a difference is too challenging and resource intensive.

### BOX 2.2 MOBILIZING INTERNATIONAL USER-TO-USER SOLIDARITY



Decentralized cooperation refers to international development cooperation led by subnational authorities and actors, such as municipalities, regional water agencies and local utilities. In France, subnational authorities can fund decentralized cooperation in the water and sanitation sector using funds from the subnational authority's budgets (owing to a 1992 law on decentralized cooperation), as well as from water bills (thanks to a 2005 law that allows up to 1% of the water and sector budget to be allocated to decentralized cooperation). This second option means that water and sanitation users in France are directly financing access to water and sanitation in less favoured countries. Potentially, up to EUR 120 million could be mobilized through decentralized cooperation. In 2009, only EUR 18 million was mobilised, partly due to the fact that many local authorities had not included this element in their contracts with water and sanitation service providers. Similar approaches have been developed in the Netherlands and Switzerland.



*General improvements in water and sanitation governance and management can make major contributions, but applying an “equitable access lens” is also needed in order to speed up progress.*





## Chapter 3

# STEERING GOVERNANCE FRAMEWORKS TO DELIVER EQUITABLE ACCESS

## KEY MESSAGES

- » In many cases, current national and local water governance frameworks are failing to deliver equitable access for a number of reasons, including broader governance frameworks that undermine efforts in the water sector; weak water governance and management resulting in poor sector performance; and water governance frameworks being “equity blind”.
- » Good water governance and management can go a long way towards achieving equitable access objectives, e.g., through inclusive participation of stakeholders in decision-making; incentives for operators to improve efficiencies and keep costs down; and accountability and redress mechanisms.
- » Applying an “equitable access lens” will speed up progress. This does not necessarily require setting up new legal and institutional mechanisms and processes, since many existing mechanisms can be used to promote equitable access. It does, however, require a results-oriented action plan building on country-situation analysis and context-specific equity indicators.
- » All water and sanitation stakeholders need to be engaged and responsibilities identified and allocated. Water users must participate as key actors and not only as beneficiaries, and need to be aware of their duties as users, including the duties to preserve water resources and to preserve water and sanitation facilities. The participation of the members of vulnerable and marginalized groups constitutes a real challenge in all countries and must be given special attention. Water operators need to be more responsive to delivering equitable access, and local government and civil society organizations need to play a greater role.



### 3.1 APPLYING AN “EQUITABLE ACCESS LENS” TO WATER GOVERNANCE AND MANAGEMENT

The realization of the right to water and sanitation requires political commitment and a long-term vision of reaching those who do not yet have access in order to progressively improve access, quality and safety. In many cases, current national and local water governance frameworks are failing to deliver equitable access. There are three major reasons for this, as set out below.

First, the broader governance framework may limit or undermine efforts in the water sector. Water governance and management is not independent from the broader governance context, as illustrated in box 3.1. Clearly, good water governance and management can go a long way towards achieving equitable access objectives. For example, more transparent, participatory and inclusive decision-making greatly contributes to promoting equitable access.

Second, weak water governance and management results in poor sector performance. In many cases, inequities are simply the result of poor performance, and can be redressed by implementing standard recommendations for improving the performance of the water and sanitation sector. Examples from Armenia and Portugal are provided in boxes 3.2 and 3.3.

Third, current water governance frameworks are often “equity blind”. They frequently do not do a good job of factoring the access challenges experienced by particular territories or groups into sector policy development and implementation. Decision-making in the water sector needs to adopt an “equity access lens”. In many cases, the solutions are not about developing

specific strategies or institutional mechanisms. Rather, there are many opportunities for mainstreaming equity considerations into regular sector processes and for making use of existing institutional mechanisms (see boxes 3.4 and 3.5 for examples in Hungary and France).

A major issue in any water governance and equitable access discussion is the financial element. Equitable access objectives can and should be made compatible with financial sustainability objectives. Financial sustainability does not guarantee equitable access — there may be access problems for marginalized and vulnerable groups, as well as affordability issues for some sections of the population. But without financial sustainability there will not be equitable access because adequate levels of access and quality of service will not be guaranteed for everybody due to lack of financial resources and the vulnerable and marginalized groups are likely to suffer the most. It is thus important to develop financial strategies that take into account equity considerations both on the revenue side (integrating affordability considerations in tariff policy) and on the expenditure side (targeting financial resources to areas and groups with the greatest need, ensuring that any subsidies are not captured by the richest, ensuring that the financing framework provides incentives for efficiency). These financial strategies shall ensure the ongoing financial sustainability of measures promoting equitable access. It is also important to develop information about the costs of non-access (or the benefits of access, see OECD, 2010) to redress the bias of decision-makers, who tend to focus much more on the costs of service provision since these are better documented, as well as to ensure the ongoing financial sustainability of measures promoting equitable access.

#### BOX 3.1 THE BROADER GOVERNANCE FRAMEWORK SLOWS DOWN PROGRESS IN BOSNIA AND HERZEGOVINA

The legislative framework for achieving the right to water, and thus equitable access to water, is sufficient in Bosnia and Herzegovina on paper — but not in practice. The State has ratified many international conventions and regional instruments committing it to implementing various international water and human rights obligations, including the International Covenant on Economic, Social and Cultural Rights, which it ratified in 1992. The Constitution also includes most of the principles of these human rights conventions and guarantees that they supersede national legislation. The water ministries of the Bosnia and Herzegovina entities are currently working on creating secondary water legislation. Yet, challenges remain in the implementation of national and international legislation and the execution of rulings, as the institutional and administrative bodies needed to ensure the legislation is adequately enforced are embedded in a complex politico-administrative system lacking harmonization and clearly defined responsibilities.

#### BOX 3.2 STRENGTHENING WATER MANAGEMENT TO ENSURE EQUITABLE ACCESS IN ARMENIA

In Armenia, the water mains of Garni-Zod and Garni-Yerask supply water to 180,000 people in 60 residential areas. But while the villages located at the beginning of the water main receive a 24-hour supply, the 26 villages located midway receive low pressure water, and the 16 villages located at the end may not receive drinking water for several days at a time, particularly during the irrigation season. Resolving this inequity essentially required improvements in regular water management: awareness-raising campaigns to reduce consumption, introduction of water metering, disconnection of illegal connections, better maintenance of mains and the construction of additional water reservoirs.

### BOX 3.3 SETTING STRATEGIC TARGETS TO ENSURE UNIVERSAL ACCESS IN PORTUGAL

Over the past 20 years, the strict standards set by EU directives regarding the provision of water and sanitation services have forced a severe restructuring of the sector in Portugal. In the early 1990s Portugal still faced several problems regarding the provision of water and sanitation services — only about 80% of the population was served by drinking water networks (with only about 50% being sure that their water was of good quality), only 61% was connected to sewerage networks and only 31% was connected to wastewater treatment plants.

To comply with the EU directives, the Portuguese Government developed a Strategic Plan (*Plano Estratégico de Abastecimento de Água e de Saneamento de Águas Residuais*) that sets clear targets for service coverage to be achieved with the joint contribution of all the authorities involved in water and wastewater services provision. The Strategic Plan defines the strategic objectives and some operational ones, the investments to be made, the management models that could be used to provide the services, the environmental values to be achieved, the financing models and tariff policies, private sector participation, the regulatory model and the legal framework.

The Strategic Plan has been very successful in helping to focus the efforts of all stakeholders on priority actions. For example, several multi-municipality concessions were created to operate bulk services, making it possible to pursue regional strategies (rather than inefficient municipal ones), and enabling fast increases in investments funded by the State and the EU. The Strategic Plan has also been instrumental in raising and allocating public funds — from both the Portuguese State and the EU.

### BOX 3.4 MAKING USE OF EXISTING INSTITUTIONAL MECHANISMS — THE PARLIAMENTARY COMMISSIONER FOR FUTURE GENERATIONS IN HUNGARY

Existing institutional mechanisms can be used to promote equitable access to water and sanitation. One example is provided by the Hungarian Parliamentary Commissioner for Future Generations. The Hungarian Constitution recognizes and enforces everybody's right to a healthy environment and to the highest possible level of physical and mental health. Hungary has the figure of the Parliamentary Commissioner for Future Generations, whose tasks are to monitor the legislative measures ensuring the sustainability and improvement of the state of environment and nature, to investigate potential rights violations in this area (or have them investigated) and to initiate general or specific measures in order to remediate those violations. In recent years, the Parliamentary Commissioner has intervened in several water-related cases to uphold the right to a healthy environment.

### BOX 3.5 APPLYING AN EQUITABLE ACCESS LENS TO WATER POLICIES IN FRANCE

In France, ensuring access to water for all is an undisputed social and policy goal. The 2006 Law on Water and Aquatic Environments stipulates that water is a common heritage and every person has the right to access to water in sufficient quantity and quality and under affordable conditions. France works towards implementation on several fronts:

- » The policy framework for water operators. Specific areas of attention include the conditions for obtaining a water connection, tariff structures, payment options and stakeholder consultation.
- » The development of preventive aid measures. Municipalities, social services authorities and water operators have adopted measures aimed at preventing the poor and socially excluded from incurring water debt and risking disconnection from the water grid — measures vary from financial aid to dissemination of information.
- » The development of remedial aid measures. These measures are applied when households are still unable to pay their water bills, either because they did not take advantage of the preventive aid or because of unexpected and sudden difficulties.
- » Additional measures developed at municipal level. In particular, the city of Paris has adopted a series of measures, including a group of specific measures for the poor such as the adoption of a ceiling related to water and sanitation expenses for a family budget (3% of the income) and free public drinking water and sanitation facilities.

All water and sanitation stakeholders need to be engaged in ensuring equitable access. There is scope for making water operators more responsive to equitable access objectives. Water users and rights holders must be empowered to claim their rights and become protagonists in the planning and implementation of water policies. Civil society organizations can be major partners. This chapter explores these different governance aspects and offers a checklist for Governments and public policies to stop being equity blind.

## 3.2 EMPOWERING ALL USERS AND RIGHTS HOLDERS

### 3.2.1 Role of water and sanitation users and rights holders

Decision-making processes that affect equitable access to water and sanitation take place at different levels. Examples at the international level include the Protocol on Water and Health and the EU Water Framework Directive, the Drinking Water Directive and the Urban Waste Water Directive. Examples at the national level include national legislation and national policy dialogues on water and sanitation. These frameworks provide a basis for proper access to information, public participation in decision-making and access to justice that provides recourse for those whose rights have been violated.

Water and sanitation users and rights holders should not be considered merely the beneficiaries of access to water and sanitation. They have roles to play in demanding, shaping and maintaining equitable access to safe water and sanitation. Governance frameworks and public policies should enable them to play those roles:

- **Demanding equitable access.** Users need to be aware of their rights and the options for exercising them.



Courtesy Global Water Partnership Central and Eastern Europe

- **Shaping equitable access.** Users need to be able to influence the solutions chosen to meet their water and sanitation needs. The needs of different parts of the population will be different. Participatory processes need to be put in place in such a way that they are truly inclusive, paying special attention to eliciting input from vulnerable and marginalized groups. Those participatory processes need to be informed by reliable evaluation of the impact of alternative measures and the outcomes of effective accountability mechanisms.
- **Keeping access equitable.** Users need to be able to play an active role in managing the level of access that they receive and the costs that they pay. They need to know, for example, how to react to episodes of water contamination, or how their water consumption patterns impact their water bill.

## BOX 3.6 EMPOWERING CONSUMERS IN PORTUGAL AND THE UNITED KINGDOM

### The Portuguese mediation mechanism

Before 2006, water and sanitation users in Portugal did not have a low-cost and user-friendly way to claim their rights, and as a result the number of complaints was very low — on average 45 per year between 2000 and 2005. In 2006, a change in the legislation made it compulsory for service providers to have a complaints book and to send the original complaint sheets to the water and sanitation services regulator (Entidade Reguladora dos Serviços de Águas e Resíduos (ERSAR)), which has developed a structured process to deal with the claims that can be followed by claimants through a web-based application.

As a result, the number of complaints has increased at a fast pace — in 2010 ERSAR received more than 3,000 complaints. This shows that consumers are now more aware of their rights and that they value the role of the mediation mechanism. The creation of a structured process has enabled ERSAR to issue recommendations in an efficient way, but the large number of claims has put the regulatory agency's human resources under strain.

### The Consumer Council for Water in England and Wales (United Kingdom)

The Consumer Council for Water (CCWater) is an independent and statutory consumer body that is recognized as an informed, influential and effective consumer champion in England and Wales. It works directly with English and Welsh governments, regulators and water and sewerage companies, as well as with water consumers themselves. It uses consumer research and direct customer feedback with domestic and business customers to inform water policymaking and implementation, for instance as regards affordability. Furthermore, CCWater takes up the complaints of domestic and business consumers where the water company has failed to resolve issues with their water or sewerage services. Notably, in 2010-2011, CCWater helped get nearly £2.3 million back for customers. CCWater is organized around four regional committees in England and a committee for Wales which regularly meet with the water companies in public meetings. In 2011-2012, CCWater's running costs were 21p (€ 0.23) per bill payer.



### BOX 3.7 COUNTING ON NON-GOVERNMENTAL ORGANIZATIONS TO DEVELOP AND IMPLEMENT AWARENESS-RAISING STRATEGIES IN UKRAINE AND KYRGYZSTAN

In Poltava oblast (Ukraine), where more than 600,000 people (36% of the population) rely on wells for drinking water, up to 12 babies died each year between 1998 and 2001 as a result of acute nitrate poisoning. Public awareness has been a key component of the policy response, with civil society organizations playing an important role. The Ukrainian non-governmental organization (NGO) MAMA-86, reflecting on its experience in Poltava oblast, concluded that public awareness is a key measure that needs to be fully exploited by: (a) making it regular, (b) covering the whole rural area, (c) broadening its target beyond pregnant women and medical staff, and (d) making it evolve from focusing on urgent short-term measures to long-term measures — such as water catchment protection and improvement of sanitation, wastewater treatment and waste management at local and household levels.

