



Report

Assessing the financial impact of COVID-19 on the operation and performance of PUCs in six Western Balkan economies

Implemented by



In cooperation with



Published by: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices Bonn and Eschborn, Germany

Address:

GIZ Office Sarajevo Zmaja od Bosne 7-7a Importanne Centar 03/IV T +387 33 957 500 F +387 33 957 501 E GIZ-BosnienHerzegovina@giz.de I www.giz.de

Programme/Project:

Open Regional Fund for Modernization of Municipal Services in SEE (ORF MMS)

Editors:

Peter Wolf, Sector Fund Manager Pavle Donev, Officer responsible for implementation

Author:

Center for Development and Promotion Promo Idea – Strumica



On behalf of:

German Federal Ministry for Economic Cooperation and Development (BMZ)

Photo credits: Front cover: GIZ

Maps:

The maps printed here are intended only for information purposes and in no way constitute recognition under international law of boundaries and territories. GIZ accepts no responsibility for these maps being entirely up to date, correct or complete. All liability for any damage, direct or indirect, resulting from their use is excluded.

Disclaimer:

Copyright © 2020 GIZ. All rights reserved by GIZ - No part of this publication may be reproduced or distributed in any form, or by any means, or stored in a database or retrieval system, without the prior permission of the publisher. The content and opinions expressed in this publication are those of the authors and do not necessarily reflect the official views of the GIZ and the German Federal Ministry of Economic Development and Cooperation (BMZ). Neither of these institutions nor any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.

Printing and distribution: ORF MMS and Regional Capacity Development Network for Water and Sanitation Services (RCDN) Printed on 100% recycled paper, certified to FSC standards.

Place and date of publication

Skopje, Republic of North Macedonia, February 2021

Table of Contents

Table of Contents	3
List of abbreviations	4
List of Figures	5
Executive summary	6
Financial implications of the COVID-19 crisis on the provision of water and sanitation and other services by PUCs	
Delivery of communal services during the COVID – 19 pandemics	7
Revenues - Net financial effects of COVID-19	7
Expenses - Changes to utility operations and costs	8
Other financial impacts, mitigating financial losses and available assistance	8
Recommendations	9
1.1 Context	10
1.2 Background and objectives	11
1.2.1 Background of this document	11
1.2.2. Objectives of the analysis	11
1.2.3. Target groups	12
1.3 Methodology and limitations	12
1.3.1 Methodology	12
1.3.2 Online survey questionnaire	12
1.3.3 Limitation and challenges	13
1.3.4 Structure of the document	13
2. Financial implications of the COVID-19 crisis on the provision of water and sanitation and other services by PUCs	
2.1 Delivery of communal services during the COVID – 19 pandemics	14
2.2 Revenues - Net financial effects of COVID-19	17
2.3 Expenses - Changes to utility operations and costs	18
2.4 Other financial impacts, mitigating financial losses and available assistance	20
3. Conclusions and recommendations	24
Conclusions	24
Recommendations	27
Urgent support for coping with the short-term financial shortages and deficiencies	27
Planning for the "day after" – building recovery strategies for the short and mid-terms	
Short-term strategies and activities	
Mid-term and long-term recovery strategies	
References	31

List of abbreviations

ADKOMAssociation of Communal Service Providers in the Republic of North MacedoniaAPUCAssociation of Public Utility CompaniesAQUASANAquasan Network in Bosnia and HerzegovinaAWMAssociation of Waterworks of MontenegroAWRSAssociation of Waterworks of Republic of SrpskaBMZFederal Ministry for Economic Cooperation and DevelopmentCDCapacity DevelopmentCSOCivil Society Organisation
AQUASANAquasan Network in Bosnia and HerzegovinaAWMAssociation of Waterworks of MontenegroAWRSAssociation of Waterworks of Republic of SrpskaBMZFederal Ministry for Economic Cooperation and DevelopmentCDCapacity Development
AWMAssociation of Waterworks of MontenegroAWRSAssociation of Waterworks of Republic of SrpskaBMZFederal Ministry for Economic Cooperation and DevelopmentCDCapacity Development
AWRSAssociation of Waterworks of Republic of SrpskaBMZFederal Ministry for Economic Cooperation and DevelopmentCDCapacity Development
BMZFederal Ministry for Economic Cooperation and DevelopmentCDCapacity Development
CD Capacity Development
CSO Civil Society Organisation
EU European Union
GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GWOPA Global Water Operators' Partnership Alliance
IAWD International Association of Water Service Companies in the Danube River Catchment Area
IFI International Funding Instrument
LG Local Government
LGA Local Government Association
LGU Local Government Units
NALAS Network of Associations of Local Authorities of South-East Europe
ORF MMS Open Regional Fund for the Modernisation of Municipal Services
PPE Personal Protection Equipment
PUC Public Utility Company
RCDN Regional Capacity Development Network for Water and Sanitation Services
RWC Regional Water Company
SECO Swiss State Secretariat for Economic Affairs
SEE South-East Europe
SHUKALB Water Supply and Sewerage Association of Albania
SHUKOS Water and Wastewater Works Association of Kosovo
UPKP Association of Employers of Utility Companies in Federation of Bosnia and Herzegovina
UTVSI Association of Water Technology and Sanitary Engineering
VAT Value Added Tax
WASS Association for water protection and preservation in the South of Serbia
WB Western Balkans
WSS Water and Sanitation Services

List of Figures

Figure 1: Profile and service portfolio of PUCs who participated in the online survey	14
Figure 2: Overall financial impact of the COVID-19 pandemic on PUCs operations	15
Figure 3: Reported changes in water consumption in 2020 in comparison to 2019	16
Figure 4: Reported decrease in water supply revenues in 2020 as a result of the COVID-19 crisis	17
Figure 5: Reported tendencies in costs of PUCs for staff, materials, equipment, and spare parts	18
Figure 6: Reported increase of services rates and distribution among categories	20
Figure 7: Increased difficulty among customers in paying communal service bills in 2020	21
Figure 8: Measures implemented by PUCs to address the issue with delayed payments of customers	21
Figure 9: Recommendations for decision and policymakers to improve the negative financial perspectives of P	UCs
as a result of the COVID-19 crisis	23

Executive summary

Since the World Health Organization identified COVID-19 as a global health pandemic on March 11, 2020, the LGs and especially their PUCs have been heavily affected by its impact.

With closed businesses, suspended educational process, closed public institutions, and major disruptions to operations of the majority of economic subjects, **PUCs are changing and adapting their daily operational practices and procedures to the rapidly changing conditions** to ensure the timely and quality delivery of essential communal services.

COVID-19 has raised many questions that PUCs need to address. How will these changing conditions affect PUCs finances? How will PUCs cope with the expected financial deficits and effects in both the short and the long term? What will happen with the ongoing and planned capital investments and modernisation projects? All these concerns have to be addressed by utility managers in cooperation with the local decision-makers.

Given that background, the German Agency for International Cooperation (GIZ) has been preparing new COVID-19 related measures on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), aiming at strengthening the resilience of LGs and PUCs from the Western Balkans. For that purpose, the Centre for Development and Promotion Promo Idea – Strumica (Promo Idea) was commissioned by GIZ, in the frame of the Open Regional Fund for the Modernisation of Municipal Services (ORF MMS) to prepare three (3) analyses of the COVID-19 responses of LGs and their PUCs, as well as the relevant stakeholders in 6 Western Balkan economies¹. The insights, conclusions and recommendations provided in the series of analyses will further enhance the capacity of the Regional Capacity Development Network for Water and Sanitation Services (RCDN), established with the support of GIZ. They will form the basis for the establishment of the newly emerging body of practice in the field of crisis management.

The present Report, prepared in the frame of Analysis no. 3, focuses on assessing various aspects of the financial impact of the corona crisis on the operations and performance of PUCs in the provision of WSS services during the COVID-19 pandemic. Fully realising that drawing conclusions for the long terms is somewhat premature, the current Report evaluates the various aspects of the financial performance of PUCs in the target Western Balkan economies, focusing on revenues, expenses, and other potential impacts and trends that have been observed at PUCS during the first year of operating in times of pandemic.

The research data was gathered through a targeted online survey, inquiring the managerial staff (e.g. General Manager, Financial Manager, Accountant, etc.) of PUCs who manage and coordinate the delivery of essential communal services in local communities. LGAs and APUCs as well as the regional organisations NALAS, IAWD and AQUASAN, all members of the RCDN, provided support in the communication and distribution of questionnaires to their member PUCs and LGs.

Financial implications of the COVID-19 crisis on the provision of water and sanitation and other communal services by PUCs

As in most areas of the world, the COVID-19 pandemic has caused a lot of negative impacts on many communities across the Western Balkan economies. As the impact of the pandemic has been felt worldwide, strict lockdown measures have been imposed on the local and national level by most economies of the Western Balkans to respond to the unknown threat. These restrictions have rendered the key public service providers in a challenging position regarding ensuring the continuous delivery of the essential communal services in their local communities.

While our societies and authorities are still struggling with the novel models of the virus and the different waves of the pandemic, experts and practitioners working in the WSS sector are trying to assess the impact of this unprecedented crisis on their organisations in both the short and the longer term.

What is most important in these unprecedented times of crisis is that PUCs continue to provide proper servicedelivery, ensuring sufficient operations regarding the new challenges that derive from the COVID-19 crisis in adherence with the heightened standards and assuring the necessary hygiene safety in public areas.

¹ Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia

Delivery of communal services during the COVID – 19 pandemics

The researched region of the Western Balkans is among the richest in Europe in terms of water resources, as the amount of water per person is twice the European average. **Despite these abundancies, the WSS sector and local governments in the region still face many struggles and challenges in delivering essential communal services, such as losses of drinking water, poor drinking water quality, lack of sewage systems in every settlement, outdated equipment and facilities**, etc.

Despite the challenges, **the service quality**, **in terms of continuity and compliance with water quality and wastewater discharge standards**, **has been improving steadily over the past several years**, influenced by a multitude of factors such as the compliance with the EU water legislation, increased access to funding (especially for pre-accession countries), public sector improvements, increased capacity development (CD) opportunities, etc.

Expectedly, the pandemic has influenced the service provision of PUCs across the world negatively. While much of the economic and social life has been shut down, essential public services had to continue. PUCs, in cooperation with their LGs, needed to assure proper service-delivery 24 hours a day, 7 days a week, complying with the newly imposed social distancing, health prevention and heightened hygiene and sanitation requirements. In almost every community, local water supply and sanitation departments have also been burdened with the overall responsibility of safeguarding public health by performing various additional services and activities related to the disinfection and sanitation of public spaces and facilities. Ensuring stable business continuity of these services that guarantee enough hygiene standards for citizens is not an option, but ultimate obligation and responsibility at the local level, which is considered a National security and safety issue in this time of crisis.

