

# Social issues in the provision and pricing of water services

## FOREWORD

This book explores the links between social issues and the provision of water supply and sanitation services in OECD countries.

The main focus of the report is the affordability of water services, as well as the social measures currently in place aimed at resolving these affordability problems. The report also examines the potential role of the private sector in incorporating the social dimension into water pricing decisions, as well as issues related to making the transition towards higher levels of access to water services.

Several external consultants participated in the project and/or drafted parts of the original text. In particular, contributions are gratefully acknowledged from:

- **Paul Herrington**, University of Leicester, Leicester, United Kingdom (measuring affordability in Chapter 2; tariff and non-tariff social measures in Chapter 3).
- **Ana-Mari Hamada, Eduard Interwies, and Andreas Kraemer**, ECOLOGIC, Berlin, Germany (private sector participation and regulatory oversight in Chapter 4).
- **Peter Newborne**, Overseas Development Institute, London, United Kingdom (managing the transition to improved water services through a differentiated approach in Chapter 5 and contributions to Chapter 6 on Mexico).
- **Lilian Saade-Hazin**, private consultant, Oostende, Belgium (case study on Mexico in Chapter 6).

The project was carried out under the Natural Resources Management Programme of the OECD Environment Policy Committee. It was managed by Kumi Kitamori (Environment Directorate, OECD), under the guidance of Tom Jones (Environment Directorate, OECD) and the Working Party on Global and Structural Policies. The active support of delegates to that Working Party, as well as that of participants in an expert workshop (OECD Headquarters, November 20, 2002) are also gratefully acknowledged. The project also benefited from the advice and suggestions of Henri Smets (Académie de l'Eau) and Bernard Barraqué (Ecole Nationale des Ponts et Chaussées). Rebecca Brite provided editorial support.

The project could not have been completed without the financial support received from the governments of Canada and Germany.

The report is published under the responsibility of the Secretary-General.

## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	9
CHAPTER 1. INTRODUCTION .....	15
CHAPTER 2. MEASURING THE AFFORDABILITY OF HOUSEHOLD WATER CHARGES.....	27
CHAPTER 3. SOCIAL MEASURES FOR HOUSEHOLD WATER CHARGES: BALANCING ENVIRONMENTAL AND SOCIAL CONCERNS.....	49
CHAPTER 4. GOVERNANCE AND PRIVATE SECTOR PARTICIPATION .....	103
CHAPTER 5. MANAGING THE TRANSITION TO IMPROVED WATER SERVICES .....	135
CHAPTER 6. IMPROVING ACCESS TO WATER SERVICES: MEXICO .....	153
CHAPTER 7. SUMMARY AND CONCLUSIONS .....	183
ANNEX A. DATA SOURCES FOR CHAPTERS 2 AND 3.....	191
ANNEX B. OPERATION OF “FLANDERS-TYPE” HOUSEHOLD TARIFF, INCLUDING “FREE ALLOWANCES PER CAPITA”.....	197
BIBLIOGRAPHY .....	201

# Executive Summary

***Water pricing policies can contribute to environmental and economic goals, but may face social resistance.*** This book examines social issues related to the provision and pricing of household water services. Properly designed water management policies can contribute to both environmental and economic goals, but may face resistance due to the perceived negative social impacts for some stakeholders. Given the importance of household water supply and sanitation services for social welfare, these social dimensions need to be taken into account when key policy decisions are made regarding the provision of water services.

***Some basic "social" concepts in water services provision include...*** Social issues in the provision of water services can be considered from the perspectives of the impact of policies on different income groups; different consumer types; different regions; or different generations.

***...access...*** While the social and public health requirements of "access" to public water supply have largely been fulfilled in OECD countries, some still have as many as a quarter of their population without individual household connection to piped supply. As for wastewater collection and treatment, several OECD countries have a backlog of investment requirements, with the result that they still do not meet their own water quality standards.

***and affordability.*** "Affordability" is the social aspect of water service provision that is most clearly and closely linked to pricing policies. Affordability of water services may not be distributed equally across income groups or neighbourhoods - a lower income household will inevitably pay a higher proportion of their income for water services than a higher income household does.

***Many OECD countries have seen water charges increase recently, which will continue to put pressure on the affordability of water services.*** Many OECD countries have seen a real increase in household water charges in recent years. The factors behind this trend include continuing pollution of water sources (necessitating more expensive treatment), combined with additional national legislation and EU directives that require higher standards of wastewater treatment. This trend toward higher prices is likely to continue, and will therefore continue to generate pressure on the perceived affordability of water services.

