

WELCOME TO THE WEBINAR

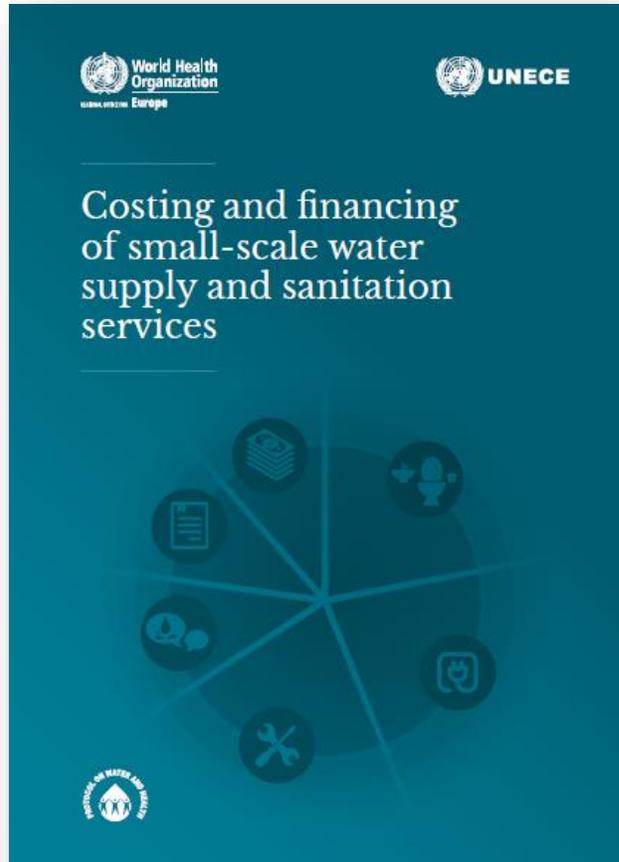
Don't forget the small ones

The costs and financing of small-scale water supply and sanitation services in the pan-European region



Costing and financing

Small-scale water supply and sanitation services



<https://www.euro.who.int/en/costing-and-financing-of-small-scale-water-supply-and-sanitation-services>

Protocol on Water and Health

Webinar series 2020



Webinar Series 2020
Protocol on Water and Health



Don't forget the small ones

The costs and financing of small-scale water supply and sanitation services in the pan-European region

Speakers:

Opening remarks by Oliver Schmall and Sonja Köppel
WHO Regional Office for Europe and UNECE

Stef Smits
IRC, the Netherlands

Susanna Smets
World Bank

Steffen Krause
Universität der Bundeswehr München, Germany

Alexandra da Cunha
Water and Waste Services Regulation Authority, Portugal

Corina Andronic
Skat Foundation, Republic of Moldova

Moderation by Bettina Rickert
German Environment Agency

Wednesday, 8 July 2020
11:00 – 12:30 CEST

[Register here](#)

[Download the document](#)

Sufficient financial means are required to provide safe and sustainable small-scale water supply and sanitation services that protect public health. Frequently, financing these systems faces a number of challenges. In this webinar, we launch the publication *Costing and financing of small-scale water supply and sanitation services*, developed under the Protocol on Water and Health. It aims to guide policy-makers responsible for water and sanitation in defining strategies for sustainable financing. The webinar introduces the key concepts of the document and features case examples of successful action taken from several countries of the pan-European region. The webinar is co-organized with the German Environment Agency and the Institute of Public Health of Serbia.



Equity in WASH access

Wednesday, 22 July 2020

11:00 a.m. – 12:30 p.m.

WebEx etiquette



**PARTICIPANTS CANNOT SPEAK.
PANELISTS, PLEASE STAY MUTED WHEN NOT SPEAKING.**

**SELECT
CHAT**



**TYPE YOUR
QUESTION**

Programme

- Welcome and introduction
- Costing and financing of small-scale water and sanitation services
- Findings on financing for rural water supply and sanitation services in the Danube region
- **QUESTIONS AND ANSWERS: PART 1**
- Assisting small water supplies in southern Germany with calculating tariffs and costs
- How to assess costs in small water systems in Portugal?
- Ways to improve financing in small water supply and sanitation systems in the Republic of Moldova
- **QUESTIONS AND ANSWERS: PART 2**
- Summary and closure



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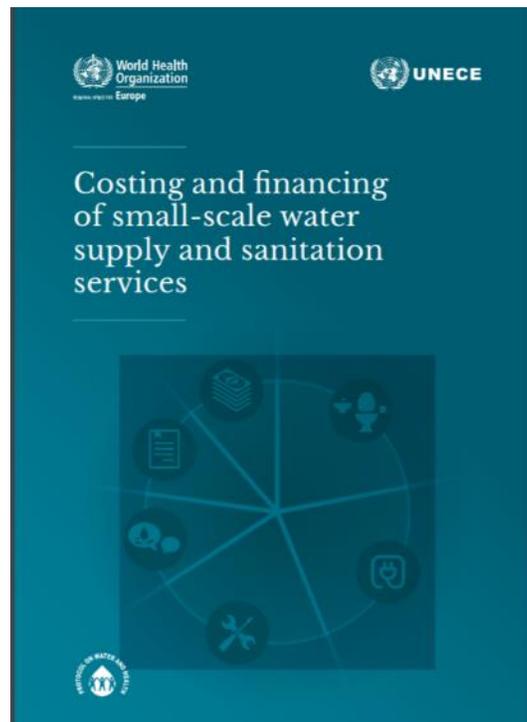
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German Environment Agency



Costing and financing of small-scale water and sanitation services

Stef Smits and Catarina Fonseca
IRC

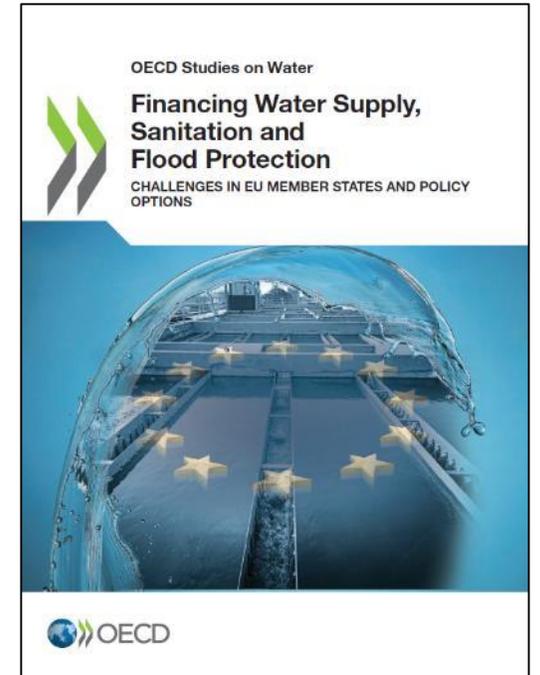


IRC Supporting water sanitation and hygiene services for life



Background: large financing needs for water supply and sanitation

- Overall need to increase expenditure in water supply and sanitation in the region (OECD, 2020)
 - To reach the SDGs, national targets and EU technical directives
 - Requiring large additional expenditures in many EU member States, and probably beyond
 - Balancing with affordability to users



Background: particular needs and challenges for small-scale systems



- Small-scale water supply and sanitation services play critical role...
 - Serving an estimated 203 million people in the region, and likely to be the service modality for the 16-31 million lacking access currently
- .. facing particular financial challenges
 - Unmet financial needs to cover expansion and improvement of services
 - Limited possibility to cover operation and maintenance costs
- Caused by:
 - Inherently limited economies of scale
 - Lower political and financial priority
 - Less well-developed institutional, regulatory and financial framework that governs these systems
 - Limited insight into current financial situation of such supplies, as shown in the GLAAS survey



Background: need for guidance

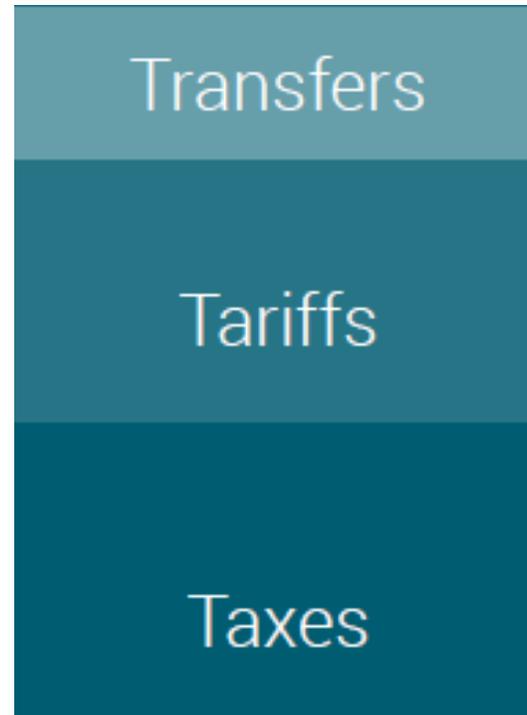
- Little quantified insight in costs and expenditures required, nor guidance on how to mobilize finance for small-scale water and sanitation services
 - To our knowledge, none in Russian
- Priority to develop specific guidance for small-scale water and sanitation services under the Protocol on Water and Health
- In the form of a framework that provides:
 - Key concepts and terminology related to the costs and financing of small-scale drinking-water and sanitation services
 - A discussion on the challenges related to their financing
 - To identify strategies and options for addressing these challenges



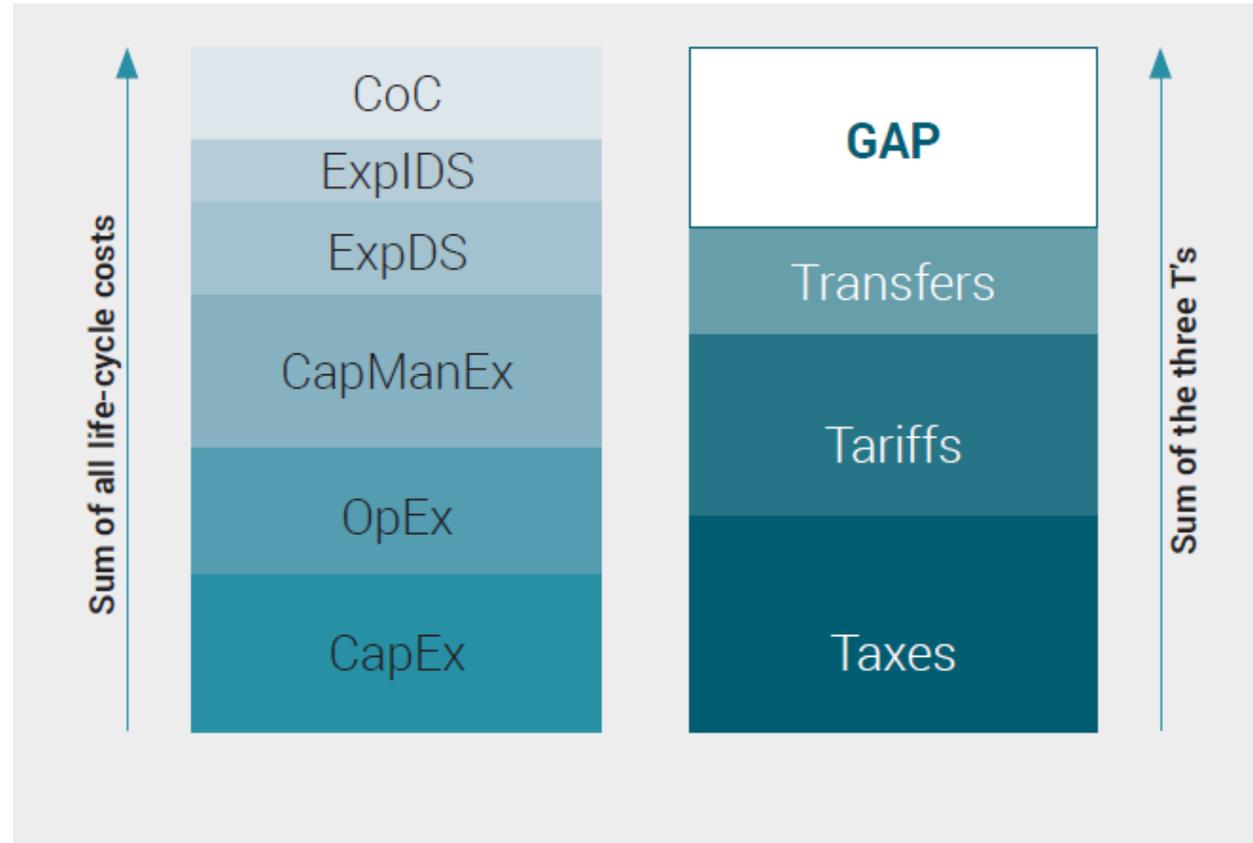
Key concepts: life-cycle costs...