Expectedly, the crisis is affecting almost every aspect of the LGs and PUCs operations and activities to a similar extent. However, some PUCs are more affected than others, resulting from a variety of factors. Nevertheless, the majority of PUCs shared that the most impacted sector has been the water supply, followed by sewage management and municipal waste collection. The negative effects observed in these sectors are directly linked with the increased sanitation requirements, health protocols, and the need to ensure the health and safety of employees delivering these services. Although it is still premature to draw any conclusions, PUCs across the Western Balkans have experienced and anticipate experiencing revenue and cost impacts associated with the national, state, and local response to the COVID-19 crisis. Data of the online survey indicates that the vast majority of PUCs observe a considerable financial impact of the COVID-19 in all budget categories (i.e. revenues, expenses, etc.), while only a few stated that no significant financial impact had been observed so far on their operations. Throughout the research, representatives of PUCs are reporting for increased expenses resulting from the additional sanitation and disinfection activities, decreased incomes, resulting from the reduced economic activities and closed businesses (especially in the hotel and hospitality industry), impeded ability for collection of bills, staff deficiencies, delay of investments, etc.

The COVID-19 crisis has "put the breaks" on many economic activities worldwide, and the Western Balkan region is no exception to this negative trend. Public and private finances have also suffered due to decreased revenues. The majority of PUCs across the researched Western Balkan economies, as the majority of respondents in the online survey for the current research, have either delayed all planned capital infrastructure investment projects or reduced all planned major repairs and maintenance activities.

Revenues - Net financial effects of COVID-19

The COVID-19 pandemic brought clear and more or less expected financial challenges to PUCs in the Western Balkan region, posed by the reported revenue losses. These have resulted from the newly adopted consumer deferral policies, reported declines in water consumption, operational and management changes (amended staff policies, shift segmentation, overtime work, reduced or impeded consumption reporting procedures, expected decline of new customers due to the hindered investment activities, etc.).

The results of the online survey conducted in the frame of the present Analysis clearly show that most surveyed PUCs have experienced or were expecting to experience revenue losses as a result of the COVID-19 pandemic. Many of the surveyed managers of the PUCs were yet uncertain of the financial impact of the crisis, despite the fact that they are clearly aware of the revenue losses accumulated in 2020 compared to the precrisis period in 2019. However, what would be the financial impact of the pandemic is still unknown. These

findings have been supported by many other surveys conducted in the WSS sector, conducted in the target Western Balkan economies.

Expenses - Changes to utility operations and costs

Provision of communal services (i.e. water supply, sewerage management, municipal waste removal, etc.) is a cost-intensive activity with high demands in terms of staff, consistent demand for supplies, materials and other consumables. All these account for the bulk of operating costs of PUCs. The degree to which the COVID-19 crisis influences a public utility company depends on several factors such as its location, customer composition (number and profile), organisational structure, financial health, as well as the PUC's response and overall management through the crisis.

The crisis caused by the COVID-19 pandemic has put hygiene as one of the primary needs where water is necessary to maintain both personal hygiene and the hygiene of private and public spaces. PUCs shared that they had to perform additional activities/services during the COVID-19 pandemic, which have not been envisaged in their annual work plan. These mainly included disinfection of public buildings and institutions, open public areas (i.e. markets, parks, etc.); functioning and maintenance of disinfection checkpoints in cities and other settlements; maintenance of disinfection vehicles and equipment; etc. Some PUCs shared that they were obliged to increase the amount of chlorine in drinking water, based on the relevant health authorities' recommendation. PUCs had to rapidly organise, in cooperation with local authorities, the procurement of a large amount of sodium hypochlorite and disinfection of public areas, facilities and equipment, and disinfection and personal protection equipment (PPE).

In doing so, they worked with reduced resources, primarily human resources, because the recommendations of the headquarters for crisis management required the separation of shifts, sparing of vulnerable groups from exposure to contacts, work from home, etc. Many PUCs introduced digital solutions and remote payment schemes, which introduced new costs related to maintenance of call centres, upgrading of websites, online payment taxes, etc. Rationally, this led to an increase in the operating costs associated with these additional activities (i.e. staff, materials and equipment, utilities, fuel).

Despite all these negative trends, the majority of PUCs are reporting a rather low increase (between 5-10%) in the amount of costs related to the implemented additional activities, except for the costs related to community cleaning and disinfection which are directly related to the sanitation and health prevention measures, introduced and administered at the local level by PUCs. The Report outlines in details some potential impacts to operational costs of PUCs (e.g. staff, PPEs, digitalisation, remote service provision, deferral policies, bad debts, etc.) that should be taken into account and addressed by their management and stakeholders.

Other financial impacts, mitigating financial losses and available assistance

Apart from revenues and expenses, which are the most important categories that determine an enterprise's financial status, other specific features are also influencing the potential economic impacts that PUCs might experience in both the short and longer-terms.

Trying to assess the drop in revenues reported by the majority of PUCs, it was important to analyse the primary sources for the reported decrease. One of the important elements that constitute a large part of revenues of PUCs is related to the delivery of various types of communal services, including WSS, to both domestic and business consumers. Until recently, many PUCs in the Western Balkans were suffering from low collection rates. Even though no major fluctuations in the amount of water use were observed, the COVID-19 pandemic increased the number of unpaid or delayed bills by customers in the period January-December 2020 in relation to the same period in 2019.

PUCs are recognising this difficulty and offering to assist customers in various ways, backed-up by support policies implemented by the relevant national institutions. Common methods across surveyed PUCs include suspension of all shut-offs and late payment fees, extensions to payment deadlines, flexible payment plans, level/fixed payment plans, etc. In many of the target Western Balkan economies, central governments have provided financial support and stimulus to customers of vulnerable groups (e.g. people with disabilities, people with special needs, the elderly, women with small children), etc. Each of these methods implies both collection and transaction costs for PUCs. However, these measures have been adopted for both supporting customers as well as for improving collection rates.

PUCs have very few tools available to mitigate potential financial losses during COVID-19. In the short–term, PUCs can rely on their reserves to compensate the reported revenue losses and increased incremental expenditures resulting from the additional activities and services linked with the response to the COVID-19 crisis. However, the ability to use reserves is directly connected with the type of PUC, customer base and the existing financial status of the institution. Therefore, support from the LG or the relevant institutions on a national level is essential for overcoming the adverse effects on the financial status of PUCs.

Recommendations

Long-term financial impacts are still "terra incognita" for both experts and managerial staff of PUCs. Working around the clock to continue the uninterrupted provision of essential services to their communities, PUCs are starting to look ahead in the period after the pandemic, drawing plans and strategies for recovery and improving resilience to future crisis.

As PUCs transition to normal operations, experts and managers working in the public services delivery sector begin to look ahead to analysis and planning the available COVID-19 cost recovery options. While the effects on operating costs may be highly localised, it is likely that utility revenues will generally decrease in the short-term. The extent to which this happens will largely depend on how long utilities operate under the current COVID-19 condition. In the process of analysing the potential impact of the COVID-19 in target economies, the issue of liquidity and financial aspect of PUCs' operations and the support of LGs on this issue has emerged as a new topic that requires attention further research and support. Based on the initial analysis, there is a need to define, identify, and calculate the real costs incurred by PUCs as a result of the COVID-19 pandemic and the extra services provided to communities. Additionally, there is a need to propose models for covering financial costs resulting from the COVID-19 pandemic to ensure uninterrupted financing of essential services in the community, i.e. delivery of water supply and wastewater collection and treatment services.

The present Report provides important recommendations for utility managers, local practitioners and decision-makers. The document is divided in two main parts, where the first part represents an overview of the most important policy and organisational recommendations provided by representatives of PUCs who participated in the research process. The second part of the proposals outlines the short and mid/long-terms activities and strategies summarised by the research team. Both could be taken into account by the relevant national authorities/regulators in the process of designing recovery strategies and resilience efforts across the target Western Balkan economies.

1.1 Context

Local Governments (LGs) and Public Utility Companies (PUCs) in the Western Balkans face significant challenges in providing sustainable Water and Sanitation Services (WSS). Key challenges include insufficient managerial and technical competencies and poor financial performance, combined with a complex institutional and administrative landscape. In addition, the sector still struggles in the transition from old economic systems to a free-market economy. PUCs in the region have to accommodate many new regulations and EU accession requirements, which dictates the need to introduce modern corporate management principles and methods.

Since the World Health Organization identified COVID-19 as a global health pandemic on March 11, 2020, the LGs and especially their PUCs have been heavily affected by its impact. With closed businesses, suspended educational process closed public institutions, and major disruptions to the majority of economic subjects' operations, PUCs are changing and adapting their daily operational practices and procedures to the rapidly changing conditions to ensure the timely and quality delivery of essential communal services. COVID-19 has raised many questions that PUCs need to address. *How will these changing conditions affect PUCs finances? How will PUCs cope with the expected financial deficits and effects in both the short and the long term? What will happen with the ongoing and planned capital investments and modernisation projects? All these concerns have to be addressed by utility managers in cooperation with the local decision-makers.*

As part of the German Agency for International Cooperation (GIZ) - Open Regional Fund for the Modernisation of Municipal Services (ORF MMS), a regional programme, commissioned by the BMZ, a project was designed in order to establish a self-sustaining Regional Capacity Development Network for Water and Sanitation Services (RCDN) aiming at the development of professional and skilled WSS workforce in the Western Balkans. The project enables 16 Local Government Associations (LGAs) and Associations of PUCs (APUCs) from six Western Balkan economies, as well as the regional organisations NALAS, IAWD and AQUASAN, to facilitate and coordinate CD initiatives in the region and to support the delivery of CD measures to PUCs and LGs in the respective economies. The programme provides the necessary assistance for introducing and enhancing functional capabilities, procedures and instruments that allow the RCDN partner associations to deliver feebased CD products to PUCs and LGs in an effective manner. The project is jointly financed by the German Federal Ministry of Economic Cooperation and Development (BMZ) and the Swiss State Secretariat for Economic Affairs (SECO).

Given that background, the German Agency for International Cooperation (GIZ) has been preparing new COVID-19 related measures on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), aiming at strengthening the resilience of LGs and PUCs from the Western Balkans. For that purpose, the Centre for Development and Promotion Promo Idea – Strumica (Promo Idea) was commissioned by GIZ - ORF MMS to prepare three (3) analyses of COVID-19 responses of LGs and their PUCs as well as the other relevant stakeholders in the 6 Western Balkan economies. The main objectives of the analyses are focused on collecting and sharing the newly generated COVID-19 related experiences, good practices and lessons learned of the responses of the LGs and their PUCs as well as on their horizontal collaboration (on the local level) and their vertical collaboration with the national authorities and donor community, in the provision of WSS during COVID-19 pandemic. LGAs and APUCs, as well as the regional organisations NALAS, IAWD and AQUASAN, all members of the RCDN, provided support in the communication and distribution of questionnaires to their member PUCs and LGs.