***The affordability of water in about half of OECD countries is either an issue now, or will become one in the future.*** There are several methods available for measuring the affordability of water charges. "Macro-affordability" indicators are developed by relating national average household water charges to either average household income (disposable or gross) or average household aggregate expenditure. "Micro-affordability" indicators disaggregate the former by income groups, family types or regions. Available evidence of affordability indicators suggests that, in about half the OECD countries (15 out of 30), affordability of water charges for low-income households is either a significant issue now or might become one in the future, if appropriate policy measures are not put in place.

The trade-offs between efficiency and equity objectives in the provision of household water services typically occur when moving from an unmeasured to metered charging structure, when rebalancing tariffs away from fixed charges towards volumetric charges, and when increasing fees and tariffs towards full-cost pricing. There is considerable experience in OECD countries with policy measures to address water affordability for vulnerable groups, while attempting to make water pricing reveal the full economic and environmental costs of water services.

***Affordability measures can be broadly classified into income support measures...*** Affordability measures can be classified in two main groups: *income support measures* and *tariff-related measures*. The *income support measures* address the individual customer's ability to pay from the income side (through income assistance, water services vouchers, tariff rebates and discounts, bill re-phasing and easier payment plans, arrears forgiveness).

**...and tariff-related measures.**

*Tariff-related* measures keep the size of water bills low for certain groups (e.g. refinement of increasing-block tariffs, tariff choice, tariff capping). There seems to be clear potential benefits from increasing block tariff structure, which adjusts a free or very low-priced first block by household size, and then reflects the transition from “basic” to “discretionary” water use in subsequent blocks at prices closer to marginal social costs. There is evidence that the use of such tariffs is increasing.

**Co-operation between the public and private sectors in the provision of water services is expanding.**

While the provision of urban water supply and sanitation is traditionally considered a public service, there is a trend of increasing commercialisation and private sector participation (PSP), for a number of reasons. Whether water services are provided by the public or private sector (or both), it is important that social and environmental objectives continue to be met.

**OECD countries already use several different forms of private sector participation (PSP).**

Different types and degrees of PSP in household water services are found in OECD countries. These can be characterised as *Administrative PSP*, *Corporative PSP*, *Legal PSP* and *Financial PSP*, according to legal status, asset ownership, operation and management, and capital investment responsibility. Several examples of different forms of PSP are included in this book. These examples illustrate how these water service providers are being regulated in the areas of pricing, service standards, operational efficiency, investment practices, water quality, environmental protection, and consumer protection. Some key criteria for evaluating the effectiveness of water service providers in meeting economic, social, and environmental objectives are also considered.

**There are OECD countries where the extent of coverage of water services remains incomplete.**

Access to public water supplies is no longer a serious problem in most OECD countries, (especially in urban areas), with at least 75% of the population (and often as high as 90%) already being served. Thus, the social and public health requirements for universal access have largely been fulfilled. However, in a few OECD countries or regions, the extent of coverage of water services is still suboptimal, due to incomplete infrastructure development and/or uneven availability of the resource.

**Filling these service gaps may be managed through “differentiated” approaches.**

Filling these “service gaps”, including the installation of water services infrastructure for the first time, typically occurs over a transitional period. The potential roles of “differentiated” approaches are therefore explored in the book (e.g. private wells, water trucks, septic tanks, community-managed systems).

**Mexico is an OECD country where gaps still exist in the “first-time” provision of water and sanitation services.**

Mexico provides an example of an OECD country where gaps still exist in the “first-time” provision of water and sanitation services, particularly in: (i) rural areas, where widely dispersed and marginalised communities lacking access basic water services; and (ii) peri-urban areas, where informal settlements surround rapidly growing cities. The existing conditions, and therefore the transitional solutions, will differ between rural and urban settings. An overview of the household water sector in Mexico is provided, followed by a more detailed focus on the three southern States of Chiapas, Guerrero and Oaxaca – among the poorest in the country.

Water-related challenges. 2.2 billion people lack access to safely managed drinking water services. (WHO/UNICEF 2019). Over half of the global population or 4.2 billion people lack safely managed sanitation services. (WHO/UNICEF 2019). 297,000 children under five die every year from diarrhoeal diseases due to poor sanitation, poor hygiene, or unsafe drinking water. Contaminated water and a lack of basic sanitation are undermining efforts to end extreme poverty and disease in the world's poorest countries. In 2017, 2 billion people worldwide did not have access to basic sanitation facilities such as toilets or latrines. 673 million people still practised open defecation. The social dimension should be addressed in the sustainability of water services provision, but it is less well studied than the economic and environmental ones. The debate between pros and cons of... (2003). Social issues in the provision and pricing of water services. Paris: OECD. Google Scholar. Pflieger, G. (2008). Social Issues in the P by Organisation for Economic C Other editions. We'd love your help. Let us know what's wrong with this preview of Social Issues in the Provision and Pricing of Water Services by Organisation for Economic Co-operation and Development. Problem: It's the wrong book It's the wrong edition Other.