In Kyrgyzstan, the NGO Central Asian Alliance for Water and the youth network Independent Republics of Fergana Valley have been working since 1998 on the provision of safe drinking water to vulnerable and marginalized groups. Their priorities include fighting the lack of information about drinking water as well as bad hygiene behaviour. In 2009, they ran the activity “Puppet Theatre of Youth Independent Republics”. Theatre performances and peer-to-peer educational workshops in primary and secondary schools in the Fergana Valley raised awareness about inequitable access to sanitation among school children and the need to establish free public access to drinking water and sanitation in rural areas. As a result, additional public resources were invested in sanitation facilities in several primary schools in the Fergana Valley.

### 3.2.2 Awareness-raising and education

Water and sanitation users need to be aware of their rights, of problems that affect the provision of safe and affordable water and sanitation services (to them and their communities) and the different options for solving those problems. They also need to be aware of their duties as users, including the duties to preserve water and to preserve water and sanitation facilities. For example, the 2002 Ukraine law on drinking water and drinking water supply highlights several duties of consumers, such as paying their water bill in a timely manner, saving water, avoiding water losses within the house’s distribution network, preventing the pollution of drinking water sources, informing the water operator of damage to any of the water equipment and providing access to water equipment for operator staff.

Awareness-raising and educational activities on access to water and sanitation for all is a first step in mobilizing civil society and in creating a sense of ownership. Such activities are very effective for finding equitable and sustainable long-term solutions, since users aware of the issues around water and sanitation provision demand to be more involved in defining their needs and shaping the solutions.

Information to raise awareness can be provided in a variety of ways, such as through traditional mass media, through the Internet or through the water operators. What is important is to ensure that all the intended audiences are effectively reached. People living in rural areas, the poor and those vulnerable and marginalized are often more difficult to reach, and thus special attention should be paid to reaching them. Getting the message across will involve efforts both in terms of communication channels and in language used (such as the use of local languages and non-technical terms).

The water and sanitation bill is a key tool for providing information that will empower users. One important aspect is the potential of the water bill to help users manage their water consumption levels, thus helping them to keep their water bill affordable. A good practice is provided by the Walloon Region

of Belgium, where utilities are required to insert in the water bill a chart representing the evolution of the water consumption during a minimum three-year period, and a warning is sent to the consumer if the evolution of the water consumption increases rapidly. The water bill is also a good channel for users to receive important and actionable information, such as water quality or contact points to claim their rights.

National Governments should launch awareness-raising campaigns when appropriate. They should also enable other actors (such as local authorities, utilities and civil society organizations) to play an active role in raising awareness.

### 3.2.3 Public participation

Meaningful participation of all stakeholders in the decision-making process is a prerequisite for equitable access to water and sanitation. Among other benefits, public participation helps to ensure that the services provided are aligned with the real needs of the population. Like for awareness-raising, a range of tools exists to enable public participation in decision-making. Such tools include referendums, public hearings/inquiries, citizens’ juries, workshops, representation of vulnerable and marginalized groups in expert panels and requesting inputs via traditional mass media or e-mail communication.

Human rights standards call for the participatory formulation of public policies and development plans and the institutionalization of democratic processes. Everyone has the right to participate in decision-making processes that may affect their rights, and the right to have full and equal access to information concerning water and sanitation. It is critical for States to go beyond ad hoc and project-level participatory processes and ensure that participation is meaningful throughout the elaboration, implementation and evaluation of projects. States must overcome barriers to participation including low literacy levels, language constraints, cultural barriers and physical obstacles. Inspired by the same principles, the Protocol on Water and Health fosters a strong involvement of the public in decision-making and its right to access to

### BOX 3.8 WATER POLICY CONSULTATION MECHANISMS CONTRIBUTE TO EQUITABLE ACCESS IN FRANCE

In order to improve the quality of legislative proposals regarding water management, the French water law of 1964 created the National Water Committee as a consultative mechanism that gives advice to the French Government on water pricing and on the quality of water distribution and treatment by public utilities, among other issues. In 2009 the National Water Committee created a working group devoted to water access issues whose members include representatives from the central Government (ministry in charge of environment), consumers, environmental NGOs, mayors (in charge of water and sanitation delivery) and other stakeholders (such as departmental councils that provide subsidies). This working group has led a review on access to water, listening to a panel of experts including academics and members of the National Assembly, but also representatives of vulnerable and marginal groups, such as Travellers' representatives and NGOs that provide care for the homeless. The first result has been the presentation of a law that secures a "curative dispositive" to support households that cannot pay their water debts. In 2011, another law will be presented to the National Assembly in order to secure a "preventive dispositive" to help households avoid incurring water debts. The working group is also drafting a legal proposal to solve the problem of access to water by homeless and travelling people. The French experience indicates that special attention needs to be paid to the composition of the panel of experts, to ensure representativeness while keeping the size of members manageable, as there is a risk that too extensive consultation delays the development of legislative proposals.

information, in particular on the quality of drinking water and on the progress achieved in implementing the Protocol.

From an equitable access perspective, there are two important aspects. First, the availability of broad public participation mechanisms, so that all users can have a say. Second, the recognition of the diversity of water users and other water rights holders, as well as of the constraints that they face in taking part in public participation processes, which may require different approaches to enable their effective participation in decision-making processes. For example, disabled people may not be able to access the places where the public participation meetings are taking place, traditional gender roles may prevent women from speaking in public meetings, or the lack of political rights of prisoners or refugees may mean their input was not sought.

### 3.3 MAKING OPERATORS MORE RESPONSIVE TO EQUITABLE ACCESS NEEDS

Operators of water and sanitation services are key actors in the delivery of equitable access. National and local governments set public policy objectives related to achieving equitable access, but operators (irrespective of whether they are public or privately owned) can have a substantial influence over a number of key variables such as:

- **Investment plans.** Operators make proposals for investments and can suggest (or decide) whether to prioritize water or sanitation, to extend access or upgrade the current system or to invest in richer areas or deprived areas. In addition, poor design and dimensioning of networks results in high costs and thus a higher water bill for customers.
- **Operations and maintenance.** Failure to carry out maintenance, to attract and retain qualified staff and many other decisions by operators affect operational efficiency. This also has a major impact on the quality of service (such as the ability to provide 24-hour health-standard-compliant water supply), as well as on the cost of provision (and through it on access and on affordability).

- **Tariff levels and structures.** Operators suggest tariff levels and structures and, in many cases, have great influence over the final decision.
- **Customer service.** Whether people from vulnerable and marginalized groups receive the same level of service as other customers depends on the customer service policies and practices decided by the operators.

Governance frameworks need to ensure that operators are given the right set of incentives to help deliver equitable access to water and sanitation. Good governance in water and sanitation will contribute to achieving equitable access by providing a framework for operators to find ways to increase operational efficiency and develop and apply good management practices that will ultimately reflect on the service levels delivered and the prices charged to users.

Benchmarking is one of the most effective instruments for improving operational efficiency. It consists in developing a set of performance and price indicators, collecting the relevant information from the operators and comparing them. Benchmarking has been introduced in many European countries, such as Belgium, France, the Netherlands and Portugal. While standard benchmarking will certainly contribute to achieve equitable access, there may be scope for making it more equitable-access oriented by including in the indicator set some indicators that directly track equitable access dimensions.

The incentive framework for operators can combine monetary and non-monetary incentives. Monetary incentives for achieving equitable access objectives can be included in the concession contract or alternative tool regulating the provision of the service. Non-monetary incentives are also very powerful — they can include making information on equitable access performance publicly available, and the awarding of prizes to those operators making the most progress in delivering equitable access.

### BOX 3.9 ENSURING THAT WATER PROVIDERS HELP TO DELIVER EQUITABLE ACCESS IN THE NETHERLANDS

In the Netherlands, the production and distribution of drinking water is seen as a public service. Public authorities (namely, the provincial governments) own the 10 drinking water companies, which operate on the basis of full cost recovery tariffs. The Drinking Water Act, which came into force as of 1 July 2011, increases the responsibilities of the drinking water companies: they must guarantee a durable and efficient public drinking water supply; ensure that future demand can be satisfied; carry out fault risk analysis; and provide for emergency drinking water when the delivery of drinking water is no longer possible or is unacceptable on public health grounds.

To ensure equitable access to drinking water, every drinking water company is obliged to:

- » Make an offer to any person who requests access.
- » Provide a connection under conditions that are reasonable, transparent and non-discriminatory.
- » Apply tariffs that are cost-covering, transparent and non-discriminatory.
- » Develop a policy aimed at avoiding disconnection of small consumers.

In addition, benchmarking (performance comparison) is used to compare service delivery and costs between companies, thereby pressuring suppliers to better their performance and lower their costs to remain competitive.

### 3.4 DEVELOPING A STRATEGIC FRAMEWORK FOR EQUITABLE ACCESS: A CHECKLIST

The following paragraphs provide a checklist that can be used by Governments when developing a strategic framework for ensuring equitable access to water and sanitation.

- 1. Reflect international commitments in national legislation.** While international law is applicable at the national level, changes in national legislation to reflect the contents of the Protocol on Water and Health and the human right to water and sanitation as regards equitable access would contribute to their effective application.
- 2. Identify and allocate responsibilities** among the different actors (central Government, local authorities, services providers, etc.) for delivering on those commitments, **and the financial resources needed** to effectively discharge those responsibilities.
- 3. Set equitable access targets.** Setting targets under the Protocol on Water and Health can actively promote equitable access, for example, by setting differentiated targets for areas that lag behind or setting specific targets addressing vulnerable or marginalized groups, or related to affordability.
- 4. Develop capacity-building initiatives** aimed at enhancing the understanding of the importance and implications of adopting an equitable access lens to the planning and delivery of water and sanitation services by staff in relevant ministries, agencies and utilities.
- 5. Invest efforts in better understanding the linkages between equitable access to water and sanitation services and equitable access to other public services** (in particular health services) and assess the need for developing integrated responses to equitable access to public services.
- 6. Develop awareness-raising programmes** aimed at informing users and other rights holders of water supply and sanitation services of their relevant rights and the mechanisms to claim them, making sure that those programmes are designed in a way that prioritizes reaching out to citizens with no access or lower levels of access.
- 7. Analyse and publish the progress** in closing equity gaps.
- 8. Develop accountability mechanisms** that help to identify violations of the human right to water and sanitation (including with respect to discrimination, exclusion and unjustifiable retrogression) and to seek redress. They can be formal (such as customer service departments within water and sanitation operators, courts and national human rights institutions) or informal (such as lobbying, advocacy, public campaigns and political mobilization).
- 9. Create national or local spaces for discussion and coordination between competent authorities.** At the national level, key agencies include the ministry of finance, the ministries responsible for water and sanitation services, the ministry responsible for regional development, the ministry responsible for social protection, the ministry of health and the ministry of environment.
- 10. Ensure well-functioning institutional mechanisms for the monitoring and enforcement** of standards, such as those related to the quality and costs of drinking water or sanitation facilities. Such mechanisms (e.g., water regulator, water observatory) should in particular be able to monitor the evolution of coverage and service quality levels in the areas lagging behind in terms of access, as well as for users belonging to vulnerable and marginalized groups.





*Access and price gaps between geographical areas can be explained by underlying cost structures but also by political influence and decisions, and thus reducing those gaps requires a combination of political, financial and technical efforts.*



## Chapter 4

# REDUCING GEOGRAPHICAL DISPARITIES

### KEY MESSAGES

- » The levels of service received by users in different geographical areas within the same country can be very different. Access to improved water and sanitation in rural areas in the pan-European region is 10% lower than for urban areas. Access and price gaps between geographical areas can be attributed to underlying cost structures but also to political influence and decisions.
- » Reducing access gaps requires political, financial and technical efforts. International cooperation can play an important role in closing access gaps, by focusing support on the areas that lag behind. Importantly, gaps in access are not just a water policy issue, but also a regional policy issue.
- » Public policies have a fundamental role to play in reducing price disparities between geographical areas by: (a) targeting investment programmes and subsidies to areas with higher costs of service, (b) enabling cross-subsidisation from high-income low-cost areas to low-income high-cost areas, and (c) promoting efficiency and rational prices through sector organization reform and the use of information tools such as benchmarking and tariff reference values.



## 4.1 ADDRESSING DISPARITIES IN PHYSICAL ACCESS

### 4.1.1 Key issues

The levels of service received by users in different geographical areas within the same country can be very different. According to the United Nations Children's Fund (UNICEF)/WHO Joint Monitoring Programme, access to improved water and sanitation in rural areas in the pan-European region is 10% lower than for urban areas. Rural households are eight times more likely to lack access to piped water at home than urban households.

Those differences can be attributed to a large extent to economic factors. Physical access to water and sanitation depends primarily on investments in infrastructure that can be financed directly by the users themselves, by service providers that expect to recover the costs via user charges, or by government programmes. In general terms, rural areas are more expensive to serve due to their low population densities. Moreover, the ability to pay for water and sanitation services by rural populations is lower than that of urban areas. As a result, in many countries, investments in water and sanitation infrastructure networks were initially undertaken by service providers to serve urban areas (where per capita costs were lower and the ability to pay was higher) and financed by a mix of user charges and local taxes. This opened a gap between access in urban areas and rural areas that was only reduced or closed when Government policies mobilized taxpayer subsidies or cross-subsidies from urban users to pay for access by rural users. For example, France and Germany have historically made use of massive subsidies financed by urban consumers to support the development of water and sewerage networks in rural areas — and Germany pursued a similar strategy to renovate the water and sanitation infrastructure in East Germany after reunification (Verges, 2011).