Acknowledgement

The research team at Promo Idea and the involved staff of GIZ ORF MMS would like to thank the experts and representatives of the 16 national associations, the APUCs and the LGAs, as well as the regional organisations NALAS, IAWD and AQUASAN, all members of the Regional Capacity Development Network for Water and Sanitation Services (RCDN) in South-East Europe, for their ongoing support and assistance on the development of this research and the Report.

1.2 Background and objectives

1.2.1 Background of this document

The research and analysis that provided the necessary information for the needs of the present **Report** were carried by the Association Center for Development and Promotion "Promo Idea" – Strumica (Promo Idea) as part of a consulting service assignment in the frame of the GIZ ORF MMS. The Fund has proposed several intervention measures to the BMZ to support LGs and their PUCs, which have been severely affected by the effects of the corona crisis, in carrying out the necessary safety, health and preventive measures to overcome the consequences of the COVID-19.

The consulting services provided by Promo Idea resulted in the following deliverables:

- Analysis no. 1 "Compendium of good practices and the lessons learned of the responses of the LGs and PUCs in the 6 Western Balkans economies in the provision of water and sanitation services during COVID-19 pandemic";
- 2) Analysis no. 2 "Compendium of good practices and the lessons learned of the support provided by the Ministries, Regulatory authorities, IFIs/ Donors and other stakeholders to LGs and PUCs in the 6 Western Balkans economies to maintain the provision of water and sanitation services during COVID-19 pandemic"; and
- 3) **Analysis no. 3** "Assessing the financial impact of COVID-19 on the operation and performance of PUCs in the 6 Western Balkan economies".

The first Analysis focused on identifying, collecting, and systemising lessons learned and good practice examples of the responses by the LGs and PUCs in the 6 Western Balkan economies in the provision of WSS during the COVID-19 pandemic. The study looked in-depth into the experiences of selected LGs and PUCs of the target economies. It has been primarily intended for managers/practitioners working in the field of WSS and policymakers engaged in facilitating and coordinating CD initiatives in the Western Balkans to support the LGs and their PUCs to improve their response to the crisis plan for recovery in the post-COVID period.

The second Analysis provided an overview of the existing support infrastructure, CD and funding instruments and mechanisms provided on the local, regional and national level by the relevant institutions and stakeholders, i.e. the Ministries, Regulatory authorities, IFIs/ Donors, etc. to better manage and cope with the asymmetric impact of the COVID-19 crisis (i.e. health, economic, social and financial).

The current Analysis no. 3 is focused on assessing the financial impact of the COVID-19 on the operations and performance of PUCs in the target Western Balkan economies. The analysis is of particular interest to PUCs and will contribute to the newly emerging need to define a methodology for identifying and calculating real costs incurred by PUCs due to the COVID-19 pandemic and extra services provided to their communities.

1.2.2. Objectives of the analysis

The present Report summarises the results of Analysis no. 3, which focuses on assessing various aspects of the financial impact of the corona crisis on the operations and performance of PUCs in the provision of WSS services during the COVID-19 pandemic.

In the process of analysing the potential impact of the COVID-19 in target economies, the issue of liquidity and financial aspect of PUCs' operations, as well as the support of LGs on this issue, has emerged as a new topic, articulated by PUC representatives, that requires attention, further research and support. Based on the initial analysis, there is a need to define, identify and calculate the real costs incurred by PUCs as a result of the COVID-19 pandemic, assess the overall impact, analyse and estimate the extra services provided to communities. Additionally, there is a need to propose models for covering financial costs resulting from the COVID-19 pandemic to ensure uninterrupted financing of essential services in the community, i.e. delivery of water supply and wastewater collection and treatment services. For that purpose, the current document points out the key findings and lessons learned from PUCs across the target region. Although drawing conclusions for the long terms is rather premature, the current Report evaluates the various aspects of the financial performance of PUCs in the target WB economies, focusing on revenues, expenses, and other potential impacts and trends that have been observed during the first year of operating in times of pandemic.

Following the adopted approach, the primary sources of information for the analysis are representatives of PUCs from the Western Balkans through their Associations of Public Utility Companies (APUCs).

1.2.3. Target groups

The research process has been carried out across six Western Balkan economies. It reached out and involved the managerial staff (e.g. General Manager, Financial Manager, Accountant, etc.) of PUCs who manage and coordinate the delivery of essential communal services in local communities.

1.3 Methodology and limitations

1.3.1 Methodology

The current Report was prepared through a comprehensive research process consisting of two main phases:

- 1) **Phase 1:** Desk and internet research, and
- 2) **Phase 2:** Quantitative research through an online survey.

During the initial phase of the research process, a **thorough desk and internet research** was conducted by analysing available documents and information in each of the six target economies, outlining the impact of the COVID – 19 pandemic on PUCs/LGs. The project team reviewed the relevant documents produced by LGAs/APUCs and recognised international organisations of PUCs (i.e. GWOPA, Deloitte, etc.). The research team analysed the financial reports of pre-selected PUCs in the target economies by accessing publicly available data on their websites. The main objective was to spot patterns and evidence of the potential impact on the financial performance of PUCs, as a direct result of the COVID-19 crisis. Given the overall objectives of the analysis, a particular focus was put on the services and specific indicators related to the provision of WSS.

The **Quantitative phase** of the research process included the implementation of an online survey that aimed to explore the key aspects related to the operation of PUCs during the corona crisis, gauging impact in different areas such as service delivery, revenue generation, expenses, specific financial impacts and available support from both at the local and the national level. The quantitative phase of the research involved a total of 119 representatives of PUCs across the target economies. In the period January – February 2021, the survey questionnaire was translated and disseminated to target respondents with the active support and assistance of the APUCs - members of the RCDN in South-East Europe. Pre-selected representatives of PUCs and experts of APUCs assisted in validating the contents of the online survey in terms of consistency with the usual wording, sector's specifics and the objectives of the analysis.

1.3.2 Online survey questionnaire

The questionnaire that was utilised for the quantitative phase of the research was developed in close cooperation with the staff of the GIZ ORF MMS office in North Macedonia, as well as members of both the target groups (i.e. PUCs) and experts of APUCs. The questionnaire included the following sections:

- **Part 1: General information** it included questions to gather some background information on the respondents (e.g. names, position, name of the PUC, location, webpage, etc.).
- Part 2: Delivery of communal services during the COVID 19 pandemics this section included questions related to assessing the overall impact of the pandemic on the service delivery of PUCs, as well as for analysing various aspects related to the service delivery that have a direct relation to the financial performance of the utility. Several questions explored the observed changes in water consumption tendencies during the crisis. A particular focus is provided on the delivery of WSS.
- **Part 3: Revenues** explored the overall effect of the COVID-19 crisis on the different categories of incomes of PUCs, focusing on WSS.
- **Part 4: Expenses** aimed to gain insights into the impact of the crisis on the various cost categories (i.e. staff, materials and equipment, fuel, repairs and maintenance, etc.). The realised additional cleaning and sanitation costs that incurred as part of the infection control were also explored in this section.
- **Part 5: Other financial impacts** assessed important aspects that are directly influencing the financial performance of PUCs, such as deferred or delayed payments, expected declines in the number of existing and new customers, as well as the available assistance on the local and national level.
- **Part 6: Further contact** asked respondents to provide a link to their publicly available financial reports for 2021. In many cases, PUCs tend to publish these reports on their web pages.

1.3.3 Limitation and challenges

The following challenges and limitations were identified during the analysis process:

- When designing the online questionnaire, the challenge was to collect as much information as possible without making its completion difficult and time-consuming, especially in a particularly busy period of the year for most representatives and managerial staff of PUCs. In this aspect, open-end questions were reduced to a minimum number, and multiple-choice questions were provided with pre-develop statements for the participants to choose from and rate. Participants, however, were provided with the opportunity to provide links to their publicly available financial reports (i.e. on their websites or other online carriers) and other external documents and resources (e.g. internal documents, interesting articles, announcements, position papers, etc.).
- Some information gathered might be generic and subjective due to the limited information being available. Although based on relatively limited data, the identified tendencies are clear, compiled mostly by the online questionnaires. That provided a particular logistic challenge due to the period of the year, when the research took place, and the limitations resulting from the online setting and the respondents' language.
- At the time of writing of the report, many of the surveyed PUCs had not yet completed their financial reports for 2020, so many provided information based on estimates and observed tendencies. Nevertheless, many PUCs were confident of the provided answers to the questions analysing their reduced revenues and increased operational cost as a result of the pandemic.
- The entire communication with target respondents (i.e. PUCs) has been facilitated by their relevant association on the national level.
- Not all operating PUCs were covered in the research process, as only 119 representatives of PUCs participated in the survey out of a total of 339 operating in the target Western Balkans economies (i.e. 35,1%).

1.3.4 Structure of the document

The present Report is structured into three main chapters. After an introductory section, he information provided in Chapter 2 follows the adopted common structure of the online survey questionnaire utilised in the research process. The Chapter contains an introductory section and four main sections exploring various aspects of the financial performance of PUCs and the reported impact on their operation and management practices. Chapter 3 presents the conclusions and recommendations that emerged from the findings and analysis of this study. These were structured in two parts – one being taken from the participants' recommendations, and the other was based on the overall assessment of the research team. Based on the data and main conclusions outlined in the Report, local practitioners and WSS experts could better define, identify and calculate the real costs incurred by PUCs as a result of the COVID-19 pandemic, as well as the extra services provided to communities. The available data could propose models and strategies for covering financial costs resulting from the COVID-19 pandemic to ensure uninterrupted financing of essential services in the community, i.e. delivery of water supply and wastewater collection and treatment services.

2. Financial implications of the COVID-19 crisis on the provision of water and sanitation and other communal services by PUCs

As in most areas of the world, the COVID-19 pandemic has caused a lot of negative impacts on many communities across the Western Balkan economies. As the pandemic's influence has been felt worldwide, strict lockdown measures have been imposed on the local and national level by most Western Balkan economies to respond to the unknown threat. These restrictions have rendered the key public service providers in a challenging position regarding ensuring the continuous delivery of the essential communal services in their local communities.

While our societies and authorities are still struggling with the novel models of the virus and the different waves of the pandemic, experts and practitioners working in the WSS sector are trying to assess the impact of this unprecedented crisis on their organisations in both the short and the longer term. These various impacts and negative implications are analysed within the RCDN, exchanging experience and impact among its members, providing evidence that, among others, the pandemic and the crisis it caused will have a long-lasting economic impact on the WSS sector, highlighting the urgent need for a new economic model to finance the sector. What is the most important in these unprecedented times of crisis is that PUCs continue to provide proper service-delivery, ensuring sufficient operations regarding the new challenges that derive from the COVID-19 crisis in adherence with the heightened standards and assuring the necessary hygiene safety in public areas.

Below is provided an aggregated summary of the results gathered through the desk research and online survey. The structure of the summary follows the adopted methodological approach, exploring key aspects related to the operation of PUCs during the corona crisis, gauging impact in different areas such as service delivery, revenue generation, incremental costs, as well as other financial effects and available support at the local and the national level.