..., the 3Ts as sources of finance,...

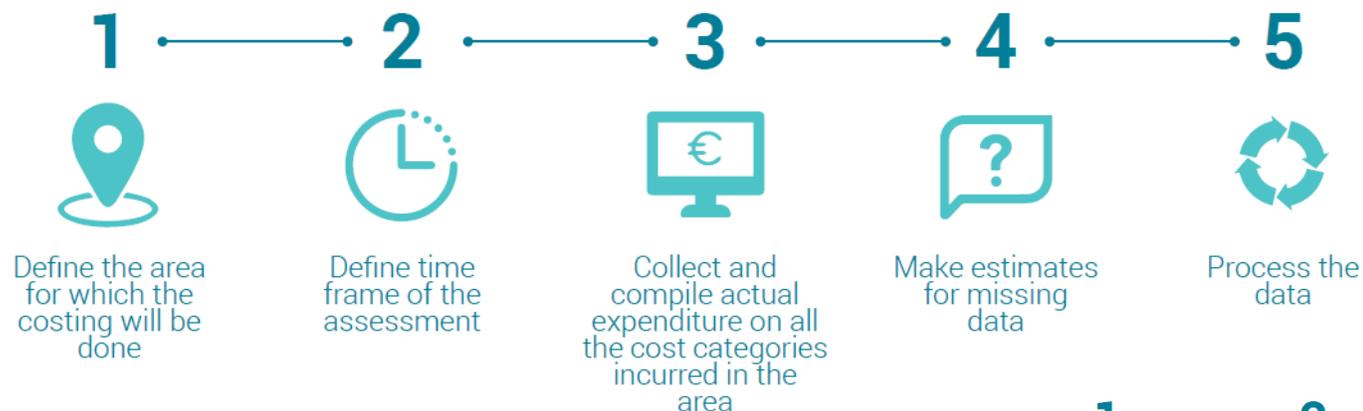


...and possible gap between them



Methods for quantifying costs

- Life-cycle costs assessment: five-step approach to identifying and quantifying the various life-cycle costs for a specific area



Methods for quantifying sources of finance

- Assessing sources of finance
 - Define spatial and temporal units in same way as for costs
 - Define and identify the financial flows behind each of the T's, each from a number of sources
 - Quantify the financial flows, using different methods and estimation
 - TrackFin as standardised methodology for this



Strategies for reducing the gap

- Reducing the costs, whilst still reaching the same level of service
 - Efficiency improvements
 - At some point it goes at expense of service level
- Increasing one or more of the sources of finance
- Using repayable finance to fill the gap now, and pay back later
- These strategies can be applied – to different levels of extent - to each of the life-cycle cost categories



Capital investment costs

- Current sources of finance
 - Taxes: from central and local government budgets
 - Transfers: grants or concessional loans to Ministries of Finance, who pass it on to Line Ministries, or even to local governments for infrastructure development projects
 - “Tariffs”: household own investments, e.g. in toilets and wells
- Challenges:
 - Lower priority of rural areas (where small-scale systems are more common) as compared to urban areas, because of their degree of dispersion
 - Bottlenecks in the annual planning, budgeting and disbursement cycle



Capital investment costs

- Strategies to address the gap:
 - increasing the tax base for allocation to small-scale systems, through advocacy and earmarked local government level taxes
 - creating challenge funds for small-scale systems, targeting small-scale providers and local government
 - accessing long-term loans through aggregation and intermunicipal cooperation so as to create economies of scale in accessing loans
 - using municipal development funds, through which (smaller) local governments can access loans of smaller size
 - providing incentives for household investment, to catalyse self-supply, under criteria of quality and safety



Operation and maintenance and capital maintenance costs

- Current sources of finance
 - Tariffs: stated preferred source of finance
 - Taxes: in reality, parts of capital maintenance, and even operation and maintenance costs come from general taxes
 - Transfers: in case of rehabilitation programmes
- Challenges:
 - Tariffs are often too low to cover capital maintenance costs
 - Low economies of scale
 - Limitation potential for cross subsidies in small service areas
 - Need for relatively large savings
 - Difficult to raises tariffs:
 - Affordability
 - Tariff regulation frameworks
 - Addressing the gap through taxes has important limitations:
 - Disincentive for efficiency and performance improvements
 - May lead to approach of ad hoc repairs and interruptions



Operation and maintenance and capital maintenance costs

- Strategies to address the gap
 - Clarifying tariff policies, legislation and regulation: who needs to pay for what, mechanisms for cross-subsidy within and across service providers
 - Increasing revenue from tariffs, within affordability parameters
 - Raising tariffs, but also billing and collection efficiency, reducing non-revenue water, legalizing non-authorized connections
 - Affordability measures, usually understood as specific tariff measures, though may also be addressed outside water and sanitation sector
- providing financial incentives linked to performance indicators;
 - Extensive guidance on performance improvement of service providers, to some extent applicable to small-scale providers
 - Link that to incentive systems
- decrease costs of capital maintenance by increasing preventive maintenance



Direct and indirect support costs

- Current source of finance
 - Taxes: main source of funding for (local) government staff who fulfil these support roles
 - Tariffs: some of the costs of support may be included in the tariff (e.g. water quality surveillance), though rare in the case of small systems
- Challenges:
 - Underfunding of these critical functions by local government, not planning and budgeting for them
 - Big differences in the extent to which this is happening in the European region

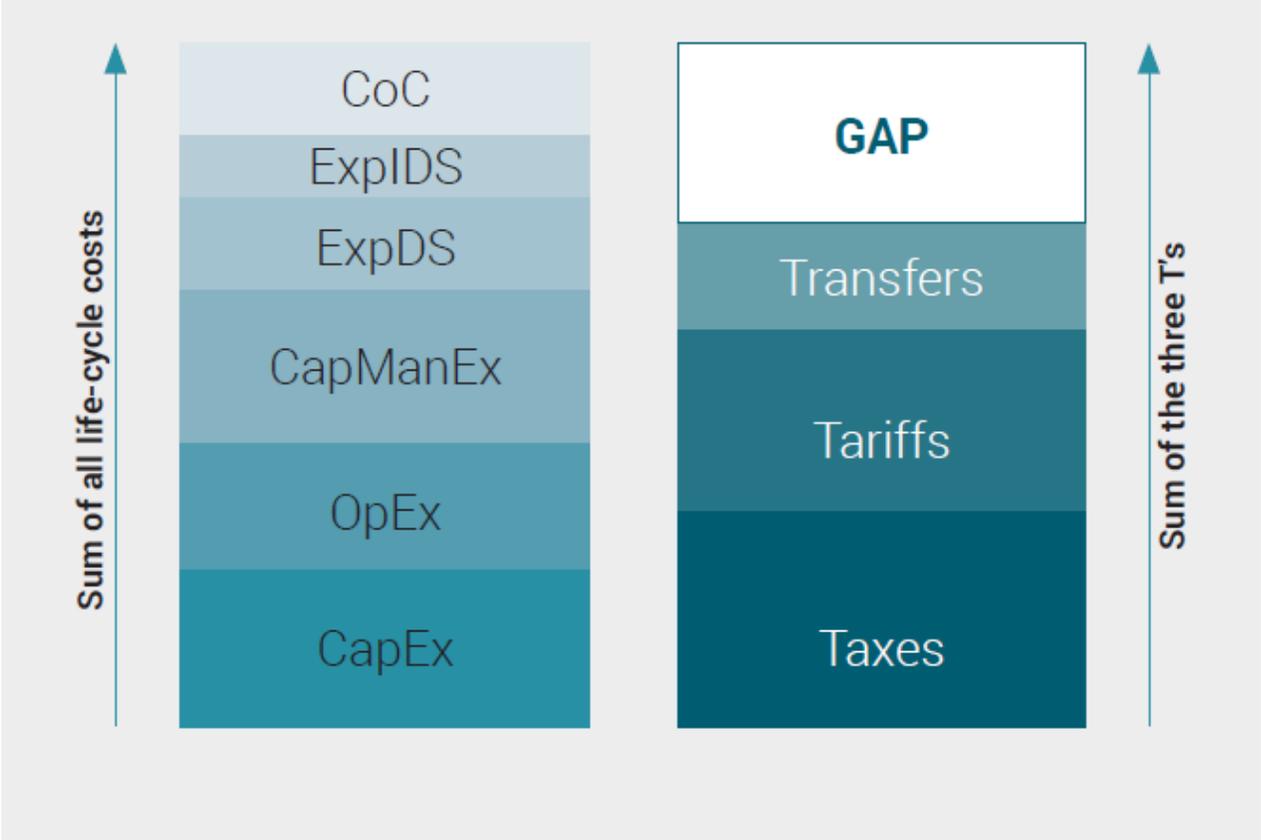


Direct and indirect support costs

- Strategies to address the gap
 - advocating increased public expenditure, based on evidence of benefits of investing in direct support
 - increasing efficiency by collaboration and cooperation, searching for economies of scale in direct support functions
 - increasing capacity at the local level



Conclusions: towards an overall finance strategy



Conclusions: towards an overall finance strategy

- Many of the individual strategies are interlinked, and may reinforce each other
- Therefore need for an overall finance strategy:
 - Assessment of the current costs and sources of financing of drinking-water and sanitation services
 - Analysis of the gap
 - Identification of the specific options to reduce the financial gap
 - Sequencing and relations between the specific options, and the upfront investments required to reach them
 - Responsibilities and commitments for implementation
- Ideally, as part of an overall WASH sector finance strategy, as it cannot be addressed separate from larger systems
- In that way, small-scale systems can be financed sustainably and yield same benefits and health impacts as we expect from larger systems