Political factors also play a role. Public investment programmes are often biased towards urban areas. In some cases, this is driven by cost-effectiveness considerations — since it costs less to provide service to an unserved household in urban areas, investment programmes that focus on urban areas can show a larger impact in per capita terms. But in many cases the discrimination against rural areas is driven by lack of political attention, electoral considerations and political influence. Investments in urban areas have more political visibility and usually benefit a larger number of potential voters. Less legitimate are the political decisions to invest in improving services in selected neighbourhoods where elites live (and already have access) while leaving many people in rural areas unserved. As a result, in some countries, the level of service received by the advanced areas (e.g., major cities) is highly subsidized, while relatively little support is offered to the areas lagging behind.

Service provision in rural areas also involves specific technical challenges. It cannot be approached in the same way as in urban areas — it requires taking into account the specific needs of rural users given their economic, social and cultural characteristics. It thus requires dedicated efforts to develop appropriate solutions. The economic and political constraints

mentioned above have reinforced the technical constraints. Since the “effective market” for urban services tends to be larger and more profitable for water and sanitation companies, professionals and researchers, less effort has been devoted to develop appropriate technical solutions for rural areas.

### 4.1.2 Policy options

Public policies have a fundamental role to play in reducing inequities in physical access. Closing the urban-rural gap in access requires efforts around three major axes: political, financial and technical.

First, more political attention should be paid to the urban-rural gap so as to ensure that policies, strategies, investment programmes, technical support and capacity-development activities are tailored to the different needs of urban and rural areas. In terms of capacity development, there is an opportunity to facilitate cooperation and solidarity between large urban municipalities and small rural ones. For example, in Palestine, the municipality of Nablus (pop. 135,000) has provided technical support to the nearby village of Kufer Qalis (pop. 3,000) to prepare a project and find donors resulting in access to safe water for 70% of the population and to sanitation for 50% of the population of the village.

Second, funding policy should aim to mobilize additional financial resources to subsidize water and sanitation investments in rural areas. This can be done in two major ways: developing public investment programmes that directly address the urban-rural gap (making general taxpayers pay); or developing cross-subsidy schemes (making water and sanitation users in richer areas pay). Box 4.1 illustrates how investment programmes can help overcome disparities in access to water resources.

Third, the policy framework should provide the right incentives for the development and adoption of appropriate technical solutions. Solutions that are appropriate for urban areas are in many cases not appropriate for rural and remote communities, either because they are not technically feasible, too expensive, or unworkable in the social and cultural context of the beneficiary communities. Appropriate low-cost technical solutions are in many cases already available, as illustrated in box 4.2. Here there is also a need for a technology-neutral regulatory framework — to avoid frequent biases against some innovative technologies (such as closed water systems).

Fourth, policies should support the development of comprehensive and integrated approaches to service delivery in rural areas. This may require changes in legislation as well as major efforts in awareness-raising and training for water and sanitation professionals. The main elements should include:

- Selection of appropriate technologies and construction of facilities in a participatory manner, taking into account the financial constraints and cultural specificities of the beneficiary population.
- Management of conflicts around water use.
- Organizing and building the capacity of service providers.



### BOX 4.1 OVERCOMING DISPARITIES BY INVESTING IN INFRASTRUCTURE: THE CASE OF UKRAINE

Ukraine depends heavily on surface water resources to supply drinking water to its population — 80% of water supplied from surface water. But surface water is distributed unevenly and its availability has a strong seasonality: the western and northern parts of Ukraine can be characterized as water-rich, while the central, southern and eastern parts of Ukraine are water-scarce. To solve those problems, Ukraine has historically made major investments in water infrastructure. In Soviet times, 1,200 reservoirs and 28,000 ponds were built to store water, and 7 big canals and 10 large water pipelines were built to redistribute water across the country.

Problems of continuous, good quality access in rural areas persist. Most rural residents rely on local groundwater sources. In 2010, 10.4 million rural residents (74% of the rural population) did not have access to a centralized water supply. Groundwater is mobilized through multiple means, such as shallow wells (over 2.1 million), catchment systems (over 1,000), artesian wells (about 80,000) and deep wells (more than 350,000). Yet, more than 1,300 rural settlements in 16 oblasts (totalling a population of more than 850,000 people) do not have constant access to good quality water and have to transport water by lorries. While this is not a new problem, it has worsened in the past 20 years due to pollution and extreme weather events (floods and droughts).

The problems with groundwater sources vary across the country. In the southern and eastern oblasts, the main problem is water scarcity. In the western oblasts, the main problem is the contamination of local groundwater sources as a result of major floods in recent years. There are also some regions where groundwater sources have been contaminated by local industry.

Public investments can solve some of these problems, but they need to be financially realistic. In 2000, the Ukrainian Government adopted a State programme to connect 848 villages from 14 oblasts to a centralized water supply. But centralized solutions were too expensive for the State to build and too expensive for rural communities to operate. The new policy on rural water supply developed in 2010 widens the options for providing services to rural communities, including decentralized, small water supply systems and “on tap” water treatment measures. The revised budget allocation is UAH 2.9 billion (about EUR 290 million) for 10 years.

### BOX 4.2 DEVELOPING TECHNICAL SOLUTIONS ADAPTED TO THE NEEDS OF RURAL AND REMOTE COMMUNITIES IN CENTRAL AND EASTERN EUROPE AND ARMENIA

In Central and Eastern European (CEE) countries,\* advanced sanitation is a major challenge in rural areas. While CEE countries have set ambitious targets for connections to wastewater collection and treatment, their sanitation programmes do not deal with settlements up to 2,000 people even though in CEE those settlements account for 20% of the population. This is driven by the fact that, under EU directives on wastewater, treatment plants are not mandatory for settlements of less than 2,000 inhabitants. To address this challenge, the Global Water Partnership for Central and Eastern Europe has been raising awareness among villages in CEE about nature-based wastewater treatment systems as a low-cost solution for wastewater collection, treatment and disposal from an integrated water resources management perspective. The major challenges for the application of this sustainable sanitation approach are obtaining construction and water permits for alternative sanitation installations — since standards for nature-based wastewater treatment systems are not in place in many CEE countries — and insufficient expertise in CEE countries in the field of sustainable sanitation.

In many countries in Eastern Europe, the Caucasus and Central Asia, rural areas are suffering the most from the inability of Governments to sustain the water and sanitation infrastructure built in Soviet times. For example, in Armenia, many villages located near cities still have wastewater collection, but no longer have wastewater treatment and thus wastewater is discharged into local irrigation canals and watercourses with deriving economic, social and environmental impacts. In the Armenian community of Paraqar, 60% of households are connected to the sewerage system, but the wastewater that used to be conveyed to and treated in Yerevan was for many years discharged untreated into open irrigation canals. In 2010, a non-traditional wastewater treatment plant (aerated biological lagoon) was constructed in the community with the support of a United Nations Development Programme (UNDP)/Global Environment Facility (GEF) project. Such wastewater treatment plants are relatively cheap and easily operated systems. The new plant helps to prevent the degradation of agricultural lands, produces 10 litres per second of additional irrigation water (allowing expansion of agricultural lands) and improves sanitary conditions.

\* CEE includes the countries of Albania, Belarus, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, the Republic of Moldova, Montenegro, the Russian Federation, Serbia and Ukraine.

### BOX 4.3 CLOSING WATER QUALITY GAPS BETWEEN RURAL AND URBAN AREAS IN THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

The quality of drinking water in the former Yugoslav Republic of Macedonia depends on where a person lives and who manages the water. The quality of drinking water supply in rural areas is often inferior to that of urban areas because small water systems are more at risk from bacteriological and physio-chemical contamination, but also because monitoring and enforcement of drinking water quality standards is often less strict in rural areas. The Ministry of Transport and the Ministry of Environment and Physical Planning are responsible for improving water supply, and the Ministry of Health is entrusted with monitoring the quality of drinking water (through the Public Health Centres). Water is managed in cities and some rural areas through the Public Enterprises of Communal Hygiene (under the Ministry of Transport), while 29% of the population relies on piped water systems managed by the municipalities and 6% on local sources of water. But water quality is often not a priority for rural municipalities.

To address this issue, the Institute of Public Health has been working with communities to increase awareness about environmental health, and the Public Health Centres are expanding their efforts to monitor water quality. Water quality surveys are conducted regularly in urban areas, while in rural areas the monitoring approach depends on the water supply infrastructure and management (piped water systems managed by a public communal enterprise, piped water systems not managed by a public communal enterprise and local water supply sources).

### BOX 4.4 ENSURING ACCESS TO WATER IN REMOTE RURAL AREAS IN FINLAND



Ensuring access to water for all in Finland has been a long-term social project that had to confront a challenging human geography. Finland is a very sparsely inhabited country, with only 17 inhabitants per square kilometre (km<sup>2</sup>) on average, reaching a low of 2 person/km<sup>2</sup> in the Lapland region. In earlier times water for the domestic needs was taken from natural springs or from lakes and rivers. The construction of wells for water supply started in the early years of the nineteenth century, both in towns and in rural areas. The first rural water supply network was built in western Finland in 1872. Still, in the 1940s most rural farms relied on their own wells. Despite massive rural-urban migration, during the period from the 1950s to the 1990s the total length of water pipelines increased about tenfold. At the moment, about 90% of the population in Finland is served by piped water supply networks and 80% by sewer networks.

A long-term programme of public subsidies has played an important role in ensuring access for people living in remote rural areas. Water and sewerage services in Finland are operated on a commercial (though non-profit) basis whereby the service costs are mainly covered by direct consumer fees.

However, grants and loan interest subsidies for water sector investments were introduced in the early 1950s. While the total share of Government support to water services has been only a few per cent of the yearly investment volume, the impact on access has been maximized by two key decisions: to provide no subsidies for operation and maintenance, and to target subsidies to smaller and remote municipalities (with a higher subsidy percentage in the northern and eastern parts of the country). In addition to the subsidy programme, extensive groundwater research funded by regional authorities has helped rural municipalities to locate water abstraction sites.

Sector organization has also had an influence. In rural areas water supply was traditionally organized, owned and managed by private organizations. Currently, there are more than 1,000 small water utilities — most of them consumer-managed water cooperatives serving one or more rural villages, sometimes the whole municipality. When owned directly by the users it has been possible to extend services also to very remote small farms, if the owners have agreed. But in bigger municipal utilities the decision-making is not always so simple.

- Establishment of systems for monitoring water quality (see box 4.3 for an example in the former Yugoslav Republic of Macedonia).
- Establishment of supramunicipal mechanisms to provide support, advice and technical assistance for operation and maintenance of facilities.
- Adoption of a subsidy policy that takes into account the cost of providing the service and the ability to pay of the rural population, and which is targeted and regularly reviewed with a view to phasing it out when no longer needed.
- Promotion of community participation and ownership in all aspects of water and sanitation management (protection of water bodies; construction, operation and maintenance of facilities; water and health aspects; tariffs; participation mechanisms).

## 4.2 ADDRESSING PRICE DISPARITIES

### 4.2.1 Key issues

Prices faced by water and sanitation users in different areas within the same country can be very different. Evidence about those price disparities is not easy to gather, as there are often many service providers and they do not always have the obligation to report prices. In addition, pricing structures may be very different, thus making prices difficult to compare.

There is rarely a single price for water and sanitation services. The price of water and sanitation services usually has three major components: a connection charge (a one-time charge); a fixed service charge (a recurrent charge, usually monthly); and a consumption charge (a charge that depends on the volume of water consumed and wastewater produced). Moreover, the consumption charge is increasingly calculated using different rates for different consumption brackets.

The complexity of water pricing structures can be explained by the multiple objectives of water pricing policies. The original objective of water pricing policies was to ensure the financial sustainability of the service. Over time, additional objectives have been assigned to water pricing: to promote economic efficiency; to promote environmental sustainability; and to ensure affordability. The economic structure of water and sanitation services (where the costs of building and maintaining the physical networks often exceed 80% of total costs) means that there are trade-offs between those policy objectives.

Water and sanitation services are natural monopolies, and thus pricing of those services is not done through the market as is the case with most goods and services. In many countries, the municipalities are legally responsible for the provision of water and sanitation services. Municipalities ensure the provision of water and sanitation services through direct provision or through contracts with service providers (whether public or private). In the first case, the municipalities set the public prices of the services. In the second, they negotiate the prices to be charged with the service provider and reflect the price in the contract. In some countries there is an economic regulator that sets price limits — a prominent example is the Water Services

Regulation Authority, which every five years sets price limits for the 21 regional services providers of England and Wales.

The price-setting mechanism can have some influence over price disparities. Weak price regulation (whether by contract or by a national regulator) or its absence can result in higher prices for consumers. When regulation is done by contract, rural areas may suffer the most since rural municipalities often have less capacity to take on their regulatory obligations.

However, the two most important factors explaining price disparities are differences in cost of service provision and subsidy policies. Rural areas generally face higher costs of service because they have less dense networks, meaning that more infrastructures need to be built and operated to serve the same number of people. Other factors affecting the cost of service include the quality of the water source (and thus the cost of treating the raw water to obtain drinkable quality), the type of technology applied and additional service elements (such as the level of water quality monitoring or the quality of customer service). In some cases, the organization of the sector can be a major factor in determining the cost of service provision: fragmentation of service provision in rural areas among a large number of small services providers prevents achieving economies of scale and results in higher average cost of service provision.

Subsidy policies can be decided at different levels. National policies in the area of water and sanitation or, more commonly, in the area of regional development and territorial cohesion, can drive the provision of significant funding to geographical areas lagging behind in terms of service levels. At the local level, each local government may decide to subsidize (or not) service provision, thus generating another source of possible price disparities.