2.1 Delivery of communal services during the COVID – 19 pandemics

As mentioned in the introductory chapter, the current analysis covered six Western Balkan economies, targeting PUCs operating on a local and regional level, which were reached through their relevant national associations (i.e. APUCs), all members of the RCDN.

The researched region of the Western Balkans is among the richest in Europe in terms of water resources, as the amount of water per person is twice the European average. Despite these abundancies, the WSS sector and local governments in the region still face many struggles and challenges in delivering essential community services such as drinking water losses, poor drinking water quality, lack of sewage systems in every settlement, outdated equipment and facilities, etc. According to data of the 2019 State of the Sector Report of the IAWD, increasing access to the three services (water, sanitation and wastewater collection and treatment) remains a challenge for all the countries in the region, especially in less densely populated areas. In addition, in many cases, PUCs in the region struggle with limited financial resources, administrative burden, political influence, poor management practices, etc.

Despite the challenges, the service quality, in terms of continuity and compliance with water quality and wastewater discharge standards, has been improving steadily over the past several years, influenced by a multitude of factors such as the EU water legislation compliance, increased access to funding (especially for preaccession countries), public sector improvements, increased capacity development (CD) opportunities, etc.

PUCs in the Western Balkans play a critical role in building and maintaining local communities' prosperity and well-being. Serving a diverse number of customers, PUCs are providing various types of essential communal services, depending on their profile and functions assigned by their local governments. The most common types of public services provided by utilities in the **region include water supply, sewage management and municipal waste collection.** Depending on the scale of the community, there are PUCs that manage wastewater treatment facilities, public cemeteries, green areas, parks, open markets, etc.

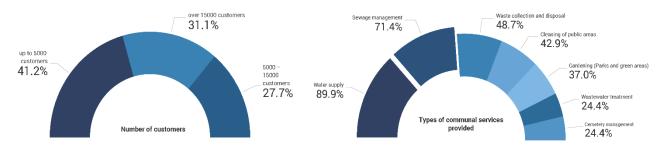


Figure 1: Profile and service portfolio of PUCs who participated in the online survey

Figure 1 presents an overview of the customer base and typical services provided by PUCs that participated in the online research across the target economies. Besides the ultimate responsibility to ensure stable water supply and sanitation services continuity in these delicate times, in many cases, local water supply and sanitation departments have also been burdened with the overall responsibility of safeguarding public health by performing a variety of additional services and activities related to the disinfection and sanitation of public spaces and facilities. Ensuring stable business continuity of these services that guarantee enough hygiene standards for citizens is not an option, but ultimate obligation and responsibility at the local level, which is considered a National security and safety issue in this time of crisis.

Expectedly, the pandemic has influenced the service provision of PUCs across the world negatively. While much of the economic and social life has been shut down, essential public services had to continue. PUCs, in cooperation with their LGs, needed to assure proper service-delivery 24 hours a day, 7 days a week, complying with the newly imposed social distancing, health prevention and heightened hygiene and sanitation requirements. Data collected in the frame of Analysis no. 1² showed no records of disruptions of drinking water supply or wastewater collection and treatment operations due to the pandemic in the surveyed communities. The quality of drinking water has been ensured in compliance with requirements and standards. Working in times of crisis and increased costs and activities while at the same time coping with limited staff and resources rendered PUCs in a difficult position from a both operational and financial perspective. The impact was quite diverse and specific, influenced by a multitude of factors, amongst all the imposed health and anti-crisis restrictions on the local and national level. The crisis is affecting almost every aspect of the LGs and PUCs operations and activities to a similar extent. However, some PUCs are more affected than others, resulting from a variety of factors. However, the majority of PUCs (72,3%) stated that the most impacted sector had been the water supply, followed by sewage management (40,3%) and municipal waste collection (39,5%). The negative effects observed in these sectors are directly linked with the increased sanitation requirements, health protocols, and the need to ensure the health and safety of employees delivering these services. The community's attention to these sectors (i.e. drinking water quality and wastewater discharge standards) has also increased, especially during the acute phase of the pandemic, requesting transparency and accountability. Some of the surveyed PUCs suffered from a lack of contingency planning and knowledge on how to react/adapt to crisis situations. The pandemic had a strong impact on the workforce, which is key to maintaining a continuous process of water supply and wastewater disposal and maintaining hygiene in urban areas. Similar trends were outlined in the Position paper published by the Association of Public Service Providers of the Republic of North Macedonia (ADKOM), which examined the influence of the COVID-19 pandemic on the operations of PUCs. The paper highlighted the importance of crisis management as an essential tool for ensuring better management.

In accordance with the objectives of the present document, one of the most significant factors for ensuring the stable and uninterrupted operation of PUCs and the uninterrupted and quality provision of essential public services is related to their financial state and fitness. This factor is directly linked with revenues, collection of payments from customers, financial support from the local and national authorities, etc. Data of the online survey indicates that the vast majority of PUCs (79,2%) observe a considerable financial impact of the COVID-19 in all budget categories (i.e. revenues, expenses, etc.), while only 8,0% stated that no significant financial impact had been observed so far on their operations.

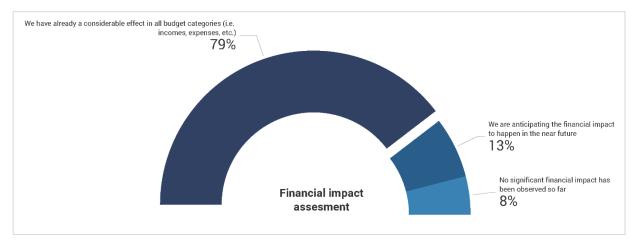


Figure 2: Overall financial impact of the COVID-19 pandemic on PUCs operations

Although it is still premature to draw any conclusions, PUCs across the Western Balkans have experienced and are anticipating to experience revenue and cost impacts associated with the national, state, and local response to the COVID-19 crisis. Throughout the research, representatives of PUCs are reporting for increased expenses resulting from the additional sanitation and disinfection activities, decreased incomes, resulting from the reduced economic activities and closed businesses (especially in the hotel and hospitality industry), impeded ability for collection of bills, staff deficiencies, delay of investments, etc.

² Compendium: Good practices and lessons learned of the response of local governments and public utility companies of six Western Balkan economies in the provision of water and sanitation services during the COVID-19 pandemic.

According to PUCs representatives who have participated in the online research, one of the most impacted services of their portfolio was the one related to the provision of water supply. Despite the fact that the delivery of water in communities relies upon and is influenced by a multitude of factors, the survey results showed that one-fourth of PUCs (25,1%) participating in the research stated that **no significant change was observed in the total amount of water consumption** in the period January-December 2020 in relation to the same period in 2019. **Figure 3** shows the trends in water consumption during the pandemic's acute phase (2020) in relation to the same period in 2019, as reported by PUCs participating in the online survey.

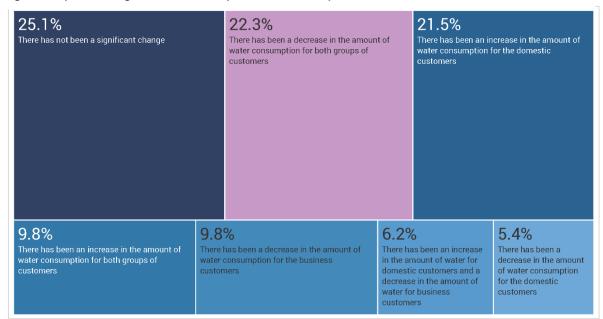


Figure 3: Reported changes in water consumption in 2020 in comparison to 2019

However, depending on the profile of customers, imposed measures, and the region where PUCs operate, the respondents shared different statements regarding the overall water consumption during the pandemic. For example, in some regions, the imposed stay at home policies in some communities/economies has led to an **increase in water consumption for domestic customers (21,5%).** Some 22,3% of PUCs reported a decrease in the amount of water consumption for both domestic and business customers. The reduction has been associated with the closure of many companies working in various sectors (i.e. tourism and hospitality sectors, etc.), the increased number of employees working from home, closing public institutions (i.e. schools, cultural facilities), etc.

In general, the vast majority of PUCs mainly dealing with water supply across the target Western Balkan region have suffered from revenue loss due to water consumption declines. Also, it is important to highlight the fact that many PUCs were impeded in their accurate reporting of water consumption due to a lack of efficient reporting during the pandemic. According to previous analysis results (Analysis no. 1), on average, less than 11% of responding PUCs have stated that they have remote water metering solutions introduced in their serviced communities. Despite the fact that many PUCs stated that they did not experience difficulties in the process of metering and reporting water consumption, as a result of the COVID-19 pandemic, PUCs that lack remote water metering solutions have faced various reporting issues such as incomplete records of the amount of consumed water, unpaid water amount, lack of financial documents, etc. However, the estimated loss in non-residential revenues was compensated in some cases by the observed minor increase in water demand and revenues from domestic customers due to the imposed stay-at-home orders and increased work from home heightened hygiene standards, increased occupancy, etc.

The COVID-19 crisis has "put the breaks" on many economic activities worldwide, and the Western Balkan region is no exception to this negative trend. Public finances have also suffered due to decreased revenues. A recent report by the Network of Associations of Local Authorities of South-East Europe (NALAS)³ shows that remarkable adverse effects on the capital investments emerged across the surveyed 137 local governments from SEE, including the target economies of the Western Balkans. The survey data showed that more than 50% of LGs reported that capital investments were cut by more than 10%, and in more than one-third of municipalities by

³ South-East European Local Governments in Post Covid-19 Socio-Economic Recovery (Survey)

even more than 20%. Being directly dependent on their LGs, PUCs have also suffered from reduced capital spending and construction projects. These negative tendencies have also been observed across the target Western Balkan economies. The majority of respondents (66,4%) in the online survey for the current research have either delayed all planned capital infrastructure investment projects or reduced all planned major repairs and maintenance activities. Only 33,6% of the surveyed PUCs have stated that the pandemic did not have any considerable impacts on their plans for capital construction and activities. The main reasons for the deferral of planned capital expenditures are related to the need of managing cash flows and ensuring liquidity in times of crisis and reduced revenues. However, the reduced decline in capital construction in both LGs and their PUCs is expected to have many adverse and multiplier effects in local communities, such as decreased employment and loss of jobs, halted economic development and activities, reduced quality of provided services, etc.

2.2 Revenues - Net financial effects of COVID-19

One of the most significant factors in the operation is the reduction of financial inflows and collection of accounts and services, leading to reduced liquidity of PUCs. The COVID-19 pandemic brought clear and more or less expected financial challenges to PUCs in the Western Balkans region, posed by the reported revenue losses. These have resulted from the newly adopted consumer deferral policies, reported declines in water consumption, operational and management changes (amended staff policies, shift segmentation, overtime work, reduced or impeded consumption reporting procedures, expected decline of new customers due to the hindered investment activities, etc.).