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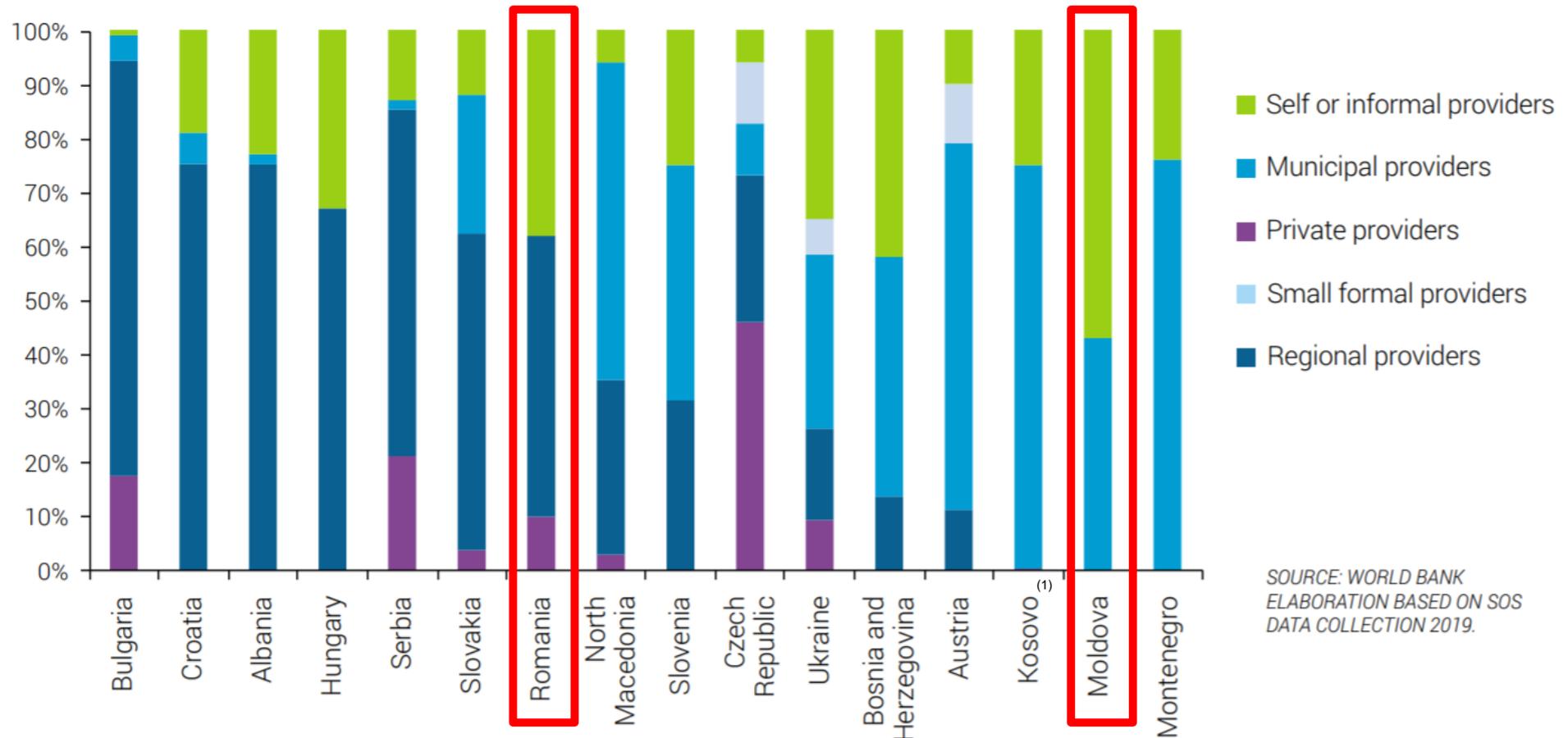
Findings on Financing for Rural Water Supply and Sanitation Services in the Danube Region

Susanna Smets, Senior Water and Sanitation Specialist
Water Practice Europe and Central Asia

With contributions from Patricia Lopez and Philip Marin (World Bank)

<https://www.danube-water-program.org/pages/programWactivities/analytical-and-advisory-work/rural-study---serving-those-beyond-utility-reach-in-the-danube-region.php>
https://sos2018.danubis.org/files/File/SoS_Report-2018.pdf

Financing needs to be seen in context of sector structure and reform of the sector



SOURCE: WORLD BANK
ELABORATION BASED ON SOS
DATA COLLECTION 2019.

(1) All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

Reforms to help close access gaps ... and Bank programs are supporting this in several countries



Republic of Moldova, Romania, Ukraine: large rural access gaps remain

- Large number of local service providers, although in Romania Regional Utilities serve rural areas to some extent

Croatia: largely closed the urban-rural access gap

- Aggregation of multi-city utilities, further consolidation slowed down

Kosovo⁽¹⁾: reform addressing urban-rural access gaps

- Regional Water Companies are successfully integrating stand-alone rural systems and expanding services

Albania: significant access gap but sector reform proactively addressing efficiency and inclusion

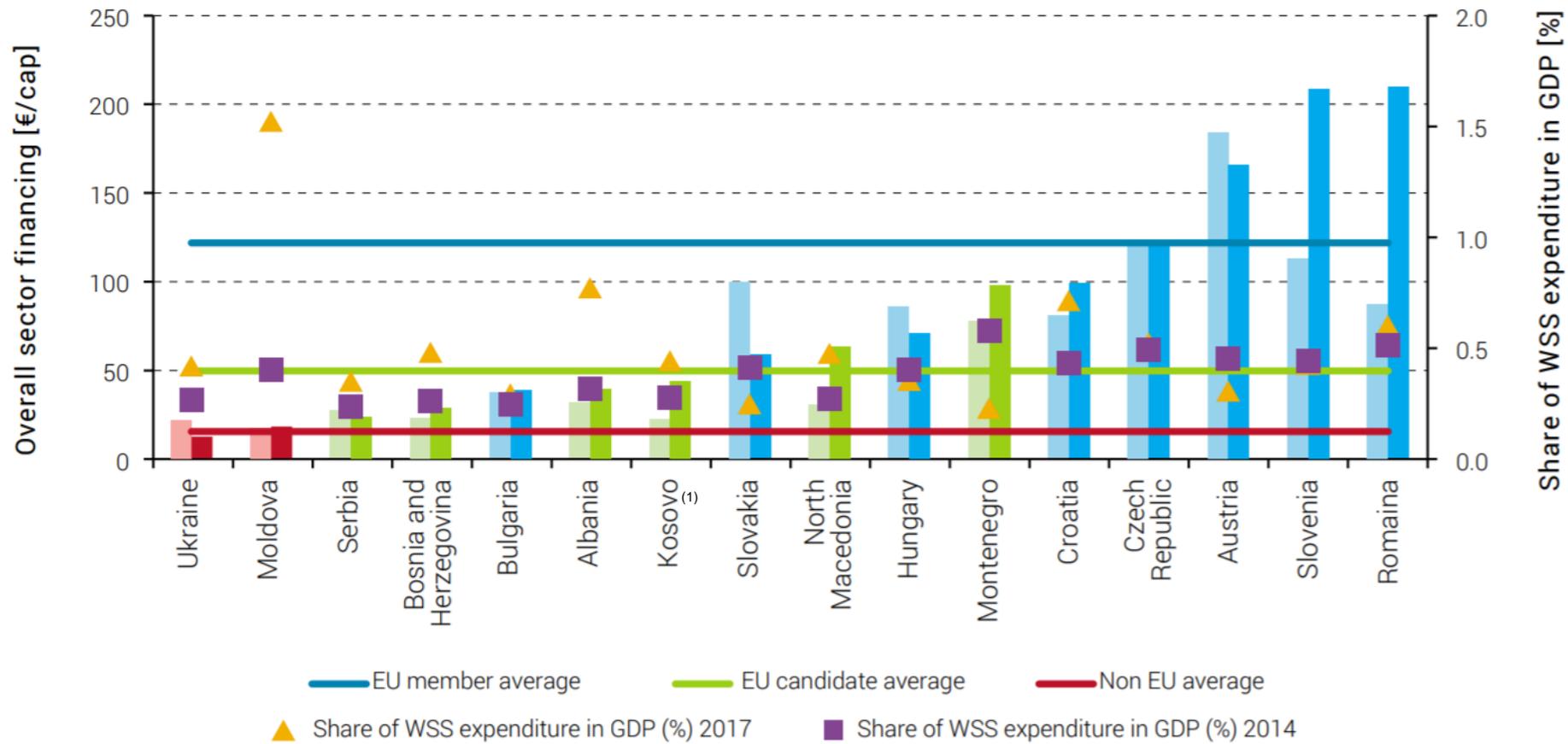
- Territorial reform and its municipal utilities are expanding to non-served areas and integrate local systems under their management; now further regionalization planned

Bosnia and Hercegovina: high piped access with self-investment and fragmentation

- Sector program is being formulated, looking to consolidate local service providers and municipal utilities to create economies of scale and expand access

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Vast differences in WSS spending point to the need for an explicit strategy ... how to best allocate the three Ts and focus on rural WSS



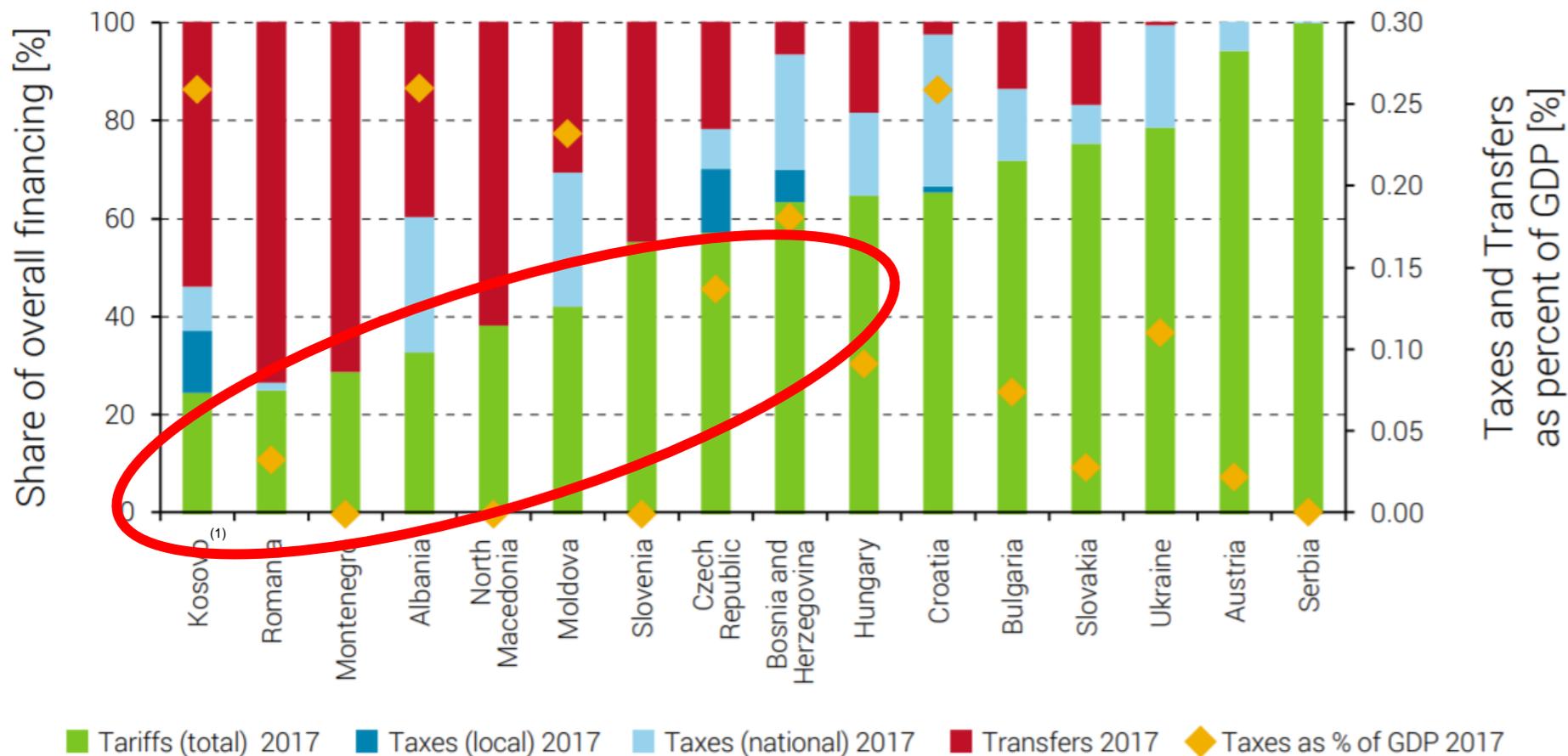
SOURCE: SOS DATA COLLECTION.