### 4.2.2 Policy options

National subsidy policy can be a powerful weapon to reduce price disparities among geographical areas. Instead of providing blanket subsidies to the water and sanitation sector, public subsidies can be targeted to areas that face higher costs of service. These targeted subsidies should be regularly reviewed every few years to ensure that they are still justified (since the differential in costs may be reduced or eliminated over time). Box 4.5 shows how Hungary and Portugal are targeting water and sanitation subsidies to reduce price disparities.

Another major policy option is to enable cross-subsidization schemes from high-income low-cost areas (usually cities) to high-cost low-income areas (usually rural areas). Box 4.6 shows how the regions of Aragon and Flanders have enabled cross-subsidization schemes to deal with the high costs of complying with the EU Urban Waste Water Directive.

Sector organization reform must also be considered, since it can have a major impact on price disparities. There are two reasons for this. First, if a country has an atomized sector with many small service providers, it is likely that sector consolidation (for instance through the creation of multi-municipality service areas or through the merging of service areas and service providers) will reap economies of scale that will reduce the cost of provision



(and thus the price) of water and sanitation services in rural areas. Second, the creation of larger service areas allows averaging the cost of provision between high-cost and low-cost areas — this was the experience of Switzerland. In England and Wales, the definition of 10 large service areas (delimited following a river basin logic), with each area being served by one single company, enhanced the possibility of geographical cross-subsidies as well as solidarity between rich and poor neighbourhoods. By contrast, France has 30,000 service areas with about 12,000 different tariffs, and as a result the tariffs can be significantly lower in the richer areas than in the low income ones. For example, tariffs in the low-income suburbs around Paris can be more than 50% higher than in central Paris because central Paris has a long-established and dense water distribution network.

In addition to budgetary and regulatory tools, information tools can also be an important part of the policy toolbox. They are particularly relevant for countries with a decentralized

tariff-setting mechanism. Examples of information tools are the collection and benchmarking of performance indicators (in this case affordability indicators) and the issuing of tariff reference values. The benchmarking option is helpful to address those situations where there is a concern that service providers are charging very high prices in comparison with other municipalities with similar characteristics — either because they are not efficient or because they are making unjustified profits. It can also be useful to complement other tools: for example, informing the allocation of public budgets. Box 4.7 illustrates the use of those information tools in Portugal. Another example is provided by France, where the National Office for Water and Aquatic Environments (ONEMA) is developing an information system that displays data on water quality, water service quality (network maintenance, leakages, claims) and water tariffs collected and submitted by municipalities, thus allowing municipalities to benchmark their figures in the near future.

#### **BOX 4.5 TARGETING PUBLIC SUBSIDIES TO REDUCE PRICE DISPARITIES IN HUNGARY AND PORTUGAL**

From 1968 to 1993, Hungary had a price subsidy system that led to residents paying less than the real cost of service: prices of retail water were classified into six categories and the average subsidy amounted to 36% to 45% of the total cost of service. But in 1993, price setting was decentralized by law, and since then local municipalities have the responsibility of determining the prices at the municipality-owned companies, resulting in wide price disparities between municipalities given the very different costs of service provision. In parallel, Hungary reformed its subsidy system; today, the subsidy is targeted towards areas that face very high costs of service. Municipalities can apply for central subsidies if the costs (before subsidy) faced by the residents exceed a certain threshold. In 2010, the threshold was HUF 321/m<sup>3</sup> (EUR 1.2/m<sup>3</sup>) for bulk water bought, HUF 485/m<sup>3</sup> (EUR 1.8/m<sup>3</sup>) for total residential water supply costs and HUF 985/m<sup>3</sup> (EUR 3.6/m<sup>3</sup>) for combined residential water supply and sanitation costs. Subsidy claims are resolved by an inter-ministerial committee, led by the Ministry of Rural Development, which allocates the total available budget appropriation taking into account criteria such as the residential water consumed during the previous year, the expected changes in water consumption, the effective and predicted costs of service and whether the claims of concerned municipalities are supported by the board of representatives. The subsidy allocated to each municipality can only be used for the reduction of residential water and sanitation bills.

In Portugal, water prices are very diverse, mostly due to political criteria, but also because of the different costs of service provision. In fact, the more sparse areas inevitably face higher investment and operational costs per household served. Because water and sanitation services are essential to well-being and to public health, Portugal has decided that some regions of the country must benefit from specific subsidies on investment and operation in order to ensure affordable services without compromising the long-term sustainability of the operators. Despite not being able to entirely separate the “political price effect” from the “higher cost of service provision effect”, affordability levels have been used as one of the main criteria for accessing EU and central Government funding. Municipalities with possible affordability issues (where the affordability index has a higher value) will have priority funding for their investment plans.

#### **BOX 4.6 ENABLING CROSS-SUBSIDIES TO EQUALIZE SANITATION COSTS IN ARAGON (SPAIN) AND FLANDERS (BELGIUM)**

In order to meet the targets set by the EU Urban Waste Water Directive, in 2006 the Government of Aragon launched the Special Plan for Sanitation and Water Treatment. The plan aims to treat wastewater in all agglomerations with a population-equivalent of more than 1,000 inhabitants. As part of the plan, 132 treatment plants are being built for 172 population centres. This represents a major financial challenge, given that Aragon's population of 1.3 million is very widely dispersed over frequently mountainous terrain in a total area of 47,719 square kilometres. The cost of the plan, which will provide wastewater treatment for nearly 600,000 people, is EUR 1.1 billion over 20 years. There is also an equity challenge, since the cost of wastewater treatment provision for the habitants of the small towns and villages of rural Aragon is much higher than for the inhabitants of Zaragoza (the capital city where over half of Aragon's population lives).

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In order to preserve equity, the financing of the construction and operation of the new wastewater treatment plants has been designed in such a way that the inhabitants of Zaragoza effectively cross-subsidize the costs for rural Aragon. The Water Institute of Aragon (a government agency) has granted concessions to private companies to build and operate the wastewater treatment plants. Each sanitation user pays the same amount for wastewater treatment, irrespective of the real cost of providing this service. In 2011, the sanitation charge was about EUR 4 per month plus EUR 0.5 per cubic metre (m<sup>3</sup>) of water. The Water Institute collects the proceedings of the sanitation charge and uses them to pay the private companies.

In order to meet the EU wastewater treatment targets in the Flemish Region of Belgium the existing sewerage plans, developed in the 1980s, needed additional refinement. Between 2006 and 2008 detailed zoning plans were developed in close cooperation with the 308 municipalities. These plans specify whether there should be collective or individual treatment. The decision criteria included the expected economic costs. Once the zoning plans were finalized, implementation plans specified whether the responsibility for implementation fell to the Flemish Region, the municipalities, or individual persons.

The financing structure results in a high degree of solidarity among a large segment of sanitation users, since domestic users (households) pay similar tariffs per m<sup>3</sup> irrespective of the real cost of provision. Implementation of activities assigned to the Flemish Region are funded 40% by the Flemish taxpayers via the general budget in 2011, while the rest is funded by users. Activities to be carried out by the municipalities are partly funded by users, via the integrated water and sanitation bill (many municipalities charge a common rate for households), partly by local taxpayers and, in some cases, partly by Flemish taxpayers. Activities to be carried out by individual persons are subsidized at about 40% of investment costs.



### BOX 4.7 INTRODUCING INFORMATION TOOLS TO REDUCE PRICE DISPARITIES IN PORTUGAL

#### Tariff guidelines

In Portugal, there are large differences in water and sanitation tariffs between municipalities — the tariff in the most expensive municipality is 30 times that in the cheapest one. This is the combined result of having a large number of service providers (over 300) and a decentralized tariff-setting mechanism which is within the remit of municipalities. In many cases, the price differences are not justified by differences in the cost of service provision — sometimes the tariffs are too high (creating affordability problems for households) and sometimes they are too low (creating financial sustainability problems for the service providers).

The Portuguese water and waste services regulatory authority, ERSAR, is working to help harmonize tariff structures and rates to ensure that tariffs are clear, affordable and a guarantee of robust service provision. ERSAR has issued a first recommendation regarding the tariff structure — for the inclusion of a fixed and a variable part (with increasing blocks) and the definition of a social tariff for low-income and large family households. ERSAR is also working on a second recommendation to establish reference values for the tariff rates — suggesting that municipalities set their tariffs between the maximum and minimum reference values.

#### Macro-affordability indicator

ERSAR has developed a set of indicators to benchmark the performance of the more than 300 service providers. Starting in 2011, the set of indicators includes a macro-affordability indicator that tracks, for each municipality, the cost of consuming 10 m<sup>3</sup> of water as a proportion of average household income. Colour ratings are given to municipalities: “green” when the cost is below 0.5% of household income, “yellow” when it is between 0.5% and 1%, and “red” when it is above 1%.

This indicator helps to identify municipalities that may face macro-affordability problems. A “red” rating suggests that the service is too expensive, which may be due to high profits or to the high cost of service provision. In the former case, it is expected that the publication of the rating will increase public pressure to decrease tariffs. In the latter case, the indicator will be used as a criterion for receiving national and EU subsidies.



*There are many vulnerable and marginalized groups, each with their own needs and facing different barriers to achieving equitable access, and thus requiring differentiated solutions.*





## Chapter 5

# ENSURING ACCESS FOR VULNERABLE AND MARGINALIZED GROUPS

## KEY MESSAGES

- » Water and sanitation for all will not be achieved without paying particular attention to the needs of vulnerable and marginalized groups. Human rights principles highlight the need to actively design water and sanitation policies that prioritize and address the needs of vulnerable and marginalized groups, rather than treating all persons as facing identical challenges. Water and sanitation for vulnerable and marginalized groups is a social exclusion issue, not just a water issue.
- » There are many vulnerable and marginalized groups, each with their own needs and facing different barriers to achieving equitable access, and thus requiring differentiated solutions. It is important for policymakers and service providers (either public or private) to dedicate time and resources to reviewing whether vulnerable and marginalized groups are being included, and that their particular needs are taken into account.
- » In many cases, adequate solutions require an integrated response combining policies and ensuring collaboration across public agencies.
- » Ensuring access to water and sanitation for vulnerable and marginalized groups requires targeted financial resources, but those are in many cases not massive in comparison with a country's water and sanitation budget — in a sense, it requires mostly increased awareness among policymakers and technical staff.

## 5.1 GENERAL ASPECTS

Human rights principles highlight the need to actively design water and sanitation policies that prioritize and address the needs of vulnerable and marginalized groups, rather than treating all persons as facing identical challenges in accessing safe water and improved sanitation. It is important for policymakers and service providers (either public or private) to dedicate time and resources to reviewing whether vulnerable and marginalized groups are being included, and that their needs are being taken into account.

Human rights also require that these efforts be undertaken in a non-discriminatory manner. Vulnerable and marginalized groups face challenges in engaging with Government officials and influencing policy. Consequently, members of these groups lack access to basic entitlements. It is therefore necessary that water and sanitation policies prevent and remedy discriminatory political decisions and practices. Under human rights law, *de jure* and *de facto* discrimination is prohibited on grounds of race, colour, sex, age, language, religion, political or other opinion, national or social origin, property, birth, physical or mental disability, health status, or any other civil, political, social or other status including socio-economic situation. Discrimination based on tenure status is a particular issue to be considered in the context of water and sanitation.

Access to basic water and sanitation services should not be contingent on the legal situation of the person concerned. Human rights law, as set out in the International Covenant on Economic, Social and Cultural Rights, requires States parties to take steps to ensure that refugees, asylum-seekers, internally displaced persons and returnees have access to adequate water whether they stay in camps or in urban and rural areas and calls for refugees and asylum-seekers to be granted the right to water on the same conditions as granted to nationals (General Comment No. 15 of the Committee on Economic, Social and Cultural Rights, para. 16 (f)). Ensuring the right to water and sanitation therefore means that access to water and sanitation services is not conditional upon legal residence, nationality, formal rental contracts or other similar conditions.

The participation of people belonging to vulnerable and marginalized groups is crucial to ensure the adequacy of governmental policies and/or development programmes. Combining top-down and bottom-up approaches significantly increases the chances of success in improving equitable access to water and sanitation for the poor, the deprived and the socially excluded. For example, a bottom-up approach is invaluable in Bosnia and Herzegovina, where water service delivery responsibilities are widely dispersed in the public sector as a result of the post-civil war constitutional settlement, meaning it would be difficult to have an impact of any significance using solely a top-down approach (UNDP, 2011).

Any measures to promote equitable access to water and sanitation for vulnerable and marginalized groups must also emphasize that citizens, as active subjects, have not only a right to safe water, they also have responsibilities for water management, such as paying affordable tariffs and not polluting water resources with waste or excreta.

Solutions must be context specific, not generic. Each country faces a myriad of context-specific problems and challenges to achieving equitable access to water and sanitation and making the right to water and sanitation a reality for all. No single measure alone will provide the silver bullet for achieving equitable access for the poor and socially excluded. To have a sustainable impact over a long-period, a mix of legal, financial, capacity-building and awareness-raising tools are needed, together with sound infrastructure and Governments committed to fulfilling their obligations under international law.

Social inclusion aspects are often intertwined with the other dimensions of equitable access to water and sanitation explored in other parts of this publication. For example, older persons, those facing serious and chronic illnesses and those with disabilities are more likely to have difficulty in paying for water and sanitation services. It would be necessary for affordability standards to take into account the ability of such groups to pay for services.

### 5.1.1 Policy options to prevent discrimination and exclusion of vulnerable and marginalized groups

The following paragraphs set out policy options to prevent discrimination and the exclusion of vulnerable and marginalized groups.