The results of the online survey conducted in the frame of the present Analysis clearly show that 77,3% of surveyed PUCs have experienced or were expecting to experience revenue losses due to the COVID-19 pandemic. The positive nuance in this generally negative statistics is reflected in the fact that the observed decrease in revenues fluctuates between 5-20%, i.e. more than 60% of respondents have pointed out such revenue loss. In addition, one-fifth of the surveyed PUCs (20,0%) indicated that the COVID-19 crisis did not have any significant change in their revenues. The reasons provided above were shared by the majority of PUCs representatives who participated in the survey. In addition, the reduced economic activity in target Western Balkan economies (i.e. mainly the sharp decline in tourism and hospitality industries, closed educational institutions) has been highlighted as a significant cause for decreased revenues and the impeded billing collection, irregular payments of bills, etc.). Also, some PUCs reported an increase in the number of uncollected short-term debts under Debt Agreements with customers.

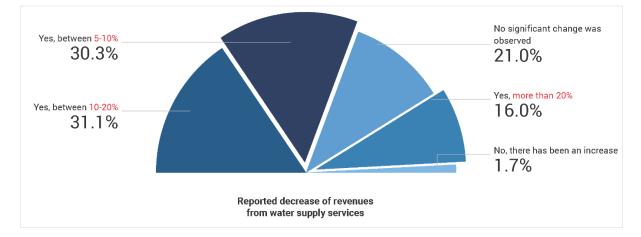


Figure 4: Reported decrease in water supply revenues in 2020 in comparison to 2019, as a result of the COVID-19 crisis

Many of the surveyed managers of PUCs were yet uncertain of the financial impact of the crisis, despite the fact that they are clearly aware of the revenue losses accumulated in 2020 compared to the pre-crisis period in 2019. However, what would be the overall financial impact of the pandemic is still unknown. These findings have been supported by many other surveys conducted in the WSS sector in the target Western Balkan economies. A study by the European Association of Public Water Operators⁴ states that apart from the apparent decrease of revenues due to the freeze of industrial and touristic activities, the medium and long-term consequences on the operations and the WSS sector where many PUCs operate are yet unknown and difficult to

⁴ EAPWO (2020), GWOPA (2020), Managing the unexpected - European Public Water Utilities Facing the Coronavirus Emergency.

predict. What makes the situation even more difficult is that many PUCs were in a difficult financial position even before the crisis, covering their operating costs, mostly with the revenues from the tariffs. Most PUCs are also burdened with credit indebtedness for the construction of water infrastructure with domestic or foreign financial institutions, and the question is how they will repay the annuities of due liabilities in such circumstances.

2.3 Expenses - Changes to utility operations and costs

Provision of communal services (i.e. water supply, sewerage management, municipal waste removal, etc.) is a cost-intensive activity with high demands in terms of staff, consistent demand for supplies, materials and other consumables. All these account for the bulk of operating costs of PUCs. The degree to which the COVID-19 crisis influences a PUC depends on several factors such as its location, customer composition (number and profile), organisational structure, financial health, as well as the PUC's response and overall management through the crisis. However, while decreased revenues and increased deferrals and non-payments are common for times of crisis and economic downturn, the additional and significant increase in expenses are not. This situation represents a risk for the overall operation and financial status of PUCs that requires particular attention by both LGs and national authorities. Many PUCs have been tracking the expense categories that have been most impacted by the COVID-19. Unfortunately, for many categories, the COVID-19 impact is not always clearly visible. Furthermore, in most cases, PUCs are not accustomed to tracking expenses related to or resulting from a crisis, or more specifically, from a pandemic. In many cases, PUCs have been reporting that incremental expenses incurred from the additional activities were covered solely through their own financial resources and equipment reserves, including numerous in-kind activities (i.e. staff, equipment, materials, etc.).

The crisis caused by the COVID-19 pandemic has put hygiene as one of the primary needs where water is necessary to maintain both personal hygiene and the hygiene of private and public spaces. PUCs were in the spotlight of local communities, being obliged to continue to provide services 24 hours a day, 7 days a week. In this aspect, most PUCs have introduced new services such as preparation of disinfectants, disinfection of public spaces and public institutions, etc. According to Analysis no. 1⁵, some 67% of PUCs shared that they had to perform additional activities/services during the COVID-19 pandemic, which have not been envisaged in their annual work plan.

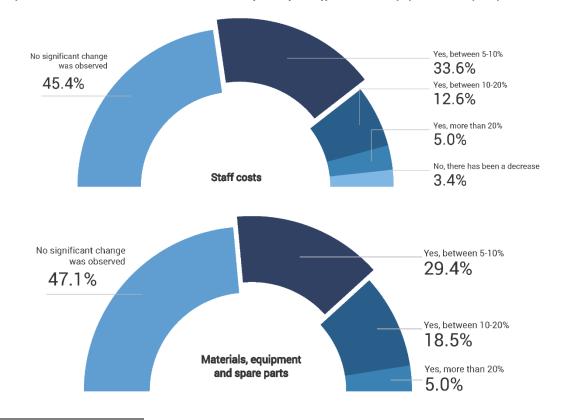


Figure 5: Reported tendencies (increase / decrease) in costs of PUCs for staff, materials, equipment, and spare parts

⁵ Compendium: Good practices and lessons learned of the response of local governments and public utility companies of six Western Balkan economies in the provision of water and sanitation services during the COVID-19 pandemic.

These mainly included disinfection of public buildings and institutions, open public areas (i.e. markets, parks, etc.); functioning and maintenance of disinfection checkpoints in cities and other settlements; maintenance of disinfection vehicles equipment; etc. Some PUCs shared that they were obliged to increase the amount of chlorine in drinking water, based on the relevant health authorities' recommendation. PUCs had to rapidly organise, in cooperation with local authorities, the procurement of a large amount of sodium hypochlorite and disinfection of public areas, facilities and equipment, and disinfection and personal protection equipment (PPE).

In doing so, they worked with reduced resources, primarily human resources, because the recommendations of the headquarters for crisis management required the separation of shifts, sparing of vulnerable groups from exposure to contacts, work from home, etc. Many PUCs introduced digital solutions and remote payment schemes, which introduced new costs related to maintenance of call centres, upgrading of websites, online payment taxes, etc. Rationally, this led to an increase in the operating costs associated with these additional activities (i.e. staff, materials and equipment, utilities, fuel). **Figure 5** provides an overview of the expenses incurred by PUCs in the various categories of operating costs.

It is important to highlight that the majority of PUCs are reporting a rather low increase (between 5-10%) in the amount of costs related to the implemented additional activities, except for the costs associated with community cleaning and disinfection which are directly related to the sanitation and health prevention measures, introduced and administered at the local level by PUCs. In this aspect, the online survey results show that 68,9% of PUCs had to implement/cover additional cleaning and sanitation costs incurred as part of infection control or prevention, which resulted in significant costs. For both categories, staff and materials, equipment and spare parts, approximately half of respondents (44,0%) stated that the incurred additional costs had not increased significantly due to the COVID-19 crisis.

Table 1 provides an overview of the potential impacts on operational costs that should be taken into account by PUCs across the surveyed Western Balkans economies when assessing and planning the potential financial impact on their operations.

Cost category	Description
Staff	Despite the reported increase in productivity of staff in the short-term, overall PUCs might experience less productivity in their operations due to the imposed social distancing requirements, shifts segmentation, transport protocols, etc. These inefficiencies might result in increased costs related to overtime work, the need for additional staff, compensate for staff absence and sick leave, financial benefits, etc.
	Potential costs related to health and social security benefits for staff might also increase in the mid-term, as PUCs might need to plan for increased sick leave, compensations for tragic events, etc.
Personal protection equipment and materials	Due to the newly introduced occupational health and safety requirements, PUCs need to ensure the availability of enough and high-quality personal protective equipment and materials for staff and employees to ensure a safe working environment.
	Cost related to additional sanitation and cleaning costs for own facilities, i.e. offices, work facilities, plants, and vehicles.
	Due to the increased hygienic and disinfection activities, many PUCs should plan the appropriate chemicals, disinfectants, and detergents to address the additional sanitation activities that are likely to continue in the short and mid- term.
Digitalisation	Incremental technology costs incurred to allow employees to work remotely. Some PUCs need to invest in new software and hardware solutions to facilitate work from home for their employees and/or introduce remote payment solutions.

Table 1: Potential impacts on operational costs of PUCs

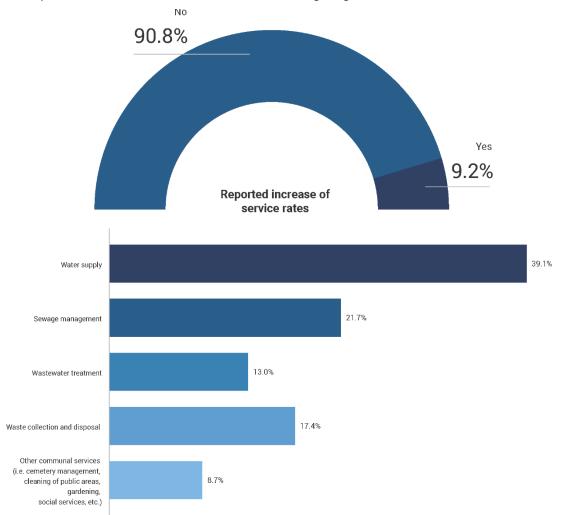
Remote services	PUCs may notice an increase in the costs related to call centres' set-up and operation to serve the increasing demand for remote provision of services, payment of bills, responding to inquiries for water safety, pandemic control measures, deferral policies, etc.
Disconnect / reconnect activities	In the short and medium-term, some PUCs might expect an increase in the expenses related to disconnects and reconnects of customers, resulting from both the reduced ability of domestic customers to pay their bills.
Billing and collection	PUCs might need to plan for additional expenses related to digitalisation of billing systems and online payment as well as the technical infrastructure for remote metering, detection of leaks to reduce losses, etc. The later are to become even more important due to COVID-19.
Bad debts	These costs might result from the voluntary or mandatory imposed moratoriums on disconnection policies to particular population groups, as well as the suspended reconnection costs.

2.4 Other financial impacts, mitigating financial losses and available assistance

Apart from revenues and expenses, which are the most important categories that determine the financial status of an enterprise, other specific features are also influencing the potential financial impacts that PUCs might experience in both the short and longer-terms.

Even though PUCs have experienced an overall decrease in their revenues and a fragmented increase in their expenses due to the COVID-19 crisis, the majority of PUCs that participated in the survey (90,8%) have not

Figure 6: Reported increase of services rates and distribution among categories



increased the prices of communal services provided to their communities. Of course, raising rates might be unreasonable to implement in the current economic conditions, but they might be considered in the mediumterm.

Trying to assess the drop in revenues reported by the majority of PUCs, it was important to analyse the primary sources for the reported decrease. One of the crucial elements that constitute a large part of the revenues of PUCs is related to the delivery of various types of communal services, including WSS, to both domestic and business consumers. Until recently, many PUCs in the Western Balkans were suffering from low collection rates. Despite the fact that no significant fluctuations in the amount of water use were observed, there has been a noticeable decrease in the number of paid bills in the period January-December 2020 in relation to the same period in 2019 (Figure 7).