EU = EUROPEAN UNION; GDP = GROSS DOMESTIC PRODUCT; WSS = WATER SUPPLY AND SANITATION.

NOTE: DARK COLORS REPRESENT SECTOR FINANCING PER CAPITA FOR THE YEAR 2017; LIGHT COLORS REPRESENT VALUES FOR YEAR 2014.

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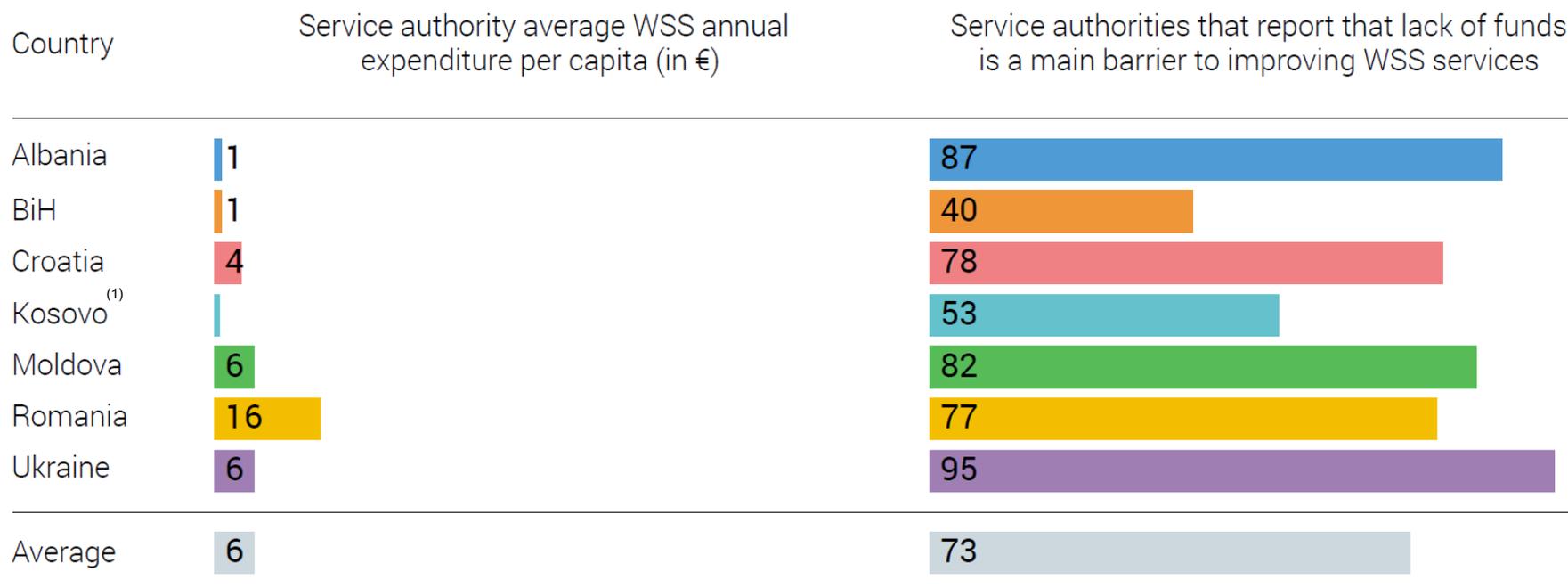
Need to increase financing from Tariffs, while targeting Taxes and Transfers to address inequalities ... social tariffs are part of the solution



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Need for targeted state funds / municipal development funds due to limited ability of local rural governments to spend on WSS

FIGURE 3.5: AVERAGE LOCAL GOVERNMENT (SERVICE AUTHORITY) ANNUAL PER CAPITA EXPENDITURE (IN €) OVER THE PAST YEAR (2016) ON WSS AND PERCEPTION OF ADEQUACY OF FUND AVAILABILITY, BY COUNTRY.



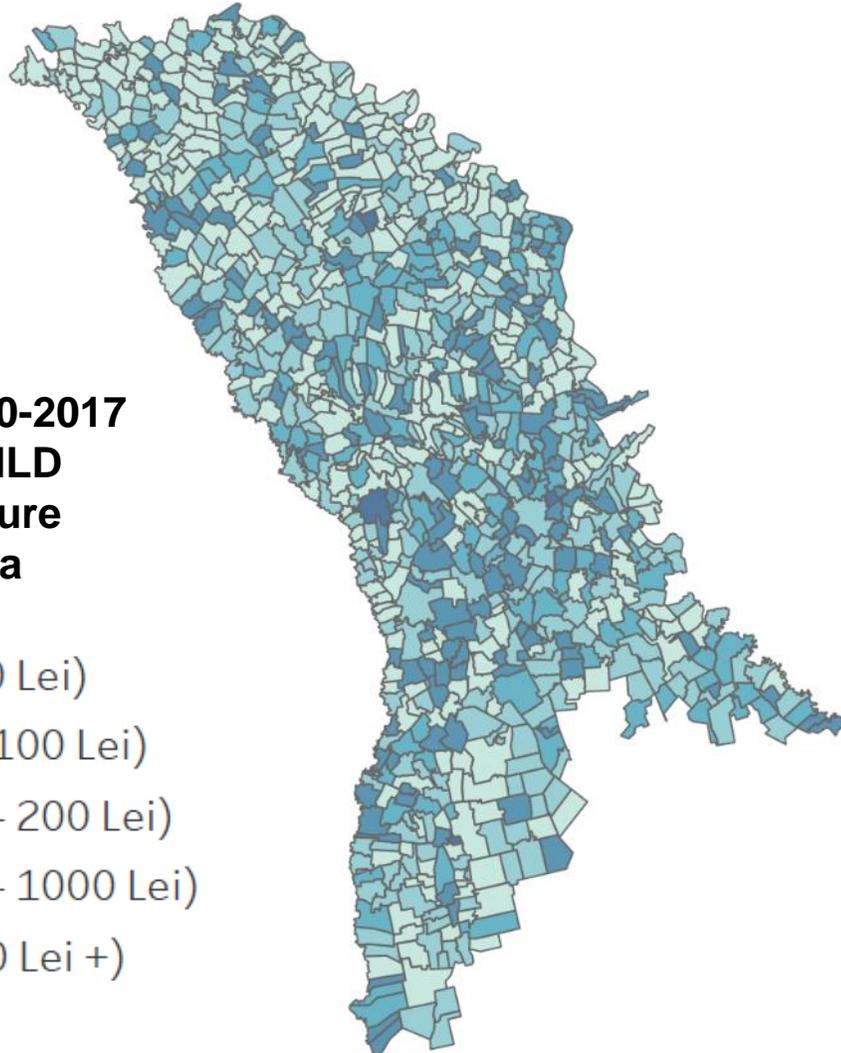
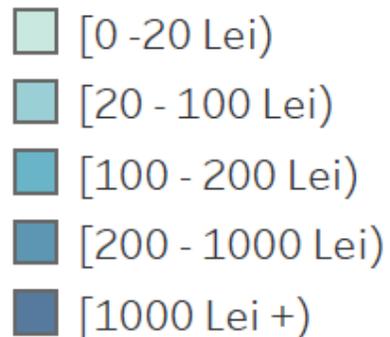
SOURCES: COUNTRY-SPECIFIC LOCAL GOVERNMENT SURVEYS.

Note: Data refer to both water supply and wastewater investments in the past fiscal year (2016). No data presented for Kosovo (no data in questionnaire); data submitted by the regulator for Kosovo estimate that per capita expenditure for rural water to be around euro 5.7 per capita (rural population), combined local and central allocations. Average is calculated by dividing total expenditure on WSS by the total population in the territory of the sampled local government. WSS = water supply and sanitation.

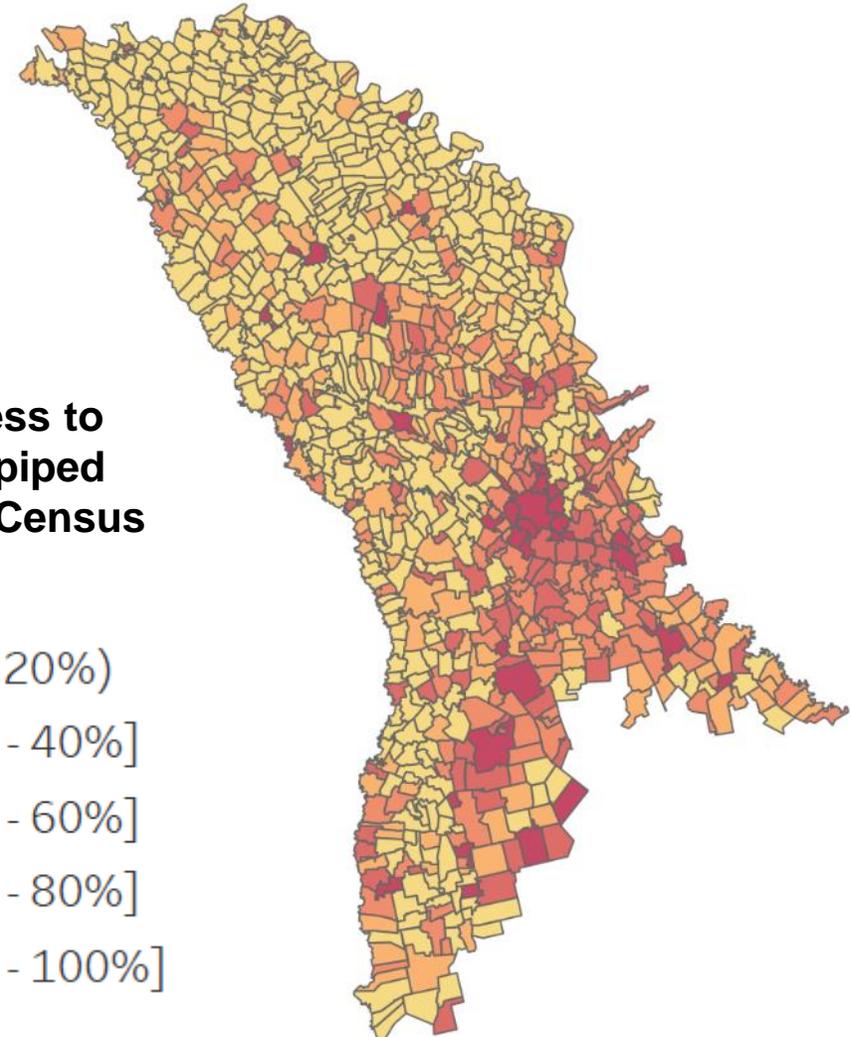
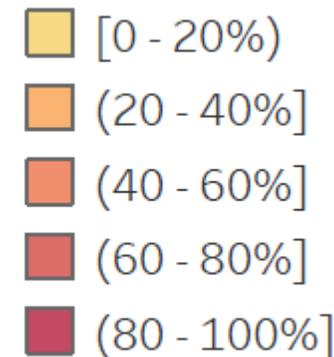
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Moldova example: Most LPAs have annual expenditure below Euro 5 per cap, mostly from National Ecological Fund