- 1. Ensure that a comprehensive anti-discrimination law is in place**, with an institution to investigate and provide remedies for discrimination against individuals or groups.
- 2. Revise existing water and sanitation laws, regulations, policies and operating procedures** to ensure that they refrain from discrimination and that they adequately address the specific requirements for vulnerable and marginalized groups.
- 3. Establish a public participatory process to identify vulnerable and marginalized groups** by locality, region and at the national level.
- 4. Review public water and sanitation budgets** to ensure that they address the needs of vulnerable and marginalized groups, including those living in informal settlements.
- 5. Collect data on access to water and sanitation** that takes into account ethnicity, age, disability, gender, religion, income and other related grounds so as to identify discrepancies and set priorities for Government assistance.
- 6. Establish requirements for water and sanitation institutions** to ensure that **representatives of vulnerable and marginalized groups effectively participate** in and have a genuine influence on decision-making processes.



Photograph by Nicholas Alan Clayton

### BOX 5.1 THE GENDER DIMENSIONS OF EQUITABLE ACCESS TO WATER AND SANITATION

Women face pervasive challenges in public decision-making. Due to gender-related inequalities and traditional gender roles, women are often not equally represented within decision-making processes. They can be discouraged from speaking in public forums. They normally have less time to participate, due to a greater burden of work, which includes household tasks and childcare in addition to income generation or subsistence agriculture. Due to their inequitable upbringing, unequal access to education, and cultural and social attitudes, women often have less experience in expressing their views confidently. Finally, women are often reluctant to invest time in participation, based on the all-too-rational calculation that they have less to gain from participating, particularly where participatory practices are limited to token consultation.

In the context of access to water and sanitation, not all women's roles have been taken into consideration by decision makers. However, women are of utmost importance in the stewardship of natural resources, as they hold special knowledge on resource management and the environment. There is therefore a need to bring women more into policy discussions on water supply and sanitation.

Practical examples of exclusion of women from participation include:

- » Dealing only with community leaders or heads of households, normally mainly men
- » Assuming that women are dependants of men
- » Not taking into account the growing number of female-headed households
- » Working only with people who have access to land rights, again often mainly men
- » Treating households and communities as undifferentiated units
- » Scheduling meetings at times when women cannot attend.

The result is that women's uses of water are often given less priority than men's. In addition, women have often had unequal access to training and credit schemes, such as for toilet construction and water point management. In spite of women's greater interest in such issues, development workers have assumed that they are less interested in, or suited to involvement in, such work.

In addition, water and sanitation projects often do not address the greater need of women for privacy at water points (particularly for bathing) and sanitation facilities. Women's sanitary requirements are greater and include clean sanitation facilities that cover the specific needs related to menstruation. Public toilets including school toilets need to meet those requirements so that women and girls are not prevented from taking part in public life and attending school.

In developing any legislation, policy or programme for improving access to water and sanitation services, it is necessary to assess the implications for women and men of any planned action. The two sexes do not have the same access to and control over resources and work, and benefits and impacts are different for women and men.



## 5.2 ENSURING ACCESS FOR PERSONS WITH SPECIAL PHYSICAL NEEDS

Many disabled, sick and elderly people face problems in accessing water supply and sanitation services because of their specific physical needs. Altogether, they amount to a significant number of people — for example, estimates of people suffering with some kind of disability are around 10% for the world as a whole and 8% for the pan-European region (WHO, 2011).

The special needs of people with disabilities are being increasingly recognized. For instance, in 2005 the World Health Assembly passed a resolution on disability, including prevention, management and rehabilitation. The resolution provided the basis for the World Report on Disability, published in 2011, which shows disability prevalence rates among Parties to the Protocol on Water and Health ranging from 4.3% in Norway to 18% in Latvia. In particular, the United Nations Convention on the Rights of Persons with Disabilities recognizes the right to water of persons with disabilities and promotes the adoption of measures to ensure equal access to clean water services.

### 5.2.1 Policy options

The following paragraphs set out policy options to ensure access for persons with special physical needs.

- 1. Adopt standards that ensure the establishment of accessible facilities.** For water points this may require taps set lower than the standard level or the installation of pumps that do not require much strength to use. For sanitation services, it may be necessary to build latrines with a seat rather than squat latrines. Hand-washing facilities, soap and hand dryers in public toilets should take into consideration the heights accessible from a wheelchair.
- 2. Ensure that the information indicating the way to public water and sanitation facilities is understandable** by people with common disabilities. This means, for example, documentation in Braille for the blind, sign language for deaf and hearing impaired persons, but also educating staff on how to make facilities accessible to persons with disabilities.
- 3. Take into account the weaker immune systems** of persons with HIV/AIDS and other serious and chronic illnesses when setting water quality standards and measures to protect water quality, as well as when issuing alerts in cases of temporary non-compliance with standards.

## 5.3 ENSURING ACCESS FOR USERS OF INSTITUTIONAL FACILITIES AND INSTITUTIONALIZED PERSONS

Many people spend all or a significant part of their time in institutional facilities, which include schools, hospitals, retirement homes, prisons and refugee camps. Since persons using or assigned to institutions or other facilities cannot

secure independent access to water and sanitation, such institutions and facilities have the duty to provide water and sanitation services free of charge.

The needs and rights of such persons are specifically recognized in international human rights law. For example, the International Covenant on Economic, Social and Cultural Rights entails an obligation on States to take steps to ensure that refugees, asylum-seekers, internally displaced persons and returnees have access to adequate water whether they stay in camps or in urban and rural areas (General Comment No. 15 by the Committee on Economic, Social and Cultural Rights, para. 15 (f)). In the pan-European region, the Council of Europe has established that people in prisons should have access to hygienic sanitary installations, and the European Court of Human Rights has identified the lack of proper toilets guaranteeing intimacy as degrading treatment.

Yet, in many cases access is not ensured in institutional settings. For example, in most countries with economies in transition, such as Tajikistan, less than 50% of rural primary schools have adequate sanitation facilities, including access to improved water and soap for hand-washing (WHO, 2010).

### 5.3.1 Policy options

The following paragraphs set out policy options to ensure equitable access for users of institutional facilities and institutionalized persons.

- 1. Incorporate international obligations in the national legal framework.** For example, the French code of criminal procedure requires the availability of clean, sanitary facilities and the protection of the inherent personal dignity of persons in prisons.
- 2. Enhance inter-institutional coordination**, for example, between the authorities responsible for educational institutions and those responsible for water and sanitation services.
- 3. Allocate enough budgetary resources** for the establishment and upkeep of water and sanitation facilities in institutions such as schools, hospitals, prisons and refugee camps (see box 5.2 for the example of prisons in the former Yugoslav Republic of Macedonia).
- 4. Introduce relevant provisions in facility management contracts.** Where the management of schools, hospitals, prisons or refugee camps are contracted out by the Government, the obligations to ensure sufficient and safe water and adequate sanitation should be part of the contract.
- 5. Establish complaints mechanisms.** Users of institutional water and sanitation facilities should have a mechanism to voice their complaints about the quality of the services provided. For persons in care or in custody the mechanism should allow for complaints to be made about any inadequacies without fear of reprisals.



### BOX 5.2 ALLOCATING BUDGETARY RESOURCES TO PRISONS IN THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

European institutions and NGOs have long criticized the unhygienic conditions of prisons in the former Yugoslav Republic of Macedonia. To address this concern, in May 2010, the Government allocated EUR 52 million to renovate old prisons and build new prisons that respect EU standards. By April 2011, space had already been newly built or renovated for 700 convicts and detainees in Prilep, Shtip, Sutka, Skopje, Idrizovo and Kumanovo. The availability and quality of drinking water supply and sanitation facilities is an important element of the project, and the Institute of Public Health performs regular monitoring of drinking water quality in the prison facilities.



### BOX 5.3 ATTENDING THE NEEDS OF REFUGEES AND INTERNALLY DISPLACED PEOPLE: EXAMPLES FROM MALTA AND GEORGIA

In Spring 2011, there were some 3,600 refugees in Malta, of which 1,000 had arrived recently as a consequence of political turmoil in North Africa. The Maltese authorities organized space to house the new refugees — in three detention centres run by the Ministry of Justice and Home Affairs, as well as five open centres run by the Agency for the Welfare of Asylum-Seekers and by local NGOs. The Maltese authorities paid attention to ensuring adequate access to water and sanitation in the centres. Water and sanitation services are provided by the Water Services Corporation (which supplies all household water in Malta) and the costs for water and sanitation are covered by the national Government. As a result, access to water in refugee centres is adequate, although challenges remain regarding sanitation, especially when the centres are full and the equipment (toilets and showers) is damaged due to overuse or abuse.

In August 2008, the war between the Russian Federation and Georgia caused the displacement of 150,000 people from South Ossetia to other regions of Georgia. With the support of international donors, refugee camps were built in places like Mtskheta, Gori and Kaspi. These camps offer lodging, public water taps, pit latrines, as well as plots to grow fruits and vegetables. The water supply systems built provide for water taps outside the houses every 30 to 40 metres, and the water quality complies with the Georgian technical standard. Although the level of service (pit latrines, shared facilities) is not necessarily what they are used to, each refugee family has access to basic water and sanitation services.



## 5.4 ENSURING ACCESS FOR PERSONS WITHOUT PRIVATE FACILITIES

A number of people lack access to water and sanitation services not because they cannot afford it, but because they have no fixed dwelling to be connected to the water network. They include homeless persons, Travellers and nomadic communities.

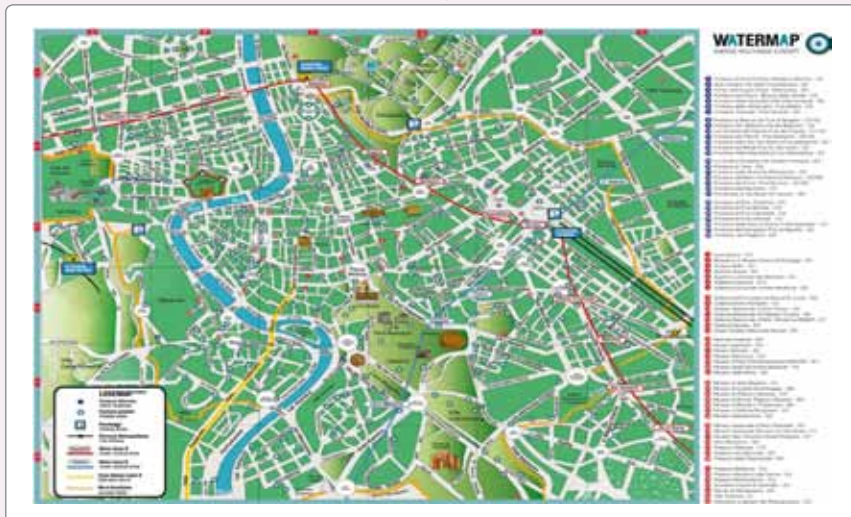
The number of homeless persons in the region is not insignificant: the Abbé Pierre Foundation has estimated that, in France alone, 100,000 people were living in the streets in 2009. Access to water and sanitation is particularly important for such people, since being able to keep themselves clean helps to improve self-confidence and the capacity to reintegrate society.

The main challenge faced by Travellers (many of them Roma) in gaining access to water and sanitation is often the opposition of inhabitants of towns and villages to the establishment of areas where they can stay temporarily, often fuelled by a perception of lawlessness.

Nomadic communities across the world generally face challenges of drought and encroachment on their traditional sources of water. Even where they have access to dedicated water sources, there can be tensions with local settled communities, particularly when the latter appropriate these water sources while the nomadic communities are absent.



FIGURE 5.1 Map of public fountains in the city of Rome



### BOX 5.4 INFORMING AND ORIENTING HOMELESS PEOPLE

People usually become temporarily homeless as a consequence of a tragic incident, and after a certain period in the streets they often succeed in reintegrating in society. When they first become homeless, they are usually very disorientated and ignore the existence or location of public water and sanitation facilities. To help them gain access to those facilities, several French cities (such as Paris, Toulouse and Nantes) include water maps in the printed guides of general advice that they distribute through social centres and NGOs. Those water maps indicate the location of drinking water and sanitation facilities, as well as of laundries where they can wash their clothes with tokens provided to them by social services. Many other European cities, such as Rome and Trento (Italy) and Brussels (Belgium) provide free maps of drinking water fountains.



### 5.4.1 Policy options

The following paragraphs set out policy options to ensure equitable access to water and sanitation for persons who do not have private facilities.

- 1. Define the responsibilities and obligations of public authorities and/or water suppliers towards rights holders without private facilities.** For example, in France, since 2000, local authorities of more than 5,000 inhabitants are bound by law to create and maintain a Travellers' site with water and sanitation (as well as electricity) services.
- 2. Provide public water and sanitation facilities and inform the homeless of their existence** (see box 5.4). Free public taps are provided in most, if not all, countries, but the provision of public toilets and public showers is less common. Examples of countries that provide public toilets include Andorra, the Czech Republic, France, the former Yugoslav Republic of Macedonia, Romania, Serbia and Switzerland. Examples of countries that provide free showers or baths include the Czech Republic, Estonia, France and Hungary. In the village of Kaloyanovets (Bulgaria) an interesting experiment has been carried out to improve the sustainability of public facilities — public shower facilities are provided on a fee basis and the revenue collected is used to cross-subsidize free toilets.
- 3. Provide Travellers' sites with access to water and sanitation services and carry out communication efforts around the areas where such sites are located to reassure residents.**
- 4. Develop targeted hygiene promotion initiatives adapted to the specific circumstances** of rights holders with no permanent address and no permanent access to drinking water and sanitation facilities.

### BOX 5.5 PROVIDING WATER AND SANITATION SERVICES FOR TRAVELLING COMMUNITIES

In France, a law passed in 2000 obliges municipalities above 5,000 inhabitants to provide areas (halting sites) equipped with water, toilets and electricity to Travellers (gens du voyage) for a daily fee. By 2010, only half of the 42,000 sites to be provided had been equipped according to the legal requirements, and as a result many Travellers decide to stay outside the designated sites. Municipalities with Travellers' sites can call on the police to expel Travellers staying outside the designated sites. There are generous subsidies to create such areas, but mayors remain reluctant to create and improve them.