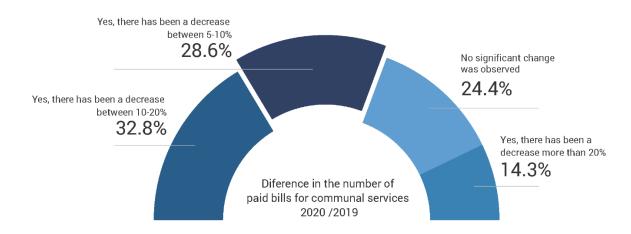


Figure 7: Increased difficulty among customers in paying communal service bills in 2020

The majority of respondents (61,3%) stated that there had been a noticeable tendency for a decrease (between 5-20%) in the number of paid bills for delivery of various types of communal services by customers in 2020 compared to the same period in 2019. Some 14,3% of the PUCs report declines in collection performance by more than 20%. The numbers vary across countries and depend on customers' profile, especially business consumers, the overall economic situation in the serviced area, introduced deferral and support policies, etc.

Another rather negative tendency that has been observed over the past year is related to the increase in the number of delayed payments for communal services. The online survey data states that such an increase in deferrals has been noted by more than two-thirds of PUCs (75,6%). PUCs are recognising this difficulty and

Figure 8: Measures implemented by PUCs to address the issue with delayed payments of customers

36.4% We have provided flexible payment plans 20.2%	10.8% We have suspended all shut-offs of for customers that are unable to pay for our services	16.2% We have suspended the late payment fees for deferred payments
We have continued our usual late payment and disconnection policies	5.8% We have decided to waive payments to customers from vulnerable groups	4.6% We have received support from the state to compensate for the deferred payments of

offering to assist customers in various ways, backed-up by support policies implemented by the relevant national institutions. Common methods across surveyed PUCs include suspension of all shut-offs and late payment fees, extensions to payment deadlines, flexible payment plans, level/fixed payment plans, etc. In many of the target Western Balkan economies, central governments have provided financial support and stimulus to customers of vulnerable groups (e.g. people with disabilities, people with special needs, the elderly, women with small children, etc.). Each of these methods implies both collection and transaction costs for PUCs. However, these measures have been adopted for both supporting customers and improving collection rates. **Only 20,2% of PUCs have continued their usual deferral and disconnection policies (Figure 8).**

The COVID-19 crisis is anticipated to slow the global economic growth and investment activities in both the private and public sectors. Analysis of similar financial crises has shown that a correlation exists between unemployment rates and construction activities. The results indicate that in the long-term, this is expected to negatively impact the revenues of PUCs as the number of new customers connecting to communal services (i.e. water supply, sewage, wastewater treatment, waste collection and disposal, etc.) is expected to decrease. However, this tendency is not yet recognised by PUCs that have participated in the survey as only 27,7% of utility managers were concerned about the anticipated decrease in new customers. The highest decline in new customers is expected in the field of communal services related to the construction sites (i.e. water supply, sewage collection and wastewater disposal). On the contrary, in some touristic areas, such as the Municipality of Dojran in North Macedonia, the local PUC is reporting a period of increased construction and investment activities, which is expected to increase the number of customers both domestic and business.

PUCs have very few tools available to mitigate potential financial losses during COVID-19. In the short–term, PUCs can rely on their reserves to compensate the reported revenue losses and increased incremental expenditures resulting from the additional activities and services linked with the response to the COVID-19 crisis. However, the ability to use reserves is directly linked with the type of PUC, customer base and the existing financial status of the institution. Therefore, support from the LG or the relevant institutions on a national level is essential for overcoming the adverse effects on the financial status of PUCs.

The majority of LGs and PUCs have requested support (either individually or through their Association) from the relevant national authorities to manage better the emergency resulting from the COVID-19 pandemic. This has been further supported by the findings of Analysis no. 2⁶, more than half of the PUCs (51,5%) participating in the survey shared that they have requested specific support from their central government, APUCs, regulatory authorities (where applicable), IFIs/donor, other stakeholders. PUCs requested support from their LGs and central government mainly in the form of financial assistance, including tax exemptions, regular reimbursement and/or reduction of VAT, payment of salaries and social security contributions for the staff, etc. Assistance was also sought from the relevant regulatory authorities for adjusting tariffs for water consumption. As stated above, in many of the target economies, PUCs have introduced various payment relief and support policies to vulnerable groups. Primarily, these policies were introduced on a national level and administered locally by the PUCs. Apart from the Republic of North Macedonia, where the central government provided one-time financial assistance to PUCs with the support and lobbying efforts of the national association of PUCs, i.e. ADKOM, very few PUCs have received financial assistance from the state to compensate for the increased expenditures and reduced revenues (Figure 8). For example, in Albania, PUCs received a one-time subsidy from the National Agency for Water Supply, Sewerage and Waste Infrastructure, amounting to 5 million ALL. In other countries, such as Bosnia and Herzegovina and Montenegro, PUCs received financial support to cover their staff expenses (i.e. salaries and social insurance contributions) as part of employment promotion support and relief measures administered on the national level and covering many economic entities. LGs have provided support to less than one-fourth of surveyed PUCs (Figure 8). The provided financial and non-financial assistance included fuel, materials, a financial stimulus for employees working in disinfection and sanitation units, budget transfers to cover increased expenses related to disinfection, equipment and vehicles. Also, assistance through procurement and supply of PPEs and materials for public hygiene was provided by LGs to support PUCs personnel engaged in disinfection and sanitation. Based on the above, it could be concluded that national and sub-national governments, along with IFIs and the donor community, will continue to play a key role in financing the WSS sector in the target economies.

⁶ Compendium of the good practices and the lessons learned of the support provided by the Ministries, Regulatory authorities, IFIs, Donors and other stakeholders to LGs and PUCs in 6 Western Balkan economies to maintain the provision of WSS during COVID-19 pandemic (Analysis no. 2).

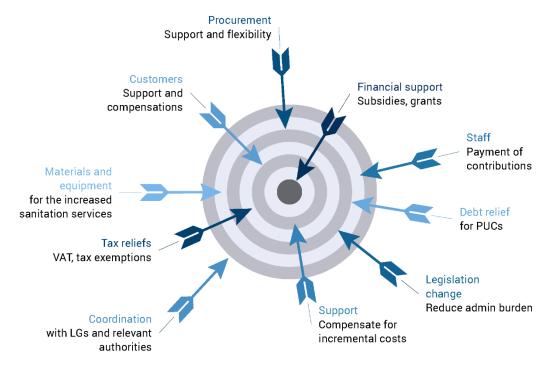
Long-term financial impacts are still "terra incognita" for both experts and managerial staff of PUCs. Working around the clock to continue the uninterrupted provision of essential services to their communities, PUCs are starting to look ahead in the period after the pandemic, drawing plans and strategies for recovery and improving resilience to future crisis. Table 2 provides an overview of the identified and expected financial impacts in the short and medium/long-term as identified by the PUCs representatives who participated in the survey.

Financial impacts	
Short - term	Medium and long - term
Lower water demand	Serviced area and national economic impacts
Increased requests for customer assistance	Decreased construction activities in both the public and private sectors
Lower revenues from business customers due to the decreased water demand and consumption	Increased prices of services leading to unrest to customers in times of expected economic decline
Reducing capital expenditures to ensure liquidity	Facilitating bad debt
Increased operational costs	Reduced ability to pay debts on construction and modernisation projects
Changes in deferral and shut-off policies. Increased difficulty among residential customers in paying water bills	Increased deferrals and inability for paying bills online of an increased number of people
Increased costs for salaries	Impeded investment and modernisation projects
Hindered service reporting (i.e. reading water meters)	Reduction in system development and user revenues from new growth due to the slowing of economic growth and development

Table 2: Financial impacts of the COVID-19 pandemic on PUCs

At the end of our online questionnaire, the research team asked PUCs representatives to list three recommendations that should be provided to the relevant national authorities/regulators that might improve their negative financial perspectives as a result of the COVID-19 crisis. Figure 9 provides a word cloud on the most important recommendations provided by PUCs across target economies.

Figure 9: Recommendations for decision and policymakers to improve the negative financial perspectives of PUCs as a result of the COVID-19 crisis



3. Conclusions and recommendations

The current Report outlined some important insights on the financial impact of the COVID-19 on the operations and performance of PUCs in the target six Western Balkan economies. Although drawing conclusions for the long term is rather premature, the current Report evaluates the various aspects of the financial performance of PUCs in the target Western Balkan economies, focusing on revenues, expenses, and other potential impacts and trends that have been observed during the first year of PUCs operating in times of pandemic.

The COVID-19 pandemic imposed many challenges on the daily operations of PUCs on several fronts, resulting from the reduced revenues, increased expenses related to managing disinfection and sanitation activities in serviced areas, reducing or deferring capital expenditures, adapting to the new realities imposed by the pandemic (i.e. social distancing, disinfection, etc.).

While our societies and authorities are still struggling with the novel models of the virus and the different waves of the pandemic, experts and practitioners working in the WSS sector are trying to assess the impact of this unprecedented crisis on both their organisations and local communities. These various impacts and negative implications are analysed within the RCDN, exchanging experience and effect among its members, providing evidence that, among others, the pandemic and the crisis it caused will have a long-lasting economic impact on the WSS sector, highlighting the urgent needs for assessing the financial impact of the pandemic on PUCs operations and further underscoring the necessity of adopting a new economic model to finance the sector.

In summary, the following insights and conclusions could be outlined, which along with the provided set of recommendations, could form the basis for the establishment of the newly emerging body of practice in the field of crisis management that will be shared and further developed in the frame of the RCDN, thus helping its members to improve their response to the crisis and plan their recovery actions in the post – COVID-19 period.

Conclusions

LGs and PUCs in the Western Balkans face major challenges in providing sustainable WSS. Key challenges include insufficient managerial and technical competencies and poor financial performance, combined with a complex institutional and administrative landscape. Also, the sector still struggles in the transition from old economic systems to a free-market economy. PUCs in the region have to accommodate many new regulations and EU accession requirements, which dictates the need to introduce modern corporate management principles and methods.