Avg. 2010-2017 annual MLD expenditure per capita

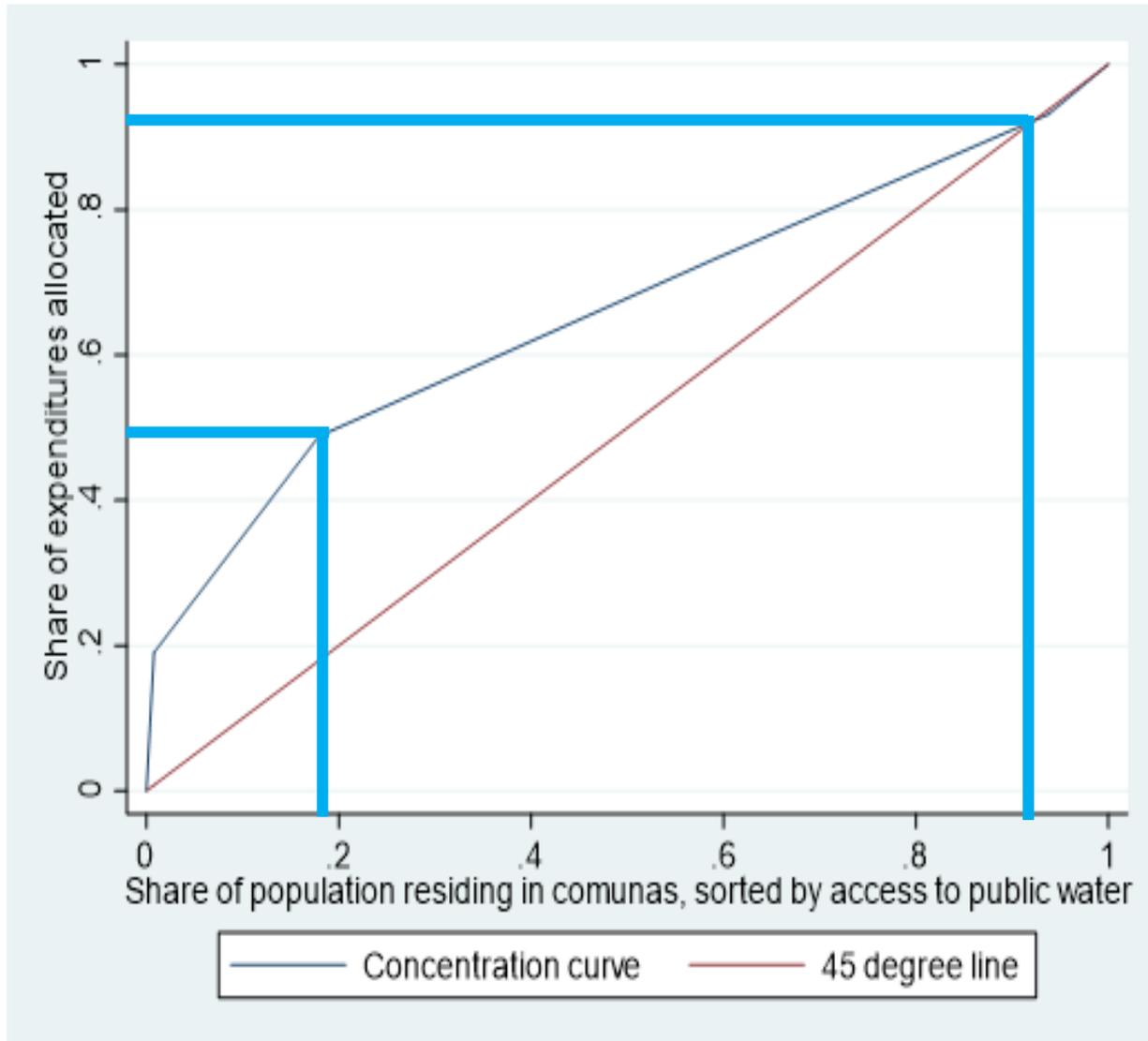


% Access to public piped water (Census 2013)



Based on 10% sample of Census 2013, NBS

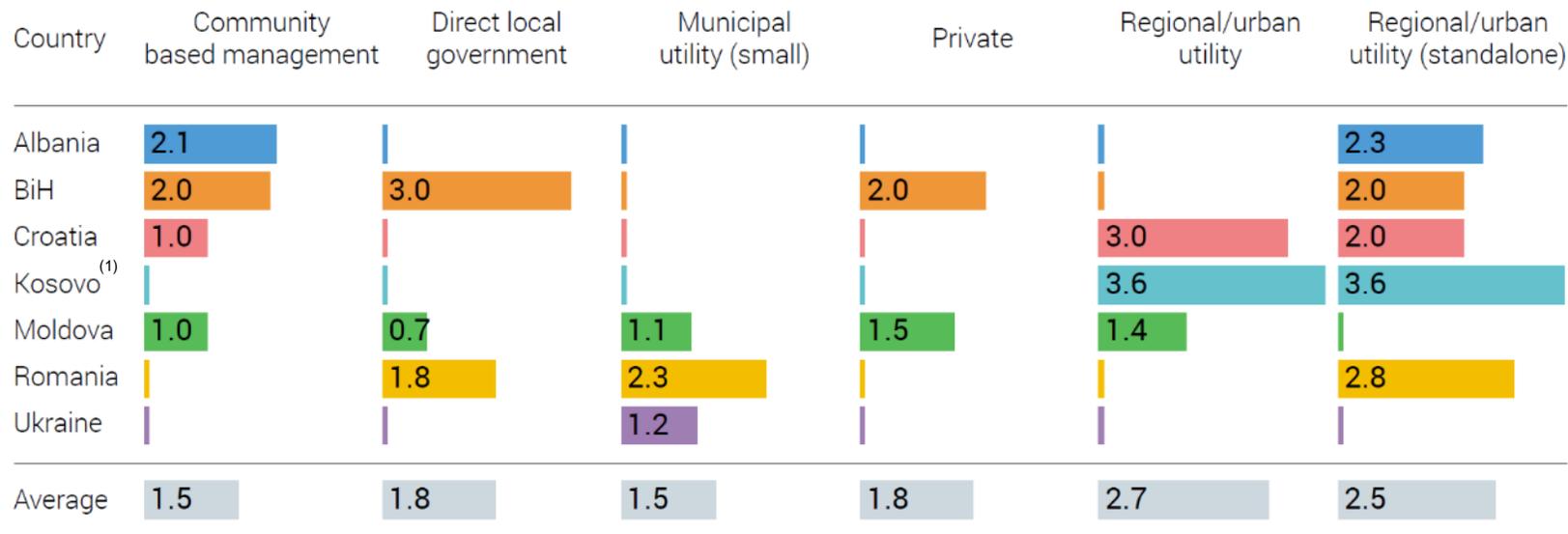
Expenditure analysis critical to understand effectiveness of targeting funds ... and requires an outcomes focus. Still lacking for Moldova's NEF



- Almost **50 percent** of all **locally executed WSS** expenditure (NEF) benefits **20 percent** of the **population** living in LPAs with lowest access
- **10 percent** of all locally executed WSS benefits almost **10 percent** in **highest access LPAs**
- Relatively high access **urban town** also benefit from **other sources** (national NFRD and donor funds not included in local expenditure)

Affordability analysis necessary to understand to space for tariff increases and need for “social” tariffs

FIGURE 3.7: PERCENTAGE OF MONTHLY PER CAPITA EXPENDITURE AS OF MONTHLY PER CAPITA INCOME/CONSUMPTION DEFINED AT NATIONAL POVERTY LINE (IN 2016 PRICES) BY MANAGEMENT MODEL AND BY COUNTRY.



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- Assess affordability for the poorest segment, not “average income”
- Address tariff increases alongside better services that (may) come with different service delivery models; community engagement critical
- Main reported barriers for self-supply households were connection cost not the tariffs.. target subsidies where most needed...
- When needed, design smart social tariffs

Salient features of social water tariffs in “old” EU countries

- **Financing:** through **cross-subsidies within each utility**; no central budget or national social system funding; could also be from a national solidarity fund
- **Targeting:** use either national social assistance system or done at discretion by utility or municipality (means testing)
- **Cost:** From 2% to 10% of total utility revenues (**usually ~ 5%**), **paid for by other customer groups**

The voluntary uptake of social tariffs illustrate that they make social and commercial sense. Increasingly there is national guidance offered

World Bank Working Paper forthcoming to summarize lessons from social tariffs in the EU



Are social water tariffs relevant for EU-13 and EU candidate countries?

WSS tariff increases happening and still more to go as countries comply with WFD ... How to make tariff rises socially acceptable?

Some considerations

- Much wider **disparities within municipalities/utilities** in country
- Social tariffs may need **to be funded by central budgets** (poverty, territorial solidarity), not utility cross-subsidies
- **Not always efficient social schemes in place** to identify and target beneficiaries
- This may make implementation more costly (need to be balanced with the gains); opportunities to use **other sectoral schemes** (heating)





Q & A

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Assisting Small Water Supplies in Southern Germany with Calculating Tariffs and Costs

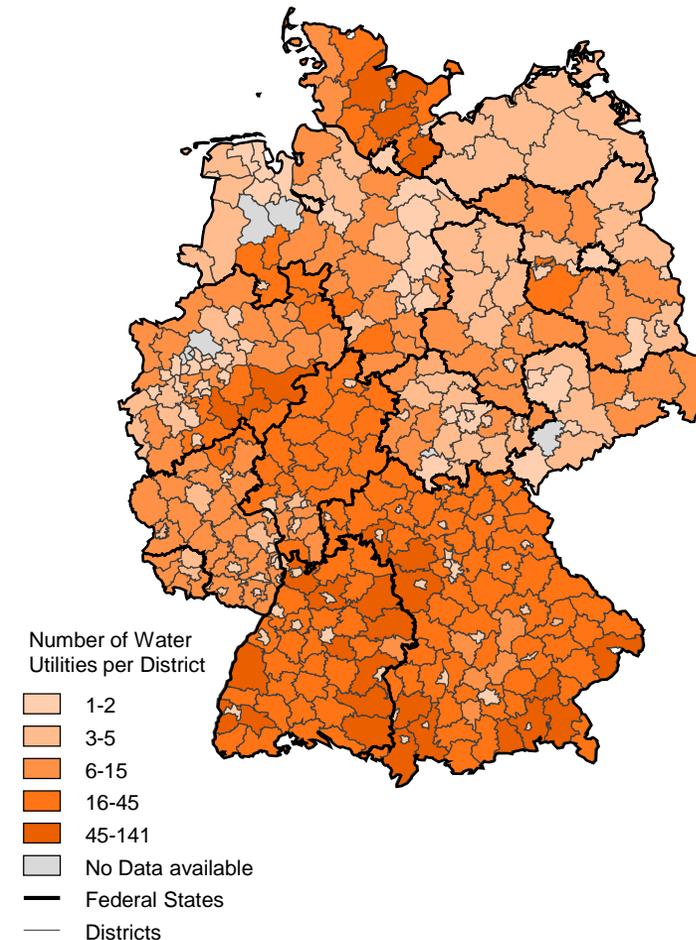
Steffen Krause,
Christian Platschek (2010 – 2016)