In order to provide basic services to persons that are legal residents but that live in trailers or travel around on a regular basis, the Flemish Region of Belgium has established four transit areas. Each of these transit areas, which are located in the municipalities of Ghent, Kortrijk, Antwerp and Beersel, offer basic facilities for electricity, waste collection and water and sanitation, with a capacity to receive between 10 and 25 families for a short period of time (a few days or weeks). The minimum water and sanitation facilities include: one frost-free water tap on the outside of the service building; drinking water taps with an adequate flow and a drain for excess water at maximum of 100 metres from any emplacement; a discharge point for domestic wastewater at maximum of 25 metres from any emplacement; toilets for men and women; one toilet accessible for people with disabilities; and one discharge point for waste from septic toilets.

For larger travelling groups (at least 10 families) and in case all official emplacements are taken (often the demand exceeds the supply), a solution is offered through the use of temporary stopover areas. A stopover area is an area that is normally not meant for housing trailers (i.e. parking), and can only be used by traffic-worthy trailers in exceptional situations, under specific conditions and for an agreed and limited period. These stopover areas also have to offer basic facilities, but less than the transit areas.

The Flemish Government assumes 90% of the investment costs (acquiring, establishing, renovating and/or extending the transit area), while the provincial or municipal government assumes the rest of the cost. Users contribute financially towards the maintenance of the infrastructure through daily fees (rental, stall or user fees). For example, in 2010, in the transit area of Ghent users had to deposit EUR 100 per trailer and pay a daily user fee of EUR 5 per family and a weekly fee of EUR 5 per trailer. Waste collection is included in the daily fee, electricity is not.





### **BOX 5.6 ACCESS FOR PEOPLE LIVING IN UNSANITARY HOUSING: EXAMPLES FROM ILLEGAL ROMA SETTLEMENTS**

Roma people can often be found living in unsanitary housing in many countries across the pan-European region. Out of the 12 to 15 million Roma living in Europe, most are sedentary. In Central and Eastern Europe Roma communities have suffered processes of segregation and exclusion. In terms of designing a “Roma strategy” the options considered are often integration (rather than acceptance) or consolidation of existing segregation.

In the city of Belgrade (Serbia), where there are 130 unhygienic Roma settlements, the city administration developed an action plan to reduce the number of unhygienic settlements, with ensuring access to water and sanitation as an important component. The plan incorporates the identification of more suitable locations and the provision of improved living conditions, but it goes beyond mere resettlement and includes issuing documentation to be able to benefit from social protection services, such as medical treatment in health centres. The new settlements have access to water supply and sewage collection, as well as electricity, heating, fire-fighting equipment and basic furniture. The monthly water (and electricity) bills are paid by the city of Belgrade. Beneficiaries of this plan include the 220 Roma families that were living under the Gazela bridge in the heart of Belgrade. As part of this action, the city administration has invested some EUR 1.1 million to provide one mobile-house per family, as well as 30 sanitary containers. Each sanitary container serves 10 families and includes 2 toilets and 2 cabins with showers (separate male and female).

Roma communities living in small towns and villages face a double challenge in accessing water and sanitation services. First, they share the same problems as the other rural inhabitants, as small towns and villages struggle with technical and financial constraints. But in addition, they also face specific problems. In the village of Richnava (Slovakia), 700 people live in the centre of the village and 1,700 in the nearby Roma settlement. Richnava does not have a public drinking water system or wastewater collection and treatment services. In the village, household wastewater is stored in septic tanks, often with artificial leaks in order to reduce costs for regular emptying. The Roma settlement does not have water supply and has been set up illegally in forest lands, which means that Roma households do not have property titles. At the request of the mayor of Richnava, GWP-Slovakia carried out and discussed with citizens a study assessing alternatives for wastewater management. In addition to the problems of the village, the study paid attention to the specific needs of the Roma settlement, suggesting a combination of centralized and decentralized schemes with natural filters, root fields, composting toilettes, drainage fields with fast-growing willows and retention reservoirs. The situation in the Roma settlement is difficult to solve, as the lack of property titles means that no construction permits for infrastructure development can be obtained.

But even within illegal settlements, there are a number of measures that can be undertaken, such as hygiene promotion. For example, the Red Cross ran a six-month education and awareness-raising project for several families in the illegal Roma settlement of the municipality of Palilula (Belgrade District) that resulted in a reduction of 60% in water-borne and sanitation-related diseases.

Overall, pilot projects tend to put in place a temporary parallel system that is not sustainable. Moving forward, there is a need for a more strategic focus, linked to Government budgets, and including real participation of the Roma communities.

## 5.5 ENSURING ACCESS FOR PERSONS LIVING IN UNSANITARY HOUSING

Vulnerable and marginalized people often live in housing without basic water and sanitation services. On occasion, this may be due to having suffered disconnection after not being able to pay the water bill (an affordability issue), but in many cases it is due to dwellings not having basic sanitary conditions. The number can be significant — in France there are nearly 2.9 million people living in unsanitary housing, including some 200,000 dwellings that lack access to water and sanitation.

Unsanitary housing conditions can be experienced by people that own a dwelling for which they lack a property title (even though the dwelling may have been in the family for generations), by poor people who cannot afford to rent better accommodation, or by people squatting in empty or abandoned property.

Ethnic minorities are more likely to live in unsanitary housing conditions. Problems of lack of access to water and sanitation often get intertwined with discrimination and social exclusion issues.

### 5.5.1 Policy option

The following paragraphs set out policy options to ensure equitable access to water and sanitation for persons living in unsanitary housing.

#### 1. Develop integrated programmes that address both the symptoms and the causes of the lack of access.

These programmes should include legal issues, urban planning, alternative technologies or innovative business models.

### BOX 5.7 PARIS PROTECTS ITS VULNERABLE PEOPLE

Paris has an official population of 2.2 million inhabitants, although the number of daily water consumers increases to 3.5 million when including commuters and tourists. The municipality estimates that around 210,000 people in the city are vulnerable or marginalized: the number of homeless, travellers, illegal immigrants and squatters is thought to be 5,000 to 15,000; those inadequately housed, around 20,000; and those decently housed, but with insufficient income, around 180,000. In order to guarantee the right to water for all Parisians regardless of circumstances, the municipality has developed a package of eight measures:



1. A general reduction of water tariffs of 8%, with an estimated loss of revenue for the water utility Eau de Paris of around EUR 19 million per year for the period 2011–2015.
2. A water allowance for Parisians receiving housing benefits from the municipality to avoid non-payment — 40,275 households received on average EUR 70 in 2010 — and financial help to those who cannot pay their bills — EUR 400,000 for 5,462 households.
3. Supply of water-saving devices in public housing, generating savings of EUR 100 per year on energy and water bills.
4. No water supply disconnection for occupied housing.
5. A plan for the elimination of substandard housing. In 2006, 2.6% of dwellings had no toilets or bathrooms.
6. Free access to public drinking water and sanitation facilities — some 1,200 drinking water fountains, 350 toilets adapted to the needs of disabled people, over 30 public baths/showers (some equipped with laundries), and distribution of water bottles, jerry cans and maps — at a combined cost of almost EUR 16 million per year.
7. Reception sites for Travellers equipped with sanitary facilities (one site will be inaugurated in 2013).
8. Information, guidance and mediation, including information centres, a solidarity correspondent within the Parisian water authority and a participatory body for water users (Observatoire Parisien de l'Eau).

The measures taken by Paris are now being considered by the National Water Council which is preparing proposals to deal with access to water and sanitation for the vulnerable population in all of France.





*Ensuring that the water bill is affordable for all requires in each country the adoption of a long-term strategy as well as careful selection of in-tariff and out-of-tariff tools.*



## Chapter 6

# KEEPING WATER AND SANITATION AFFORDABLE FOR ALL

### KEY MESSAGES

- » Affordability is a common and increasing concern in the pan-European region, although with differences among countries, and requires adopting a long-term strategy in each country.
- » Affordability is not just a water issue; it is a social protection issue that requires incorporating water and sanitation issues within social policy discussions.
- » Affordability concerns are not merely linked with tariff levels, but also to income levels, cost of provision, subsidy policies in place, and consumer behaviour.
- » There are many policy options available to deal with affordability concerns, both in-tariff and out-of-tariff. Criteria to select them should include their effectiveness in reaching the target groups and their demands in terms of administrative capacity and costs.
- » Relying only on tariff design is not enough to ensure affordability: social tariffs and social protection measures are required. The adoption of social tariffs and social protection measures requires the existence of a “social policy infrastructure”.
- » The options to address affordability concerns will demand financing from other water users or from taxpayers. User-financed systems are under increasing pressure and may be reaching their limits in some cases.
- » Water governance matters in terms of policy options — for example, fragmentation of service provision in many service areas limits the scope for cross-subsidies between users.



## 6.1 GENERAL ASPECTS

To achieve equitable access to water and sanitation it is not enough to ensure that the services are provided to the population and that the population can actually make use of them; it is also necessary to ensure that the price of those services is affordable. In Western European countries, increases in water and sanitation costs (due primarily to higher wastewater treatment requirements) have been and will continue to be reflected on water and sanitation bills. In Eastern European countries, where water prices have been traditionally low, the water bill also needs to increase, to reflect the real cost of providing the service.

Affordability concerns relate to whether a household has enough income to pay for water and sanitation services without forcing serious trade-offs in other essential goods and services. While there is no universally accepted “affordability threshold”, many institutions (and in particular the development banks) use benchmarks in the range of 3%–5% for water supply and sanitation investment projects and tariff policies (the higher end usually includes both water and sanitation services, while the lower end may include only water services). For practical and conceptual reasons, affordability thresholds are often calculated as a percentage of household expenditures rather than household income.

When looking at affordability issues, the relevant variable is the size of the whole water and sanitation bill compared with the total household’s budget. This requires adding the cost of water services and the cost of sanitation services, as well as considering all service charges (e.g., connection charge, fixed monthly charge, charges for actual water consumption and any other charges or surcharges, such as a water meter charge). Sometimes discussions about affordability focus on the price of water per m<sup>3</sup>, but very often that is only one part

of the total water and sanitation bill. At the same time, if the water and sanitation bill includes charges for other services (such as solid waste collection and disposal) those elements should be discounted when undertaking an affordability analysis.

Affordability is driven by five sets of variables:

- The income level and income distribution in a given country or area — low-income countries as well as middle- and high-income countries with large income inequalities will tend to have affordability problems.
- The cost of provision in any given country or area — countries or areas with high costs of provision (whether due to geographical or system design characteristics) will have more affordability problems.
- The subsidy policies — countries that do not subsidize the cost of provision will have more affordability problems.
- The tariff policies — tariff design can reduce affordability problems by differing connections costs or allowing for solidarity between users.
- The individual behaviour of users — users that consume more water will have, other things being equal, more affordability problems.

From an equitable access perspective, it is particularly important to distinguish macro-affordability from micro-affordability. Macro-affordability looks at the share of water and sanitation services in the household budget for the population as a whole. It is useful to detect whether there is a general affordability problem (are the levels of service provided too high for the level of development of the country?), as well as to identify possible inequities between different geographical areas (is the cost of service provision very different among different areas in the country?), and thus can guide service provision policies. Micro-affordability looks at the share of water and sanitation services in the household budget of particular groups (typically the lower income group, but it could also be applied to vulnerable and marginalized groups). It is useful to identify groups that may be in need of public support to pay the water and sanitation bill, and thus can guide social protection policies. This chapter deals with micro-affordability concerns.

In some countries, the traditional response to affordability concerns has been to keep water and sanitation prices low. It is now widely acknowledged that this is a mistaken strategy. By not making available to service providers enough revenue to operate, maintain and extend water and sanitation networks, low prices for everyone effectively result in a lack of access or low-quality access for many. Moreover, low prices as an instrument of social protection are too crude — most of the implicit subsidy goes to the well-off not to the poorest — and work against environmental objectives, since they fail to provide to users adequate signals of the value of water resources and can lead to waste. These considerations have led the EU water policy to discourage low water prices (see box 6.1).





### BOX 6.1 EU WATER POLICY: LOW WATER PRICES ARE NOT THE RIGHT SOLUTION TO ADDRESS AFFORDABILITY CONCERNS



The EU Water Framework Directive, adopted in 2000, defines the major principles that should guide water policy for all the EU member countries. These principles include the principle of recovery of the costs of water services and the polluter pays principle. The application of those principles discourages the use of low water prices to address affordability concerns. The European Commission in a communication on pricing policies for enhancing the sustainability of water resources (COM/2000/0477 Final) clearly stated that:

*The provision of water at artificially low prices to account for social and affordability objectives is a crude instrument for pursuing equity objectives. This form of subsidy encourages inefficient use and pollution. Thus, in a situation of unsustainable water use, social concerns should not be the main objective of water pricing policies, although they need to be taken into account while designing new pricing policies. And social concerns are better dealt with through accompanying social measures.*

This chapter will consider alternatives to address affordability concerns. It will first look at options related to tariff structures and then focus on non-tariff mechanisms. Table 6.1, at the end of the chapter, provides a summary overview of the application of the different instruments in Organization for Economic Cooperation and Development (OECD) countries.

## 6.2 ADDRESSING AFFORDABILITY CONCERNS THROUGH TARIFF MEASURES

### 6.2.1 Progressive tariff systems

Tariff systems can serve multiple objectives: financial sustainability (cost recovery), environmental sustainability (reduced water consumption) and social protection. Traditional tariff systems include a fixed tariff system (where every consumer pays the same, independent of the amount of water consumed), a single tariff system (where every consumer pays the same for each  $\text{m}^3$  consumed), a decreasing block tariff system (where those consumers that consume more pay less on average for each  $\text{m}^3$  consumed — a system that is still used in some countries for industrial consumers), and increasing block tariff systems (also known as IBT systems or progressive tariff systems). (Trade-offs between objectives and trends in tariff systems and structures are reviewed in OECD, 2010).