Delivery of communal services during the COVID – 19 pandemics

- Despite the challenges, the service quality, in terms of continuity and compliance with water quality and wastewater discharge standards, has been improving steadily over the past several years, influenced by a multitude of factors such as EU water legislation compliance, increased access to funding (especially for pre-accession countries), public sector improvements, enhanced management capacities, etc.
- As in most areas of the world, the COVID-19 pandemic has caused a lot of negative impacts on many municipalities and communities across the Western Balkan economies. Expectedly, the pandemic has influenced the service provision of PUCs across the world negatively. While much of the economic and social life has been shut down, essential public services had to continue. PUCs, in cooperation with their LGs, needed to assure proper service-delivery 24 hours a day, 7 days a week, complying with the newly imposed social distancing, health prevention and heightened hygiene and sanitation requirements.
- The impact was quite diverse and specific, influenced by a multitude of factors, amongst all the imposed health and anti-crisis restrictions on the local and national level. The crisis affects almost every aspect of the LGs and PUCs operations and activities to a similar extent. However, the majority of PUCs (72,3%) stated that the most impacted sector had been the water supply, followed by sewage management (40,3%) and waste collection (39,5%). The negative effects observed in these sectors are directly linked with the increased sanitation requirements, health protocols, and the need to ensure the health and safety of employees delivering these services.
- In accordance with the objectives of the present document, one of the most significant factors for ensuring the stable and uninterrupted operation of PUCs and the uninterrupted and quality provision of essential public services is related to their financial state and fitness. This factor is directly linked with revenues, collection of payments from customers, financial support from the local and national authorities, etc. The online survey data indicates that the vast majority of PUCs (79,2%) observe a

considerable economic impact of the COVID-19 in all budget categories (i.e. revenues, expenses, etc.). In comparison, only 8,0% stated that no significant financial impact had been observed so far on their operations.

- According to PUCs representatives who have participated in the online research, one of the most impacted services of their portfolio was the provision of water supply. Despite the fact that the delivery of water in communities relies on and is influenced by a multitude of factors, the survey results that almost one-fourth of PUCs, participating in the research stated that no significant change was observed in the total amount of water consumption in the period January-December 2020 in relation to the same period in 2019.
- In general, the vast majority of PUCs dealing with water supply across the target Western Balkans region have suffered revenue loss due to water consumption declines. It is also important to highlight that many utilities were impeded in their accurate water consumption reporting due to a lack of efficient reporting during the pandemic. Despite the fact that many PUCs stated that they did not experience difficulties in the process of metering and reporting water consumption, it is important to highlight that as a result of the COVID-19 pandemic, PUCs that lack remote water metering solutions have faced various reporting issues such as incomplete records of the amount of consumed water, unpaid water amount, lack of financial documents, etc.
- These negative tendencies have also been observed across the target Western Balkan economies. The majority of respondents (66,4%) in the online survey for the current research have either delayed all planned capital infrastructure investment projects or reduced all planned major repairs and maintenance activities. Only 33,6% of the surveyed PUCs have stated that the pandemic did not have any considerable impacts on their plans for capital construction and activities. The main reasons for the deferral of planned capital expenditures are related to the need of managing cash flows and ensuring liquidity in times of crisis and reduced revenues.

Revenues - Net financial effects of COVID-19

- Many PUCs reported declines in revenues due to regulatory and organizational restrictions introduced on local and national levels and voluntary changes in the behaviour of people (social distancing, work from home, reduced contacts).
- One of the most significant factors in the operation is the reduction of financial inflows and collection of accounts and services, leading to reduced liquidity of PUCs. The COVID-19 pandemic presents clear and more or less expected financial challenges to PUCs in the Western Balkans region, posed by the reported revenue losses. These have resulted from newly adopted consumer deferral policies, reported declines in water consumption, operational and management changes (staff policies, new shifts, reduced or impeded consumption reporting procedures, expected decline of new customers due to the hindered investment activities, etc.).
- Many of the surveyed managers of PUCs were yet uncertain of the true financial impact of the crisis, despite the fact that they are clearly aware of the revenue losses accumulated in 2020 compared to the pre-crisis period in 2019. However, what would be the financial impact of the pandemic is still unknown. These findings have been supported by many other surveys conducted in the WSS sector.
- What makes the situation even more complicated is that many PUCs were in a difficult financial position even before the crisis, covering their operating costs mostly by the revenues from the tariffs. Most PUCs are also burdened with credit indebtedness for constructing water infrastructure with domestic or foreign financial institutions. The question is how they will repay the annuities of due liabilities in such circumstances.

Expenses - Changes to utility operations and costs

- The crisis caused by the COVID-19 pandemic has put hygiene as one of the primary needs where water is necessary to maintain both personal hygiene and the hygiene of private and public spaces. PUCs were in the spotlight of local communities, being obliged to continue to provide services 24 hours a day, 7 days a week.
- However, while decreased revenues and increased deferrals and non-payments are common for times
 of crisis and economic downturn, the additional and significant increase in expenses are not. This
 situation represents a risk for the overall operation and financial status of PUCs that requires particular
 attention by both LG and national authorities. Many PUCs have been tracking the expense categories
 that have been most impacted by the COVID-19. Unfortunately, for many categories, the COVID-19
 impact is not always clearly visible.

- Some PUCs shared that they were obliged to increase the amount of chlorine in drinking water, based on the relevant health authorities' recommendation. PUCs had to rapidly organise, in cooperation with local authorities, the procurement of a large amount of sodium hypochlorite and disinfection of public areas, facilities and equipment, and disinfection and personal protection equipment (PPE).
- PUCs suffered from reduced personnel and staff shortages because the recommendations of the headquarters for crisis management required the separation of shifts, sparing of vulnerable groups from exposure to contacts, infection, work from home, etc.
- Many PUCs introduced digital solutions and remote payment schemes, which introduced new costs related to maintenance of call centres, upgrading of websites, online payment taxes, etc. Rationally, this led to an increase in the operating costs associated with these additional activities (i.e. staff, materials and equipment, utilities, fuel).
- Potential impacts on operational costs such as the delivery of PPEs, digitalisation, e-provision of services, billing and collection, bad debts, etc., should be taken into account by PUCs across the surveyed Western Balkans economies when assessing and planning the potential financial impact on their operations.

Other financial impacts, mitigating financial losses and available assistance

- One of the important elements that constitute a large part of revenues of PUCs is related to the delivery
 of various types of communal services, including WSS, to both domestic and business consumers.
 Despite the fact that no major fluctuations in the amount of water use were observed, there has been
 an obvious decrease in the number of paid bills in the period January-December 2020 in relation to the
 same period in 2019.
- The majority of respondents (61,3%) stated that there had been a noticeable tendency for a decrease (between 5-20%) in the number of paid bills for delivery of various types of communal services by customers in 2020 compared to the same period in 2019. Some 14,3% of the PUCs report declines in collection performance by more than 20%. The numbers vary across countries and depend on the profile of customers, especially business consumers.
- PUCs are recognizing this difficulty and offering to assist customers in various ways. Common methods across surveyed PUCs include suspension of all shut-offs and late payment fees, extensions to payment deadlines, flexible payment plans, level/fixed payment plans, etc. In many of the target WB economies, central governments have provided financial support and stimulus to customers of vulnerable groups (e.g. people with disabilities, people with special needs, the elderly, women with small children, etc.).
- PUCs have very few tools available to mitigate potential financial losses during COVID-19. In the shortterm, PUCs can rely on their reserves to compensate the reported revenue losses and increase incremental expenditures resulting from the additional activities and services linked with the response to the COVID-19 crisis.
- The majority of LGs and PUCs have requested support (either individually or through their Association) from the relevant national authorities to manage better the emergency resulting from the COVID-19 pandemic. This has been evidenced by the findings of the present and other analysis commissioned by GIZ ORF MMS on behalf of BMZ to analyse the COVID-19 responses of LGs and their PUCs and the other relevant stakeholders in the 6 Western Balkan economies.
- Apart from the Republic of North Macedonia, where the central government provided one-time financial assistance to PUCs influenced by the support and advocacy & lobbying efforts of the national association of PUCs, i.e. ADKOM, very few PUCs have received financial aid from the state to compensate for the increased expenditures and reduced revenues.

Recommendations

As PUCs transition to normal operations, experts and managers working in the public services delivery sector begin to look ahead to analysis and planning the available COVID-19 cost recovery options. While the effects on operating costs may be highly localized, it is likely that utility revenues will generally decrease in the short-term. The extent to which this happens will largely depend on how long utilities operate under the current COVID-19 condition. In the process of analysing the potential impact of the COVID-19 in target economies, the issue of liquidity and financial aspect of PUCs' operations and the support of LGs on this issue has emerged as a new topic that requires attention further research and support. Based on the initial analysis, there is a need to define, identify, and calculate the real costs incurred by PUCs as a result of the COVID-19 pandemic and the extra services provided to communities. Additionally, there is a need to propose models for covering financial costs resulting from the COVID-19 pandemic to ensure uninterrupted financing of essential services in the community, i.e. delivery of water supply and wastewater collection and treatment services.

The recommendations provided below are structured in two main parts, as the first part represents an overview of the most important policy and organisational recommendations provided by representatives of PUCs who participated in the research process. The second part of the recommendations outlines the short and mid/long-terms activities and strategies summarised by the research team. Both could be taken into account by the relevant national authorities/regulators in the process of designing recovery strategies and resilience efforts across the target Western Balkan economies.

Urgent support for coping with the short-term financial shortages and deficiencies

Financial support from the central government and the relevant institutions - PUCs insist on higher and more timely financial support tailored to their most urgent needs and challenges. Urgent financial support is needed for PUCs to cover the incurred incremental costs for implementing additional disinfection and sanitation activities. The support should be timely, tailored, up-to-the most urgent needs and challenges and challenges and channelled to the regions where it is most needed to ensure recovery. Another important and efficient measure recognised by PUCs was the employee compensations for net salaries and social security contributions provided to companies of the private sector. Such support schemes should be "opened" for PUCs where needed to partially compensate for the reduced revenues. Apart from grants and subsidies, indirect financial support could include reducing liabilities to state institutions, facilitation of access to funding from banking and other institutions for the purchase of machinery, devices and measuring instruments, improving the occupational health and safety of employees, etc. To facilitate access to funding for PUCs, governments across target Western Balkan economies should activate funding to support local economies in overcoming the financial difficulties resulting from the COVID-19 pandemic. PUCs should also be added as a direct beneficiary in funding instruments, providing them with adequate liquidity support.

Reliefs of fees and updating tariffs – Possibilities for regulatory flexibility should be re-examined in an urgent matter. Both LGs and PUCs, operating in times of crisis, should be offered with certain regulatory flexibility, such as extended reporting deadlines, the extension of VAT payment periods, regulatory exemptions, tariffs relief, fiscal and regulatory flexibility for budget reallocations, facilitated procedures for procurement of emergency equipment and supplies, writing-off interest for late payment of tax obligations of PUCs, writing off inherited VAT obligations, exemption from tax on invoiced and uncollected bills from the state, etc. All these should be further consulted with national APUCs, as they are the leading stakeholder to articulate the specific needs of PUCs. Many PUCs insisted on improving tariff methodologies to consider the existing crisis and its current and expected financial impact on PUCs operations.

Introducing support mechanisms to cope with the increased inability of different categories of customers to pay their communal service bills (e.g. water supply, sewage, waste collection and removal). Adopting common mechanisms for supporting vulnerable groups of society or certain categories of customers. PUCs call for adopting support mechanisms that should be planned by the national governments and administered locally to help both PUCs and communities to overcome the challenges and financial implications of the deferred payment of utility bills. Such mechanisms should include reimbursement of expenses for uncollected bills from socially vulnerable categories of citizens or companies directly affected by the crisis. Central government authorities should develop support mechanisms to compensate PUCs for the increased number of deferrals on communal service bills by reimbursing these costs to them.