8th July 2020

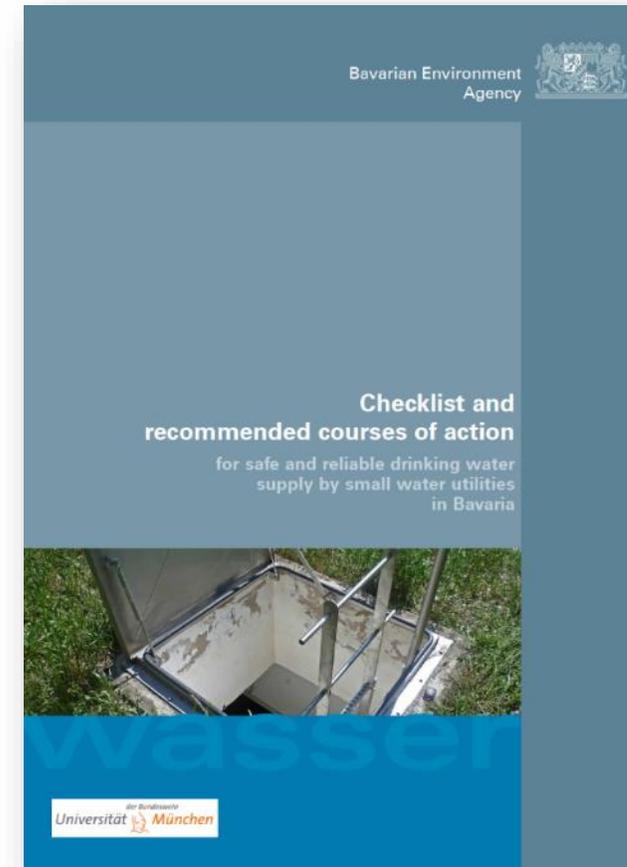
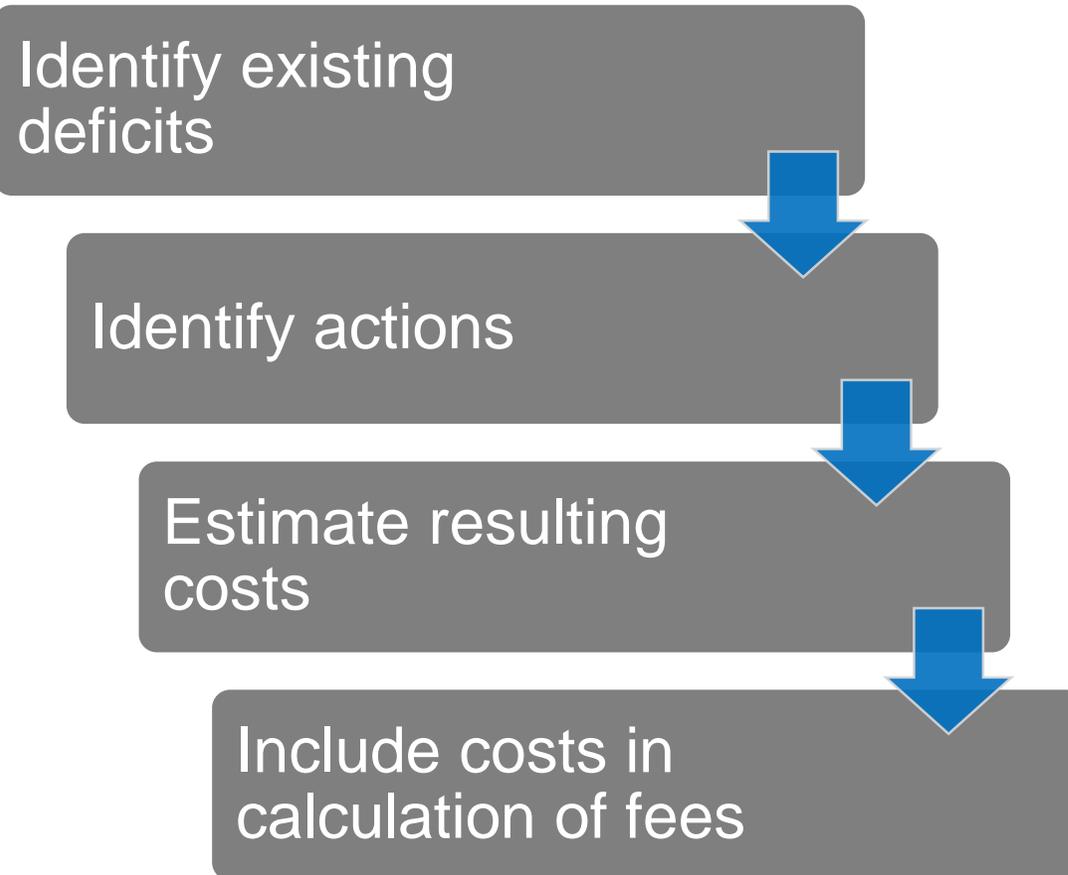
Webinar Series 2020, Protocol on Water and Health

Introduction

- ▶ **Southern Germany is characterized by a large number of small supply systems**
- ▶ **Deficits in compliance with rules and regulations are suspected/reported**
- ▶ **Insufficient investment in renewal of systems**
- ▶ **UniBwM realized several projects to support small systems on behalf of the Bavarian Government**
 - trenchless pipe laying
 - particle elimination by ultrafiltration
 - self assessment tools
 - ...



Checklist and Recommended Courses of Action



Go to www.bestellen.bayern.de and search for **lfu_was_00181**

Framework for Calculation (fees and prices)

Fundamentals defined in the EU Framework Directive and the Bavarian Community Charges Act

- ▶ Fees must be proportional to the service rendered
 - ▶ Fees shall cover long-term costs
 - ▶ Ban on cost overrun
 - ▶ Principle of equality
 - ▶ Combination of fees and contribution possible
 - ▶ Calculation must be linear and serve the careful and economic use
 - ▶ Depreciation may be calculated based on acquisition and production costs or replacement costs (using indexed prices)
- } Calculation for a period of 4 years in advance

pro's and con's are explained in examples together with all components that have to be considered in the calculations

Influence of different measures on fees is illustrated by fictional examples (costs are fully financed by fees, no contributions)

	Description	fee [€/m ³]
#1	initial scenario (funding shortfall)	0,64
#2	like #1, increase in fee	0,81
#3	like #2, depreciation for renovation of building added	0,82
#4	like #2, plus new tank (depr. 30 a)	0,92
#5	like #4, plus increase in personnel effort	0,99
#6	like #5, plus connecting pipe to neighbouring utility	1,17
#7	like #6, plus renewal of 50 m pipes	1,21
#8	like #5, plus Benchmarking and certif. Tech. Safety Managemen.	1,42
#9	like #1, plus recommended renewal of pipes	1,28

Summary

- ▶ **Support of small supply systems in safe, reliable and sustainable operation**
- ▶ **Availability of qualified personnel is key**
- ▶ **Transparency in calculation should increase acceptance for a moderate increase of fees**



127 L / (cap·d) → 1:31 min of work

	Initial value	2016	2017	2018	2019
Water consumption fee € / m ³		1.282	1.282	1.282	1.282
Basic fee € / a		36.00	36.00	36.00	36.00
Average funding deficit from previous four-year period calculations	€ 52,000	€ 13,000	€ 13,000	€ 13,000	€ 13,000
Staff costs (0.3 full-time equivalent - FTE)	€ 10,200	€ 10,200	€ 10,200	€ 10,200	€ 10,200
Electricity costs	€ 6,500	€ 6,500	€ 6,500	€ 6,500	€ 6,500
Rent/ Lease	€ 2,000	€ 2,000	€ 2,000	€ 2,000	€ 2,000
Building and property maintenance	€ 1,000	€ 1,000	€ 1,000	€ 1,000	€ 1,000
Maintenance of water supply systems	€ 6,000	€ 6,000	€ 6,000	€ 6,000	€ 6,000
Maintenance of vehicles	€ 4,000	€ 4,000	€ 4,000	€ 4,000	€ 4,000
Motor vehicle tax	€ 500	€ 500	€ 500	€ 500	€ 500
Average depreciation	€ 17,325	€ 32,325	€ 32,325	€ 32,325	€ 32,325
Average return on invested capital	€ 15,750	€ 36,000	€ 36,000	€ 36,000	€ 36,000
Membership contributions paid by associations	€ 400	€ 400	€ 400	€ 400	€ 400
Costs for professional development	€ 200	€ 200	€ 200	€ 200	€ 200
Professional journals	€ 150	€ 150	€ 150	€ 150	€ 150
Uniforms and protective clothing	€ 80	€ 80	€ 80	€ 80	€ 80
Inspection charges	€ 1,500	€ 1,500	€ 1,500	€ 1,500	€ 1,500
Administrative and functional equipment	€ 350	€ 350	€ 350	€ 350	€ 350
Miscellaneous operating expenses	€ 4,500	€ 4,500	€ 4,500	€ 4,500	€ 4,500
EXPENSES		€ 118,705	€ 118,705	€ 118,705	€ 118,705
Revenue from usage fee		€ 96,150	€ 96,150	€ 96,150	€ 96,150
Revenue from basic fees		€ 22,500	€ 22,500	€ 22,500	€ 22,500
REVENUE		€ 118,650	€ 118,650	€ 118,650	€ 118,650
Total		€ -55	€ -55	€ -55	€ -55
Funding surplus (+); funding deficit (-) after 4-year period:					€ -220

BDEW, 2020

Assisting Small Water Supplies in Southern Germany with Calculating Tariffs and Costs

Steffen.Krause@unibw.de

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German Environment Agency





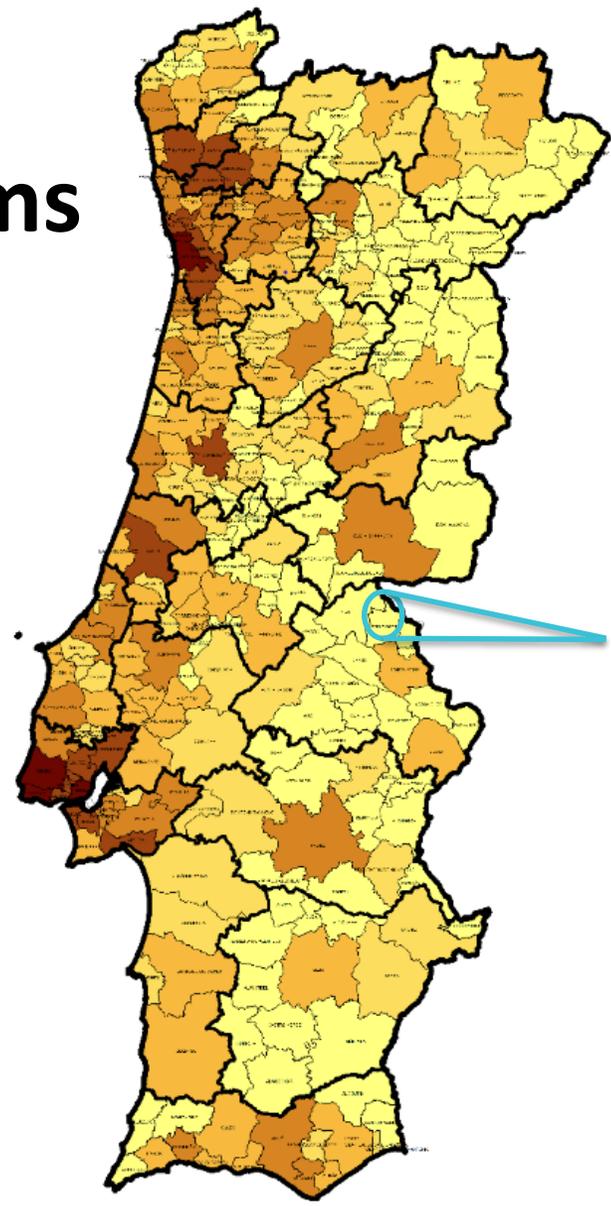
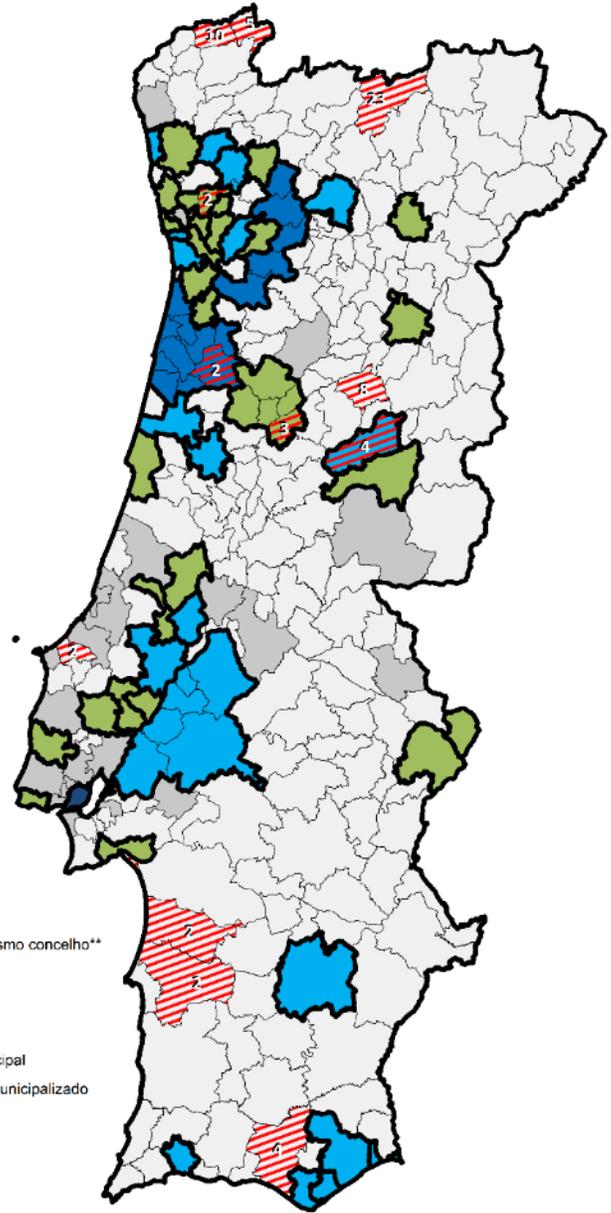
How to assess costs in small water systems in Portugal?