IBT systems have grown in popularity over the years and are now used in many countries. They consist in having the price of water (the tariff) vary according to consumption levels. Several blocks of consumption are defined (for example: up to  $3 \text{ m}^3/\text{month}$ , between  $3$  and  $30 \text{ m}^3/\text{month}$ , and over

$30 \text{ m}^3/\text{month}$ ). Then different tariffs are applied to each block, with the first block having a lower price than the second block, the second block having a lower price than the third, and so on. The intended result of is that the users that consume large quantities of water pay more for each  $\text{m}^3$  than those that consume less water, thus providing incentives to reduce water consumption.

IBTs can sometimes help to ensure affordability for part of the population. For example, if in a particular city the single tariff level would need to be EUR  $2/\text{m}^3$  to reach financial sustainability but this causes affordability problems, an IBT system could be designed to have the first block provide the water for “basic” needs<sup>6</sup> at a reduced price (for example  $3 \text{ m}^3/\text{month}$  at EUR  $1/\text{m}^3$ ), having the second block defined for “normal” consumption of water beyond strict basic needs and priced at the average cost of provision (i.e., EUR  $2/\text{m}^3$ ), and define a third block for “extravagant” consumption of water (that could be incurred by households with swimming pools and gardens, for example) at the penalizing price of EUR  $3/\text{m}^3$ . The revenue collected from the third block would compensate the utility for the lower revenue levels collected for the first block. Effectively, households that limit their consumption levels to the first block have their water bill subsidized by those users consuming more water. In some countries households with low consumption are predominantly the poor, but that is not necessarily the case in most countries.

The provision of a free-of-charge first consumption block is a variation of this system that is being applied, for example, in the Flemish Region of Belgium (see box 6.7).

<sup>6</sup> It is important that such a block be defined according to minimum human needs so that for all people the minimum volume of water needed to protect human health is guaranteed. WHO guidelines suggest a minimum of 25 litres per capita per day and recommend 50 litres per capita per day so that basic hygiene is also assured.

However, IBTs also have some limitations from an affordability perspective. First, in most countries there is likely to be a share of the population (however small) that cannot even afford the reduced price of a first block (unless it is extremely low or zero). Second, households with many members (large families) can be severely penalized. Third, for IBTs to work as described they require individual metering, but in many countries metering does not exist or a single meter applies to multiple households. The limitations of the IBTs in targeting households in need of support, in particular large households with low income which consume water in the second block, does not mean that they are not a useful tool. Rather it highlights the need to combine them with social protection measures.



### 6.2.2 Other cross-subsidies between users

Water supply and sanitation service providers usually serve different types of users — households, commercial users and industrial users. Thus, one option to reduce the burden of the water and sanitation bill in household budgets is to have other user categories cross-subsidize them. Countries in the ECE region that charge different prices to different categories of users include Andorra, Poland, Portugal, Turkey and Uzbekistan. It is worth highlighting that a differentiated price structure does not always involve cross-subsidies. In many countries all categories of users are subsidized, and the differentiated price structure only means that some users are more subsidized than others.

The design of tariff structures also allows other opportunities for cross-subsidies between households. For example, eliminating the one-time connection costs (households that lack connections benefit from a connection subsidy) and increasing the fixed monthly charges in exchange (all households contribute to finance the connection subsidy).

### 6.2.3 Social tariffs

Social tariffs are tariffs created for specific social groups (preferential tariff rates). They coexist with the general tariff system applied to the majority of the population. Whatever the general tariff system in place (such as a progressive tariff system), there is likely to be a share of the population for which the water and sanitation bill will be unaffordable. Social tariffs aim explicitly to address micro-affordability concerns.

One key aspect of social tariffs is that the criteria for accessing these tariffs must be clear, verifiable and easily adapted from the regular tariffs. A social tariff system hinges on the principle of adapting the price of water consumption to the socio-economic characteristics of the user. By contrast, a progressive tariff system only takes into account the consumption level. Differential tariffs for whole categories of water users (e.g., cross-subsidies for households from industrial users) are not social tariffs.

The socio-economic characteristics (criteria) used to apply social tariffs usually relate to:

- **Household income.** This is the most common criteria for the establishment of preferential rates. Examples in the pan-European region include Flanders (Belgium), Portugal, Serbia and the former Yugoslav Republic of Macedonia.
- **Household size.** Several countries have established preferential rates for large families, often prompted by the fact that progressive tariff systems penalize them. Examples in the region include Belgium, Greece, Luxembourg, Portugal and Spain.
- **Health, disability or age.** Examples in the pan-European region include preferential rates for people based on health, disability or age, include people suffering from designated illnesses (United Kingdom), persons suffering from disabilities (the former Yugoslav Republic of Macedonia), victims of the Chernobyl disaster (Republic of Moldova), or recipients of disability or elderly allowance (Belgium).

There are several options to design social tariffs, notably:

- Free or subsidized connection charges
- Free or subsidized fixed charges
- Free or subsidized consumption charges (usually limited to a basic amount of water, which in the case of IBTs would correspond to the first block)
- A combination of the above.

There are two major options to finance social tariffs:

- **Cross-subsidies from other users.** This is the most common option. The service provider is allowed by the competent authorities to charge higher prices to all users in order to compensate the financial loss caused by the social tariffs.
- **Public subsidies from general taxation.** This option involves a financial transfer from a public authority (local or national) to the water operator to compensate for the loss of revenue.





### BOX 6.2 IMPROVING AFFORDABILITY THROUGH THE TARIFF SYSTEM IN PORTUGAL

#### Enabling solidarity from connected to unconnected households through the tariff system

In Portugal, the uptake of connections to wastewater infrastructure is slower than expected. A study by ERSAR, the water regulator, suggests that this may be due to the high cost of connection. While on average it only represents 26% of monthly income, for low income households in some municipalities the cost of connection can reach three times their monthly income. To address this issue, ERSAR has recommended that service providers eliminate the connection charge and compensate this loss of revenue by increasing the fixed part of the tariff gradually over a five-year period. In this way, all users will contribute to paying the cost of connecting the unserved.

#### Encouraging municipalities to introduce social tariffs

Analyses using 2007 data show that there is no major macro-affordability problem in Portugal. At the municipal level, the cost of 10 m<sup>3</sup> of water and sanitation services as a proportion of the average household income is 0.39% for water and 0.17% for wastewater — reaching maximum

values of 0.99% for water and 0.81% for wastewater in the most expensive municipalities. However, ERSAR recommends the implementation of social tariffs in each municipality. The social tariff would consist in the exemption of the fixed part of the tariff and the application of the reduced rate for the first block (0 m<sup>3</sup>–5 m<sup>3</sup>) to the second block as well (5 m<sup>3</sup>–15 m<sup>3</sup>). ERSAR also suggests that municipalities apply discounts to large families to compensate for the cost of the increasing blocks.



### BOX 6.3 VOLUNTARY INTRODUCTION OF SOCIAL TARIFFS IN POLAND

AQUA SA is one of about 800 water and wastewater operators in Poland. In the early 2000s, AQUA SA, which supplies water to 300,000 people, voluntarily introduced a reduced tariff for low-income households. The eligibility criteria chosen were the same as those applied by municipal services to provide other types of social support, thus keeping administrative costs low. Currently, eligible households pay EUR 0.01 for the service of 2 m<sup>3</sup> of water delivered and wastewater collected, while consumption above that threshold is charged at the regular price of about EUR 1/m<sup>3</sup> of water and EUR 1/m<sup>3</sup> of wastewater. The estimated cost (in terms of loss of revenue) of the social tariff is about EUR 0.3 million, or about 1% of the total revenue of the operator. Partially as a result of the social tariff, AQUA SA enjoys a bill collection rate of 97%, much higher than most other operators. However, establishing a social tariff is not compulsory in Poland, and despite the low cost and potential benefits of introducing a social tariff no other operators seem to have done so.



### 6.3 ADDRESSING AFFORDABILITY CONCERNS THROUGH SOCIAL PROTECTION MEASURES

In most countries in the pan-European region, it is the State (i.e., taxpayers) and not the service providers (i.e., water and sanitation users) who subsidize water consumption for low-income households. While this can be done through the use of social tariffs, in most cases it is done through the use of social protection measures. Social protection measures are non-tariff measures aimed at helping households to pay the cost of their water and sanitation services. They are non-tariff measures in the sense that they are not based on the design of the tariff structure or the tariff rate. This category includes both preventive measures and curative measures.

**Preventive measures.** Preventive measures are those aimed at helping households to avoid falling behind in their payments for water and sanitation services (to prevent them from incurring water debt). This type of support can be channelled in three different ways:

- *Financial transfer to the user*, who is then expected to use the money to pay the service provider to cover the water and sanitation bill. Box 6.4 documents the example of Ukraine,

where the financial aid is contingent on the user not already having outstanding unpaid water bills (water debt).

- *Financial transfer to the service provider*, which then reflects the financial aid in the reduced water and sanitation bill received by the user. Box 6.5 describes the example of France, where the financial aid provided by the regional governments is complemented by other funding sources. Box 6.6 describes the additional effort made by the city of Paris.
- *Virtual financial transfer to the user*. In France, the water authority in the Paris region (*le Syndicat des Eaux d'Ile-de-France*) has created a system whereby beneficiaries entitled to the subsidy receive a voucher with a monetary value that can only be used to pay the service provider for the water and sanitation bill.

**Curative measures.** Curative measures are those aimed at helping households pay their water debt. In many countries, when a household stops paying its water and sanitation bill, the service provider can disconnect service. This has helped to ensure the high payment rates observed in Western European countries — the amounts invoiced by service providers correspond very closely with the amounts

#### BOX 6.4 TARGETING HOUSING SUBSIDIES IN UKRAINE



In Ukraine, the transition from centralized planning to a market economy resulted in fast increases in communal services tariffs (including water and sanitation) and serious affordability problems for many poor families. In 1992, users paid only about 4% of the costs of communal services, and the State paid the remaining 96% directly to the service providers. By 2001 communal service tariffs had increased by 1.5 million times (in the same period inflation had increased “only” 89,000 times).

In 1995, the Government approved a programme of housing subsidies that set a ceiling for housing related expenses — 20% of income for households with working members and 15% for pensioner or student households — and compensated the utilities for the difference between the payment ceiling and the cost of provision. In addition to water supply and sanitation, housing-related (communal services) expenses include apartment rent, electricity, natural gas, heating and solid waste management. In 2010, those ceilings were reduced to 15% and 10%, respectively, and the procedure for receiving the subsidy was simplified.

The funds to provide the housing subsidies are identified in the national budget as social protection expenses and transferred to the local governments for management. A key condition for families to receive the subsidy is not to have communal service debts. In 2001, 2.3 million families (14% of the total) received housing subsidies. In 2011, 1.3 million families will receive housing subsidies, at an average of UAH 2,738 (about USD 340) per family. Since housing subsidies are effectively targeted to low-income families, the reform of the early 1990s subsidy scheme means that high-income families now contribute much more to financing the communal services. Subsidy allocation rules and assessment of household income have improved over time. A number of additional improvements to the housing subsidy system have been suggested, including inspections and integrating the housing subsidies with other social protection tools.

Similar housing subsidies programmes have been developed in Belarus, Kazakhstan, Kyrgyzstan and the Russian Federation.

### BOX 6.5 THE HOUSING SOLIDARITY FUND IN FRANCE

France has decided that instead of having a dedicated water fund, it would be better to group all financial aid to households unable to pay their housing-related expenses. In 2004, a law bound local authorities (departments) to create a housing solidarity fund, and since 2011 all the implementing regulations have been in place. The housing solidarity fund receives contributions from utilities (electricity, gas, telephone and water service providers), social housing authorities and local authorities. Water and sanitation service providers can voluntarily contribute up to 0.5% of their profits to the fund. To receive support from the fund, a household has to ask for it. The fund allocates aid to households in need according to criteria agreed between the local authorities and the water utilities, taking into account household income (certified by the social services authorities). For households that receive individual water bills, the support is provided via a reduction in the water bill. For households that do not receive individual water bills (because they live in apartment blocks with no individual metering), the support is provided via a reduction in the communal charges. The solidarity fund faces some implementation challenges. First, given that there are 30,000 water and sanitation services providers in France, the administrative costs of signing 30,000 agreements between the French local authorities and the water and sanitation service providers are not negligible. Second, not all French departments have adequate information about the potential beneficiaries. Still, in 2008, the solidarity housing fund collected EUR 307 million, of which EUR 9.7 million were used to help households pay their water bill. Similar housing subsidies programmes have been developed in Belarus, Kazakhstan, Kyrgyzstan and the Russian Federation.



### BOX 6.6 PREVENTIVE MEASURES — THE CASE OF PARIS

The average price of water in Paris is EUR 3.1 per m<sup>3</sup>, which creates financial difficulties for some households. Aware of this problem, the city of Paris has adopted the goal of ensuring access to water at an affordable price. To achieve this goal, it has set 3% of household income as the affordability threshold and has decided to allocate part of the city budget to fund water allowances. In 2010, those water allowances were expected to benefit 44,000 households, at an average level of EUR 114 per household. This allowance is complementary to other national and local housing allowances.

collected. But there is a risk that some households that genuinely cannot afford to pay their water and sanitation bill will be denied access. Examples of curative measures are the payment guarantees mechanisms put in place by Germany and France; however, a potential downside of these mechanisms is that due to their administrative complexity, the running costs may be larger than the aid received by beneficiaries (Verges, 2011).