Facilitating administrative burden – Some PUCs call for the creation of unified price lists of communal services with a proposal for the minimum price of services at the national level by categories of communal enterprises

and by types and scope of communal services. Additionally, similar codification should be developed for employees in the sector, i.e. listing jobs by type, scope and job description for communal enterprises at the national level and determining a minimum wage for these positions, as a measure to cope with the skilled labour deficiency.

Planning for the "day after" – building recovery strategies for the short and mid-terms

COVID-19 is an opportunity for both PUCs and LGs to solve many problems and issues that have been long overdue. Although PUCs share common challenges and solutions, we have seen some long-term stereotypes and myths such as digitalisation being debunked "overnight" during the crisis. An important lesson learned is that the crisis represents an opportunity for reforming and setting the right priorities for long-term recovery. Funding, proper financing and management are tools to accomplish this objective. Horizontal cooperation, community and stakeholders' participation, ownership of local development strategies are other important instruments that will help communities to exit the pandemic and position for long-term success.

Short-term strategies and activities

Identify and track crisis-related costs/expenses – PUCs should initiate identifying, tracking and reporting impact on revenue categories that the COVID-19 crisis may impact. Unfortunately, for many categories, the COVID-19 impact is not always easy to determine. Therefore, support from the relevant stakeholders and APUCs is necessary for PUCs in their efforts for developing methodologies for calculating pandemic related costs and improving their ability to thrive in the presence of financial stress, anticipating specific financial trends and calculating real costs incurred by PUCs due to the COVID-19 pandemic, and extra services provided to the community need to be defined. Modelling scenarios should be developed for the 2021 financial year and beyond, considering revenue impacts, capital programme influences, projection of costs, etc. These models should be planned for facilitating the process of covering financial costs resulting from the COVID-19 pandemic need to be proposed to ensure uninterrupted financing of essential services in the community, i.e. delivery of water and wastewater services.

Addressing the increased payment difficulty among customers - suspension of disconnections due to nonpayment and facilitating the payment process for all categories of customers, especially the ones experiencing financial hardship. Restarting suspended services and introducing a flexible disconnection policy for nonpayment of water charges in case of crisis and emergencies. In the case of business customers, additional flexibility could be provided, i.e. liquidity support, temporary vacancy policies, bad debt revisions and other revision policies, etc. Planning and introducing flexible payment plans and other customer assistance programmes, especially for business customers of various community and WSS services, provided by LGs and PUCs. Taking care of vulnerable groups and people in remote/rural areas, attention to specific categories of users and targeted communication and adapted services/payment tools.

Fostering online payments and trustworthy customers - Online payments should be employed everywhere, allowing payments of bills without complicated login procedures; options for non-account holders to pay an account holder's bills; provide payment alternatives such as debit/credit cards, PayPal or other popular e-payment methods. PUCs should employ payment policies allowing paying by any channel, with any payment type, without fees. Trustworthy customers should be motivated by adopting various payment incentives, providing flexible payment options, loyalty programmes, on-time payment bonuses, switching to e-invoices and bills, thus reducing operational costs in the long-run.

Work with LGs proactively to communicate post-pandemic statistics and gain buy-in for new policies, programmes and funding. The current crisis confirms the need for urgent water service sector reform and the need for LGs to intensify lobbying and advocacy efforts towards higher governmental levels to make the water service sector sustainable and resilient to the next crises.

Mid-term and long-term recovery strategies

Development of digital transformation strategies and action plans for PUCs to ensure the digital transition to increase efficiency, transparency, facilitate information flow and protect employees' health and safety in case of emergencies. It is important for PUCs to take on-board the lessons learned of the COVID-19 pandemic related to crisis preparedness and resiliency of staff, systems, and equipment. These lessons could lead to increased uptake of digital solutions. In this aspect, digitalisation efforts should be planned around pre-developed

digitalisation strategies and implemented in two main directions: 1) Introduction of online services and portfolio, i.e. administration, customer service and online payment as an alternative to cashier desks are very common for the Western Balkans; 2) Investing in remote water metering solutions as part of the recovery strategies and support. Such solutions could be provided to only a part of users as PUCs should develop a set of criteria, based on which such transformation should happen (i.e. business customers, domestic customers in remote areas, etc.); 3) Introduction of enterprise solutions for automation of water management processes in PUCs, i.e. water bills prediction models and utilisation of software solutions in that aspect. These strategies should lay down plans for quickly switching to remote working to improve future crisis resilience. The Plan should take into account the existing state of the institution/company and plan/develop a Materials and Tools Checklist for remote work to be used when necessary, including equipment and infrastructure (laptops, communications, remote working software, document distribution tools, communication channels, etc.), documentation policies and data protection (not all necessary hard copy documentation required for work can be taken home), list of tasks/services/activities that can be provided remotely. Furthermore, shift segmentation plans and scenarios (i.e. smaller teams, paid and unpaid leave, different time of check-in/check-out, clean corridors, regular testing, mobile applications for check-in/check-out, health status, etc.) should be developed, especially for PUCs operating critical infrastructure facilities (i.e. water purification facilities, wastewater treatment plants, pumping stations, etc.).

Assessing, lobbying and advocacy for improving tariffs and tax components – in cooperation with APUCs and other relevant institutions, PUCs should be actively involved in the process of improving the traditional tariffs/taxes. New models could employ "smarter" approaches that better reflect the pandemic's fragmented impact on the different customer groups. The European Association of Public Water Operators suggests in its overview of the lessons learnt and good practices of the COVID-19 emergency of European public water utilities that these new approaches could raise additional revenue and can include a tax on property developers for soil-sealing (which would also capture the economic value this actor gains from the access to high-quality water and sanitation services), or more precise mechanisms to charge the cost of water pollution across users, like the approach based on the so-called "Extended Producer Responsibility". Both these approaches are currently under discussion at the EU level and/or tested in some countries.

Innovative financing mechanisms - as governments set their strategies and objectives to overcome the crisis caused by the pandemic, decision and policymakers should take into account sectoral strategies, improve coordination and synergies among sources of funding for PUCs (i.e. taxes, tariffs, subsidies) and finance (grants, financial instruments, etc.). These strategies should take into account the reported financial impact of PUCs and plan for future investments to continue the path towards digitalisation and sustainability of communal services. Such strategies should be based on careful analysis of the current financial models and costs for each type of communal services and plan for

Crisis planning and management - Local crisis management plans need to be developed and improved by taking into account COVID-19 experiences with measures for ensuring financial liquidity of water utilities under such circumstances taking into account the currently reported and analysed financial impact. The research process in the target economies showed that capacity development in crisis management is much needed in communities across the Western Balkans. A more robust risk management approach should be introduced, including activating or reorienting existing multi-level coordination bodies to bring together all stakeholders on the local level to minimise the risk of a fragmented crisis response. These should consider essential aspects that have been brought forward by representatives and experts of APUCs and LGAs, including travel restrictions, service/business continuity plans, emergency protocols for operators/essential plant workers to live on-site if needed, utilisation of alternative water supplies, etc.

Digitalisation as a measure to cope with decreased revenues for both the short and longer terms - Smart water starts with smart revenue. Remote water metering lies at the heart of overcoming the main challenges related to sustainable water management. Over the years, PUCs in the Western Balkans region has faced numerous challenges related to increasing energy costs, obsolete water systems, growing demand, huge losses due to undetected leaks, illegal connections, etc. Also, COVID-19 imposed the need of ensuring both employee safety and effectiveness. Digitalisation represents a potential solution to these challenges. On the one hand, it enables both end-users and PUCs to account for every drop of water by detecting leaks and real-time data provision. On the other hand, it allows PUCs to ensure the timely and accurate billing of their customers remotely,

corresponding to the requirements of the current realities (social distancing, working in a remote environment, limited availability of personnel, etc.). Additionally, methodologies and plans could be developed for shut-off and reconnect policies for customers, disconnects, and application of associated fees taking into account different scenarios, including crisis and emergencies.

Introducing green solutions - The need for PUCs to continue developing into sustainable, people-centred and innovative organisations is paramount. Resilient water services will meet the future demands of local communities. The relevant concept of "Green utilities" could also be further explored. These include asset management, improving non-revenue water and services, operation and management activities assessment, etc. Future investment plans could take into account and prioritize "green infrastructure" and "natural-based solutions", which can prove as a cost-effective alternative to traditional "grey" engineering solutions to tackle the impact of climate change, addressing pinnacle European political and financial priorities.

References

ADKOM (2020), Operation of Public Utility Companies in the times of COVID-19.

ADKOM (2020), Position paper on the influence of the COVID-19 pandemic on the operations of PUCs – Challenges and Solutions

AMTRS (2020), Analysis of measures carried out by the local government units in Republika Srpska during the COVID-19 crisis and recommendations for local finance management.

Flamin, Andrés Cabrera (2019), BEWOP Report, Green Utility Toolkit Concept Note Funded by the Dutch Ministry of Foreign Affairs and the Spanish Agency for International Development Cooperation A joint initiative of GWOPA/ UN-Habitat and IHE Delft Institute for Water Education Global Water Operators' Partnerships Alliance TOOL SERIES. Available from<u>https://bewop.un-ihe.org/sites/bewop.un-ihe.org/files/06-green-</u> <u>utility-concept_note-1.0b.pdf</u>

GWOPA (2020), Managing the unexpected - European Public Water Utilities Facing the Coronavirus Emergency. European Association of Public Water Operators. Available from <u>https://www.aquapublica.eu/sites/default/files/article/file/Final_Publication_European%20Public%20Water%</u> 20Utilities%20Facing%20the%20Coronavirus%20Emergency.pdf

NALAS (2020), South-East European Local Governments in Post Covid-19 Socio-Economic Recovery. Available from http://www.nalas.eu/Home/Download/Covid_19_Survey

SHUKALB (2020), Survey results "COVID-19 Pandemic Impacts on Water and Wastewater Systems in Albania. Available from <u>http://shukalb.al/wp-content/uploads/2020/05/COVID-19-Pandemic-Impacts-on-Water-and-Wastewater-Systems-in-Albania.pdf</u>

UTVSI, SCTM (2020), Survey "Consequences of the COVID-19 pandemic on the operations of Public utility companies in Serbia"

IAWD (2020), Water and Wastewater Services in the Danube Region, A State of the Sector Report June 2019, Available from <u>https://sos2018.danubis.org/files/File/SoS_Report-2018.pdf</u>

Published by: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices Bonn and Eschborn, Germany

GIZ Office Sarajevo Zmaja od Bosne 7-7a Importanne Centar 03/IV T +387 33 957 500 F +387 33 957 501 E GIZ-BosnienHerzegovina@giz.de | www.giz.de