ERSAR

Alexandra Gonçalves da Cunha

2020-07-08

Retail systems



Castelo de Vide
Population
3.407



Technical guide on cost calculation



Depreciation

Financial costs

OPEX

Subsidies

Other revenue

Direct costs

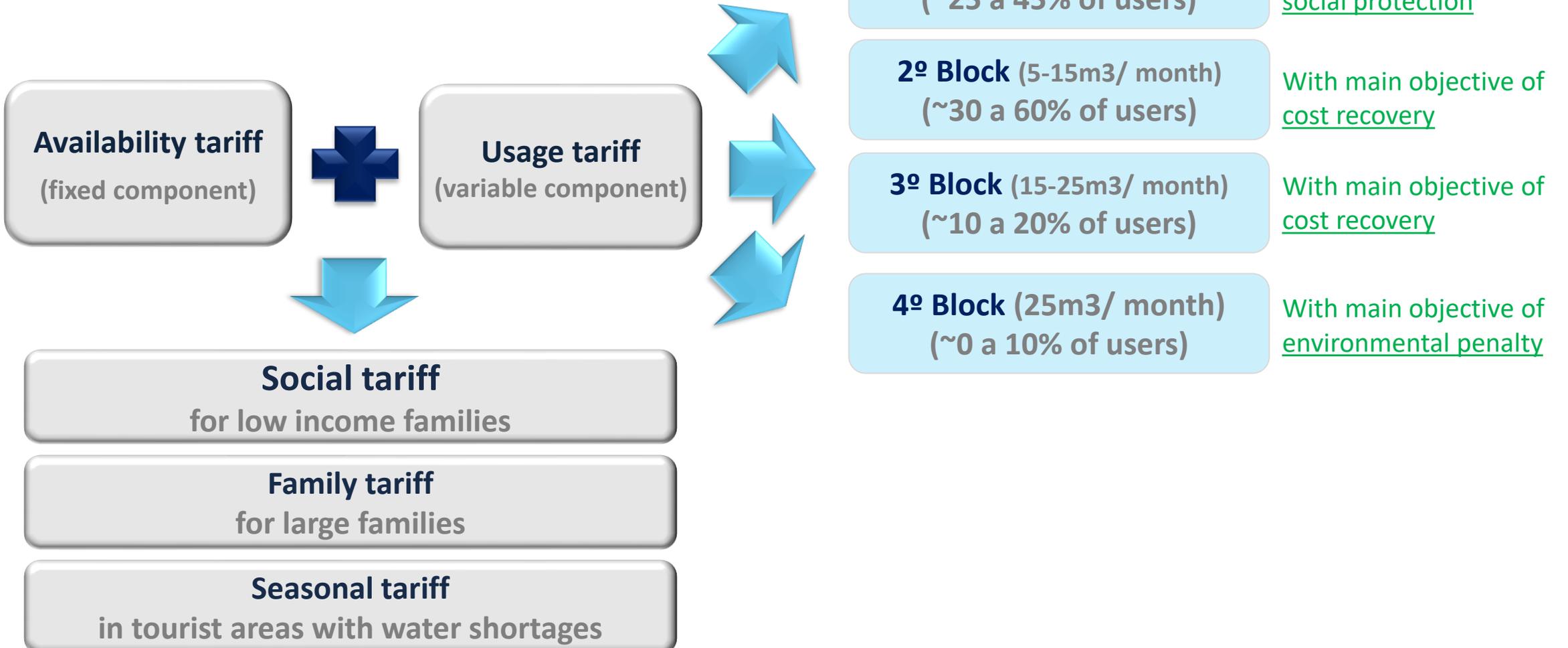
Indirect costs

Cost allocation criteria

ERSAR'S TARIFF GUIDELINES

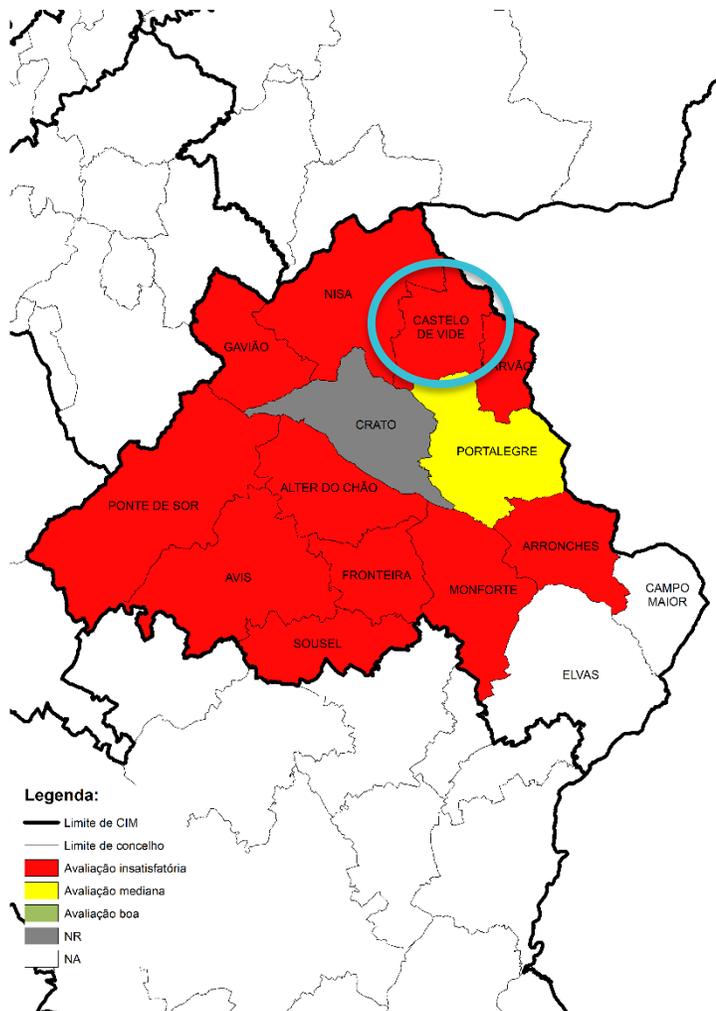


Tariff structure

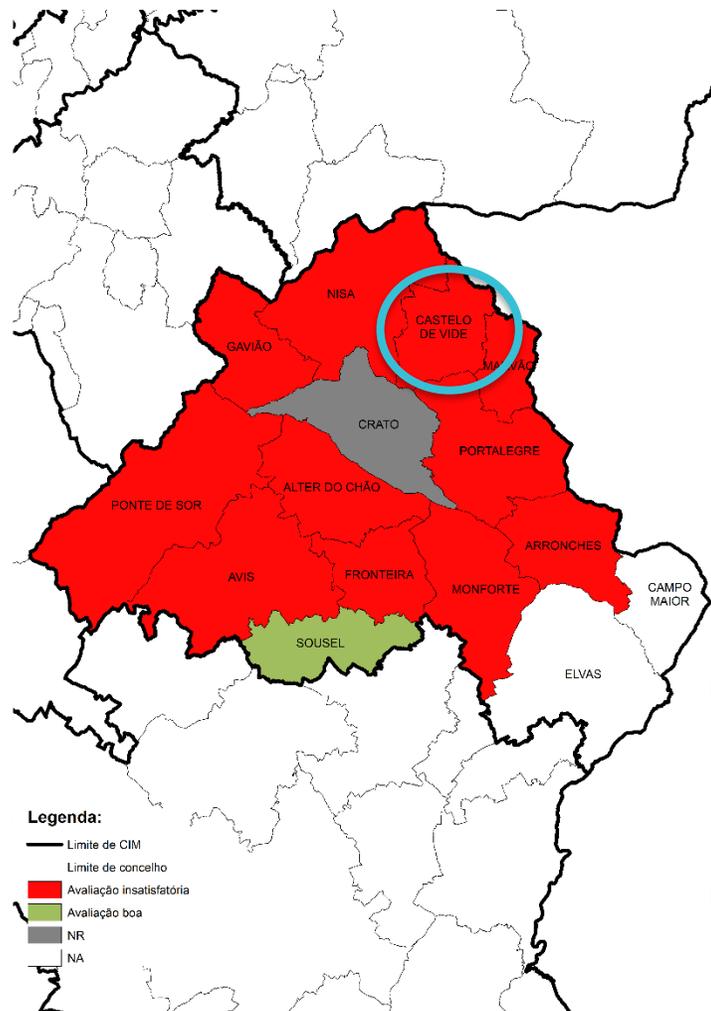


COST RECOVERY INDICATOR

Water



Wastewater

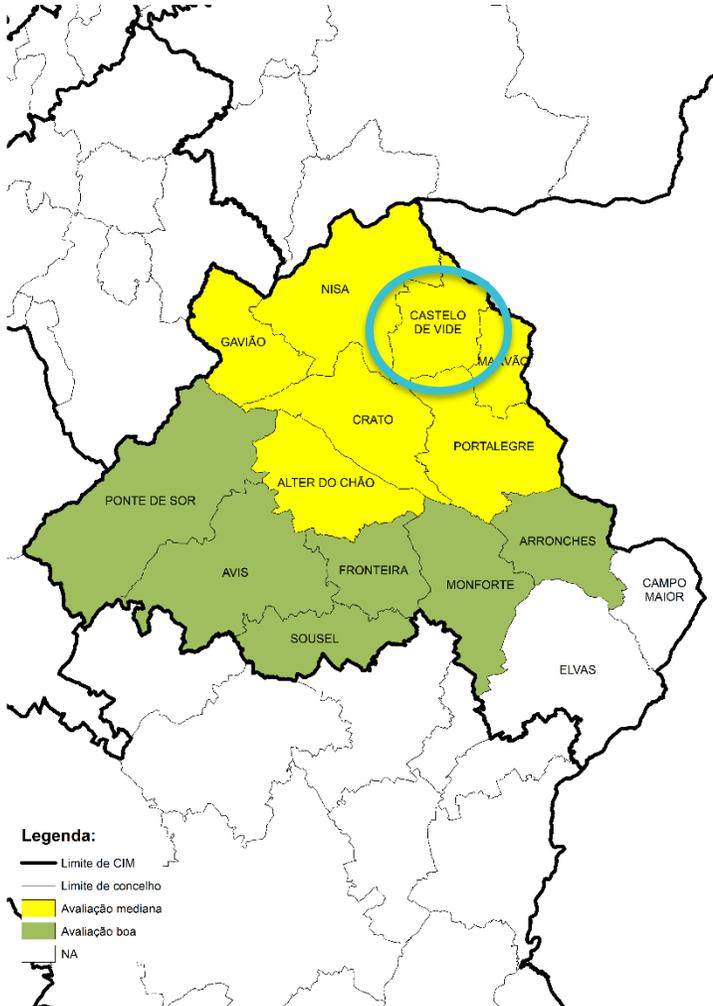


$$\frac{\text{Total revenue (€/year)}}{\text{Total costs (€/year)}}$$

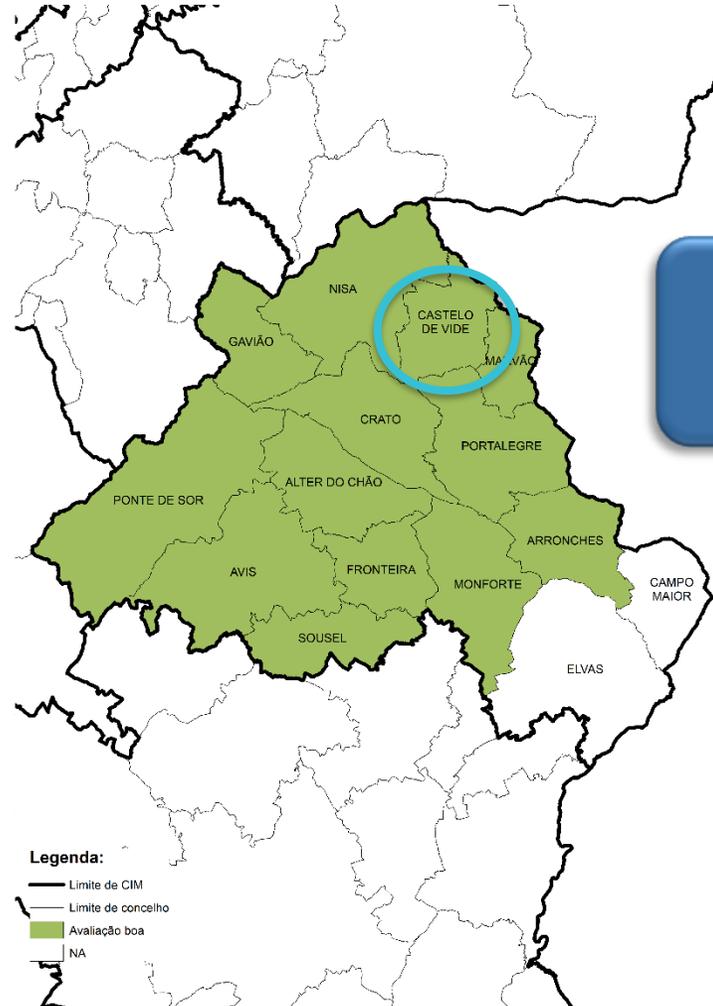
- [100% - 110%]
- [90% - 100%[and]110% - 120%]
- [0% - 90%[and]120% - +∞[

AFFORDABILITY

Water



Wastewater



Average tariff charges (€/year/120 m³)
 Average income per family (€/year)

- Good affordability
- Average affordability
- Poor affordability

Final considerations

Small systems aggregation has several benefits:

- Scale economies gains
- Uniform tariffs, optimized budgets and stabilized accounts
- Greater financial capacity and also greater facility in accessing European funds.
- Specialized human resources to operation and infrastructures maintenance
- Easier to guarantee affordable tariffs (essential aspect for SDG6)

Programme

- Welcome and introduction
- Costing and financing of small-scale water and sanitation services
- Findings on financing for rural water supply and sanitation services in the Danube region
- QUESTIONS AND ANSWERS: PART 1
- Assisting small water supplies in southern Germany with calculating tariffs and costs
- How to assess costs in small water systems in Portugal?
- **Ways to improve financing in small water supply and sanitation systems in the Republic of Moldova**
- QUESTIONS AND ANSWERS: PART 2
- Summary and closure



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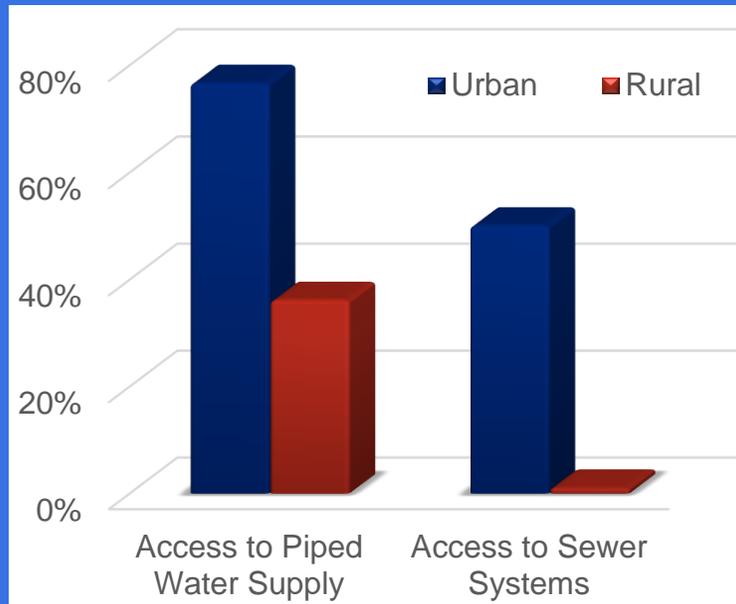


Ways to improve financing in small water supply and sanitation systems in the Republic of Moldova

Corina Andronic
Task Manager, Skat



Country context



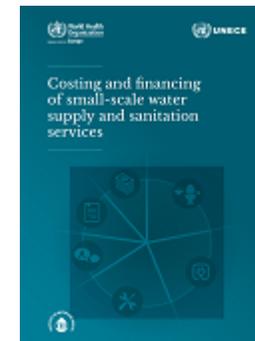
- ✓ Critical service gap between urban and rural areas
 - ✓ In urban areas services provided by 50 “ApaCanal” urban utilities
 - ✓ In rural areas by community based associations, municipal enterprises, municipal units
 - ✓ Rural operators are not subject of licencing by the national regulator and do not have a minimum service standard to comply to
 - ✓ No state technical support/advise to the local water and sanitation service providers
 - ✓ Lack of financing strategy of water and sanitation interventions at the national level, in particular addressing small systems
- ↓
- ✓ 50% of the population without access to water and sanitation are in villages with less than 2’500 inhabitants, BUT, investments done mostly in cities and larger towns

ApaSan experience: support on financial aspects

Situation before project and support needs	Project achievements
<ul style="list-style-type: none">❑ LPAs did not have a budget line for maintenance and repairs in the annual budget.❑ When the operator request for materials/equipment, LPAs were not able to act quickly, sometimes leading to interruption in the service provision.	<ul style="list-style-type: none">✓ Some LPAs are now able to better plan and budget costs required for maintenance and repairs of the water system