In addition, there are other relevant non-tariff measures aimed at ensuring that affordability constraints do not prevent households from gaining access (e.g., connection subsidies) or do not force them to lose access (e.g., disconnection bans).

- *Disconnection bans.* Some countries prohibit service providers from disconnecting users from water and sanitation services when they do not pay their water debts (e.g., in Austria, Latvia, Switzerland, United Kingdom). In order to avoid encouraging non-payment by those who can afford to pay, service providers are often

allowed to reduce water provision to a basic amount of water and/or to certain times of the day. In several Swiss cities, disconnection is legally possible in case of a user's dishonesty, but requires official approval from the town council.

- *Connection subsidies.* In some cases, the problem is not that the water and sanitation bill is unaffordable, but rather that the cost of connection is unaffordable. The previous section discussed how connection costs can be cross-subsidized by other users through changes in the tariff (see example of Portugal in box 6.2). Another option is for the State to subsidize connection costs, as is done in Latvia, for example.

Some countries have set up dedicated institutions to manage social protection support for water and sanitation, often referred to as water social funds. These funds can be established and managed at different administrative levels: national (e.g., Hungary), regional (e.g., the Walloon Region in Belgium), or local (e.g., the city of Brussels). When the fund is

managed at the regional or watershed level it is often financed by taxes on water services. When the fund is local, it is often financed by local taxes through the general budget of the municipality. Some social funds are managed by water supply companies, but in those cases the companies are most often public companies (as in Flanders). In France, the Solidarity Fund for Housing, managed at the “département” level (between the municipality level and the regional level), is partially financed by public water services (see box 6.5). Box 6.7 includes the experience of the Walloon Region in Belgium. Most social water funds are specifically set up to cover unpaid bills.

Assistance to pay for water and sanitation services can be part of a broader assistance programme. There are several cases where the support is not specific for water and sanitation,

but rather for the broader category of housing expenses. For example, in Ukraine (see box 6.4) there is only one bill for the supply of several municipal services (heating, gas, electricity and water), and thus social support is aimed at the whole set of housing-related expenses.

Social protection measures can have some advantages over social tariffs. A preferential tariff rate (social tariff) reduces the incentive for users to conserve water, while a financial transfer (social protection measure) leaves the price incentive unchanged. Both social protection measures and social tariffs require a social protection administrative infrastructure to identify the beneficiaries of the social support and channel the financial resources.

### BOX 6.7 BELGIUM APPLIES SEVERAL APPROACHES TO DEAL WITH INCREASING AFFORDABILITY CONCERNS

Keeping water affordable for all is becoming a challenge in Belgium. The legal framework guarantees the right to connection to an existing public water distribution network. All charges regarding drinking water (including the collection and treatment of wastewater) are included in a single integrated water bill, allowing consumers to understand the total cost of water. However, the water bill has been steadily increasing over the past few years (approximately 50% between 2005 and 2010) as water utilities have made major investments in wastewater treatment to meet EU environmental requirements. Indeed, sanitation charges already represent 45% of the total water bill in the Walloon Region (or Wallonia) and 55% in the Flemish Region (or Flanders). The regions of Flanders and Wallonia are adopting different approaches to address this challenge.



In order to ensure affordability, Flanders has adopted two policy measures: first, a free allocation of water for all. Flemish law obliges water operators to provide free of charge 15 m<sup>3</sup> of drinking water per year and per person registered with a delivery address. This approach ensures that every person in Flanders, rich or poor, will get water for their basic needs (40 litres per day) free of charge — which corresponds to approximately 30% of the total distributed drinking water. In order to cover the cost of producing and distributing the free water, the tariffs for volumes above 15 m<sup>3</sup> have increased. As a result larger consumers will pay a higher cost and the steeper increasing block tariff system provides a greater incentive for more sustainable (reduced) total water use. It should be noted that a fixed subscription fee is always charged, as well as the cost of collecting and treating all wastewater (including the cost corresponding to the free 15 m<sup>3</sup> allotment). The second policy measure is the granting of exemptions for sanitation charges for low-income households. Data exchange between different agencies (the national register, the entities that allocate allowances and the water utilities) means that most exemptions are granted automatically, without a request from the beneficiary. Nearly 200,000 families benefited from exemption of sanitation charges in 2010. As indicated in box 4.6, the overall sanitation cost is partly subsidized by the government to keep sanitation affordable for all.

Wallonia, for its part, has created water social funds to help households pay their water debts. They were first launched by the major water service providers in the late 1990s and generalized in 2004 by law for all water service providers. Currently, the social water funds manage about EUR 2 million per year. Of the total, at least 85% is used for subsidizing the water bills of 11,000 families. The resources are allocated to municipalities based on criteria such as the number of users in the municipality and the number of consumers experiencing difficulty in paying their water bill. This approach requires strong municipal social services, as they are charged with assessing the financial situation of households that are late with their water payments — at least 9% is allocated to pay for the running costs of the municipal social services. By contrast, the cost of running the fund itself are small, a maximum of 1%. The remainder of the funds is allocated to pay for technical improvements to houses (such as repairing leaks or installing water-saving devices). The income of the water social funds is generated by a surcharge of EUR 0.0125 on each cubic meter sold. Thus, the cost to consumers is transparent, and since contributions to the fund are proportional to water consumption, richer households are expected to contribute the most.



**TABLE 6.1** Measures to make drinking water more affordable for domestic users

	Large subsidies (a)	Reduced VAT (b)	Reduced WWT (c)	Progressive tariff (d)	Social tariff (e)	Targeted assistance (f)	Disconnection ban (g)	Free block (h)	No meter (i)	No fixed fee (j)	Income support (k)
<b>Austria</b>					Y		Y			Y	Y
<b>Czech Republic</b>	Y	Y								Y	Y
<b>Denmark</b>							Y		Y		Y
<b>Finland</b>						Y					Y
<b>France</b>		Y		Y/N (l)		Y	Y				Y
<b>Germany</b>		Y					Y				Y
<b>Greece</b>	Y			Y	Y						Y
<b>Hungary</b>	Y				Y	Y				Y	Y
<b>Iceland</b>							Y		Y		Y
<b>Ireland</b>	Y						Y	Y	Y	Y	Y
<b>Norway</b>							Y		Y		Y
<b>Poland</b>	Y	Y								Y	Y
<b>Portugal</b>	Y	Y		Y	Y						Y
<b>Slovakia</b>	Y										Y
<b>Spain</b>	Y	Y		Y	Y						Y
<b>Sweden</b>							Y				Y
<b>Switzerland</b>	Y	Y					Y				Y
<b>Turkey</b>	Y			Y							Y
<b>United Kingdom (m)</b>		Y			Y	Y	Y		Y		Y

- NOTES** (a) Subsidies for water supply and/or sanitation over 30% of service cost (including investment).  
 (b) Value added tax on water below normal rate.  
 (c) Reduced wastewater tax or other water charges for the poor.  
 (d) Progressive water tariff in general use.  
 (e) Social water tariff (reduced price for certain groups of users).  
 (f) Targeted assistance, i.e., grants or forgiveness of arrears for water provided to poor people.  
 (g) No disconnection of water supply of poor people with arrears for water or for municipal tax.  
 (h) Provision of a first block at zero price for poor people or all people.  
 (i) Provision of water to individual dwellings is unmetered in most cases (flat rate tariff for households).  
 (j) Only proportional fee.  
 (k) Income support for poor people.  
 (l) Yes/No: used but not in most cases.  
 (m) England and Wales only.

# REFERENCES

Agence française de développement and Programme Solidarité Eau (2010). Bilan et caractérisation de la coopération décentralisée dans le secteur Eau et Assainissement. Paris. Available from [http://www.afd.fr/webdav/site/afd/shared/PORTAILS/SECTEURS/EAU\\_ET\\_ASSAINISSEMENT/pdf/afd\\_pseau\\_bilan\\_coopdeceau\\_juin10.pdf](http://www.afd.fr/webdav/site/afd/shared/PORTAILS/SECTEURS/EAU_ET_ASSAINISSEMENT/pdf/afd_pseau_bilan_coopdeceau_juin10.pdf).

Bodik, I., E. Fatulova, M. E. Matuska and R. M. Zvara (2010). *Study of alternative solutions for waste water treatment in Richnava local municipality*. Bratislava: AEPRESS, Global Water Partnership Central and Eastern Europe.

Carrasco Mantilla, William (2011). Políticas públicas para la prestación de los servicios de agua potable y saneamiento en las áreas rurales. Project document LC/W.388. Santiago de Chile, United Nations Economic Commission for Latin America and the Caribbean. Available from <http://www.eclac.org/drni/>.

European Environment Agency (2007). *Europe's Environment — The Fourth Assessment*. State of the environment report No. 1/2007. Copenhagen.

European Commission (2007). Joint Report on Social Protection and Social Inclusion. Joint Staff Working Document SEC(2007) 329. Brussels. Available from [http://ec.europa.eu/employment\\_social/social\\_inclusion/docs/2007/joint\\_report/sec\\_2007\\_329\\_en.pdf](http://ec.europa.eu/employment_social/social_inclusion/docs/2007/joint_report/sec_2007_329_en.pdf).

Eurostat (2010). *Combating poverty and social exclusion – A statistical portrait of the European Union 2010*. Available from [http://epp.eurostat.ec.europa.eu/portal/page/portal/product\\_details/publication?p\\_product\\_code=KS-EP-09-001](http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-EP-09-001).

Kim, M. (2010). Economic barriers to the realization of the basic human right to water. Background document for the second session of the Meeting of the Parties of the Protocol on Water and Health, Bucharest, 23–25 November 2010.

Organization for Economic Cooperation and Development (2010). *Pricing Water Resources and Water and Sanitation Services*. Paris.

Office of the United Nations High Commissioner for Human Rights, World Health Organization (2008). The Right to Health. Fact Sheet 31. Geneva, Switzerland. Available from <http://www.ohchr.org/documents/publications/factsheet31.pdf>.

Office of the United Nations High Commissioner for Human Rights, United Nations Human Settlements Programme, World Health Organization (2010). The Right to Water. Fact Sheet 35. Geneva, Switzerland. Available from <http://www.ohchr.org/Documents/Publications/FactSheet35en.pdf>.

Smets, Henri (2008). De L'eau Potable à Un Prix Abordable: La pratique des États. Discussion paper. Académie de l'Eau. Available from [http://www.economie.eaufrance.fr/IMG/pdf/eau\\_potable\\_prix\\_abordable.pdf](http://www.economie.eaufrance.fr/IMG/pdf/eau_potable_prix_abordable.pdf).

United Nations Development Programme (2011). Improving Access to Water and Sanitation for Marginalised and Vulnerable Groups. Background document for the Drafting Group on Equitable Access to Water and Sanitation under the Protocol on Water and Health.

Verges, Jean-François (2011). Servicios de agua potable y alcantarillado: lecciones de las experiencias de Alemania, Francia e Inglaterra. Project document LC/W.334-P/E. Santiago de Chile: United Nations Economic Commission for Latin America and the Caribbean. Available from <http://www.eclac.org/drni/>.

World Health Organization (2010). *UN-Water Global Annual Assessment of Sanitation and Drinking Water — Targeting Resources for Better Results*. Geneva, Switzerland. Available from [http://www.unwater.org/activities\\_GLAAS2010.html](http://www.unwater.org/activities_GLAAS2010.html).

World Health Organization (2011). *World Report on Disability*. Geneva, Switzerland. Available from [http://www.who.int/disabilities/world\\_report/2011/en/index.html](http://www.who.int/disabilities/world_report/2011/en/index.html).

World Health Organization-United Nations Children's Fund (2010). *Progress on Sanitation and Drinking Water — 2010 Update*. Geneva, Switzerland. Available from [http://www.who.int/water\\_sanitation\\_health/publications/9789241563956/en/index.html](http://www.who.int/water_sanitation_health/publications/9789241563956/en/index.html).

World Bank (2005). *Growth, Poverty and Inequality: Eastern Europe and the former Soviet Union*. Washington, D.C. Available from <http://siteresources.worldbank.org/INTECA/Resources/complete-eca-poverty.pdf>

World Bank (2011). *World Development Indicators*. Washington, D.C. Available from <http://data.worldbank.org/data-catalog/world-development-indicators>.



*The overall message of this document is that we have at our disposal the policy tools to ensure that strong advances towards universal access to water and sanitation are not made at the expense of putting those populations that require special attention at the end of the access queue.*



# NO ONE LEFT BEHIND

## GOOD PRACTICES TO ENSURE EQUITABLE ACCESS TO WATER AND SANITATION IN THE PAN-EUROPEAN REGION

The Protocol on Water and Health stipulates that “equitable access to water, adequate in both quantity and quality, should be provided for all members of the population, especially those who suffer a disadvantage or social exclusion”. At the same time, “special consideration should be given to the protection of people who are particularly vulnerable to water-related diseases”.

In 2010, the United Nations General Assembly and the Human Rights Council recognized access to water and sanitation as a human right. In order to comply with the human rights obligations, as well as their obligations under the Protocol on Water and Health, Governments need to pay special attention to ensure that access to water and sanitation is equitable for all members of the population.

This publication presents good practices and lessons learned from throughout the pan-European region on the policies and measures to be enacted to provide equitable access to water and sanitation. It distinguishes three key dimensions of equitable access: geographical disparities; specific barriers faced by vulnerable and marginalized groups; and affordability concerns. A range of available policy options to fight inequities in each of those key dimensions are presented.

The examples contained in this publication should support and encourage policy and decision makers at the national and local levels, as well as private and public operators, non-governmental organizations, international donors and other concerned actors to review and, where appropriate, replicate or adapt existing approaches and put in place new or additional measures, to ensure equitable access to water and sanitation. The publication also aims to inspire practitioners, civil society and private sector organizations with regard to the role that they can play and the activities they can carry out in achieving equitable access to water and sanitation.

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