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**LEGAL AND POLICY FRAMEWORK**

**REGULATION**

# **WATER SUPPLY AND SANITATION POLICIES, INSTITUTIONS, AND REGULATION**

**RESILIENCE**

**FINANCING**

**INTERGOVERNMENTAL CONTEXT**

**INSTITUTIONS**

Adapting to a Changing World

**POLICY BRIEF  
AUGUST 2022**

## CONTEXT AND OBJECTIVES OF THE STUDY

**Policies, institutions, and regulation (PIR) are essential to achieving the Sustainable Development Goals (SDGs) related to water and sanitation but need a considerable boost to be effective.** A rich body of analytical work has been developed to support this idea but the mainstreaming and implementation of PIR into concrete reforms and investment programs is still sporadic at best. The stakes for improving service delivery and advancing water reforms are higher than ever and PIR needs to be strengthened, adjusted, and scaled up to meet the needs of a changing world.

**The World Bank has reviewed the experience of various countries with PIR and has documented its insights in a new report** (World Bank 2022). This report has two main objectives. The first is to reflect on the body of PIR knowledge and experiences accumulated globally and in selected countries to refine the PIR concept based on lessons learned. The second is to advocate for greater action on PIR by policy makers, development partners, international financial institutions, and civil society by using projects and investments as implementation vehicles. A companion piece to this report, the PIR Framework Tool, provides more detailed guidance on undertaking policy dialogue on PIR, identifying reform options, and applying PIR concretely in practice. In addition, deep-dive policy briefs on some of these cases— from Bosnia and Herzegovina, Brazil, Colombia, the city of Chennai in India, Mozambique, and Uzbekistan— and a companion piece on how regulation can incentivize green, resilient, and inclusive water supply and sanitation (WSS) services, complement this report.

## THE CASE FOR AN INTENSIFIED FOCUS ON WATER AND SANITATION PIR

**Since adoption of the SDGs, there has been increasing global concern about the sustainability of attempts to improve WSS services.** The SDGs set an ambitious agenda that includes universal access to WSS services with the requisite quality, reliability, equity, and sustainability essential for overall human and economic development. While the financial needs and technical solutions are well known, there has typically been less appreciation of the transformational role of sector governance—that is, the

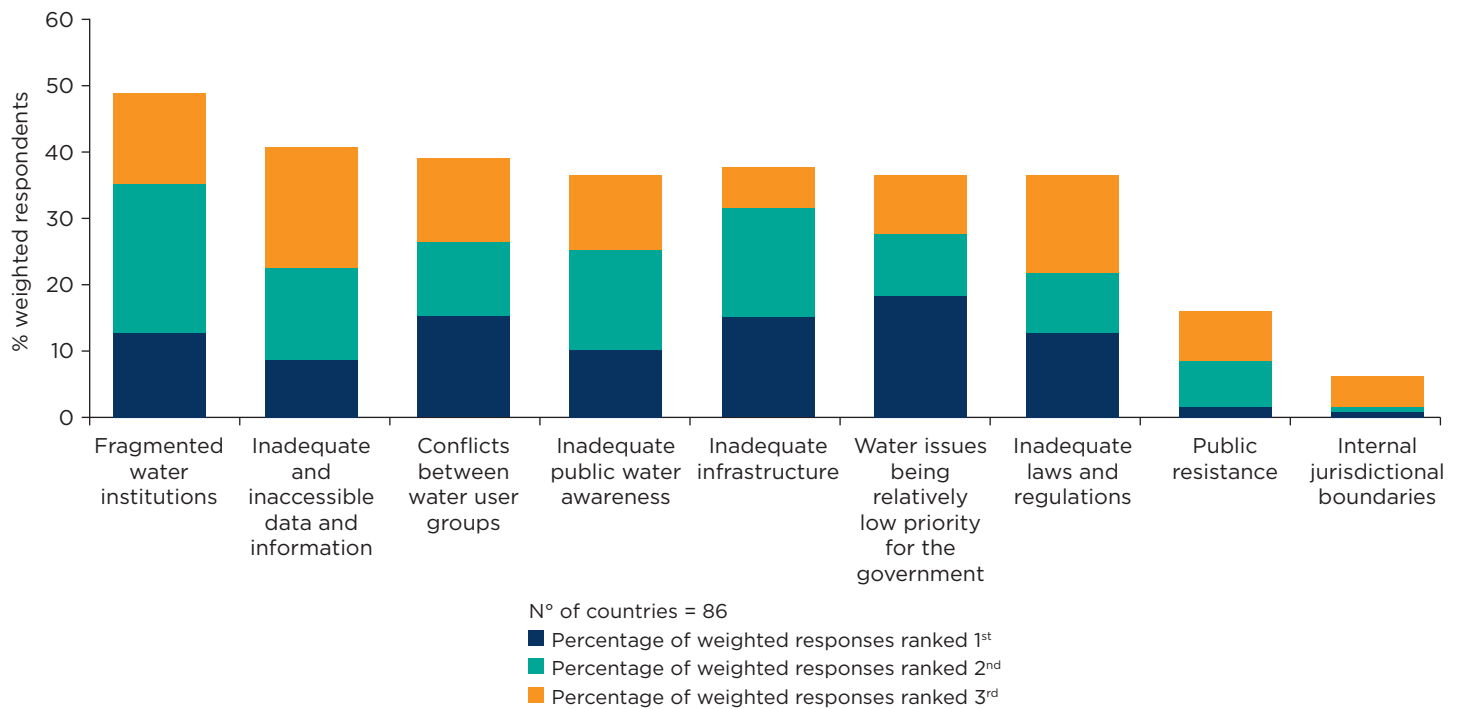
laws, policies, regulations, institutions, and systems that can help mobilize financial and technical solutions and enhance their impact on WSS services (Mumssen et al. 2018).