<ul style="list-style-type: none">❑ It was not clear what they exactly needed to transfer to operators (asset or management) and contracts with operators were vague and not always legally correct.	<ul style="list-style-type: none">✓ Some LPAs better document discussions with operators and have established clearer contracts with operators.
<ul style="list-style-type: none">❑ Lack of awareness on tariff setting by operators	<ul style="list-style-type: none">✓ Operators better understand how to establish a tariff structure and what their responsibilities are.✓ Increased awareness that tariff setting should not be a political decision and that operators can influence it and ask for a review, if necessary

Further support needs for rural water and sanitation services

- ✓ Describe and document the different management model (including financial management) options for rural water services delivery
- ✓ Define and approve **Minimum criteria for the water and sanitation services provided by rural/local operators** (Operation and maintenance instructions covering technical and **financial aspects**, safety and public health issues, etc.)
- ✓ Develop simple tariff guidelines specific for rural water supply systems
- ✓ Capacity building of local authorities and service providers on the key concepts on the costing and financing of small-scale water & sanitation services
- ✓ Dissemination and application of the new publication: 



USE LIFE-CYCLE COST APPROACH

Costs of capital

Capital expenditure

Operation and minor maintenance expenditure

Capital maintenance expenditure

Expenditure on direct support

Expenditure on indirect support

Ways to improve financing of SSWSS

- ✓ Estimate cost for water/sanitation and services
- ✓ Water quality is assessed before the investments or the treatment technology is identified
- ✓ Support in making tariff calculations and estimating costs and budgeting
- ✓ Assist in calculating and integrating the fees for use of the infrastructure in the contract of the amortization
- ✓ Work with the LPA and explain the elements that have to be part of the budgeting and decision making process: need for cost recovery tariff, amortization fund, water safety aspects

Ways to improve financing of SSWSS

Examples:

Expenditure on direct support

- ✓ Cost of direct support services provided to small water and sanitation service providers.

Area of services: juridical/legal support and advice, technical and economical assistance, coaching in decision making on water and sanitation issues.

Expenditure on indirect support

- ✓ Costs related to indirect support: advocacy, policy development and regulation for small water and sanitation services (e.g. development of Water and Sanitation Strategy, Law on Water and Sanitation Service, national target setting under SDGs and Protocol on Water and Health)

For more details

[HTTP://APASAN.SKAT.CH](http://APASAN.SKAT.CH)

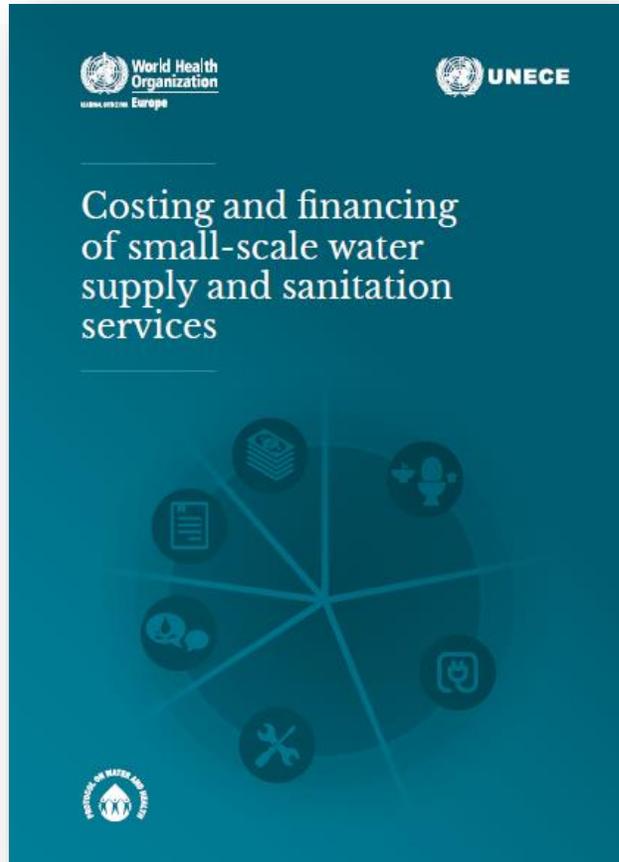
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Q & A

Costing and financing

Small-scale water supply and sanitation services



<https://www.euro.who.int/en/costing-and-financing-of-small-scale-water-supply-and-sanitation-services>

Next edition

Protocol webinar series 2020



Equity in WASH access

Wednesday, 22 July 2020

11:00 a.m. – 12:30 p.m.



**Please write
any further
questions
in the chat**

**Contact us at
euwatsan@who.int**