The World Bank launched the PIR initiative in 2016 as a new approach to water sector reform. Previous global initiatives offered a range of promising technical solutions to expand water and sanitation infrastructure but did not have a sufficient understanding of the policies, institutions, and regulatory framework necessary to improve service delivery and to operate and maintain water and sanitation infrastructure in a sustainable manner. The initial phase of the PIR initiative (2016–19) sought to build strong empirical and literary foundations through the seminal report “Aligning Institutions and Incentives” (Mumssen et al. 2018). Based on an extensive literature review that analyzed trends and theories on public sector reform as well as the insights gained from 10 country case studies, this report formulated the initial PIR Conceptual Framework. This framework posited that integrated policy, institutional, and regulatory interventions can help align incentives for more sustainable WSS service delivery.

The objective of the second phase of the PIR initiative (2019–22), which was recently concluded, was to put the concept into practice and learn from its implementation to further refine the PIR concept, draw operationally applicable lessons, and inform the development of a tool for operationalizing PIR in government and development partner programs. The review of the application of the PIR framework globally—summarized in this report—reconfirms the importance of policies, institutional arrangements, and the regulatory context in improving governance and the alignment of incentives to support more effective and sustainable WSS service delivery. In addition, the second phase identified three cross-cutting areas that are key to sustainable WSS services: sector funding and financing, the intergovernmental context, and the orientation of the sector toward sustaining results. These issues have emerged as both the biggest constraints to progress toward SDG 6, and the areas in which governments and other sector actors have expressed the strongest need for reforms and technical support.

**There has been growing recognition that PIR—and water governance more generally—is the missing link for resolving some of the chronic challenges**

**FIGURE 1. Challenges to Achieving Good Water Management according to Water Leaders**



Source: Water Policy Group 2021.

**undermining WSS services.** For example, a 2021 survey of ministers, agency heads, and other senior officials in the water sector found that institutional fragmentation is the foremost challenge to achieving good water management, ahead of other more visible challenges such as inadequate infrastructure (figure 1). Further, PIR aspects such as improving sector data and resolving conflicts among water users are also a top priority for decision-makers (Water Policy Group 2021). At a national level, some countries are realizing that PIR reforms are essential in the context of growing shocks and stresses in the water sector. In South Africa, for example, where several provinces or cities are at or close to a “tipping point” (as continuous supply is no longer the norm and many locations are experiencing intermittent water supply), the National Treasury and Department of Water and Sanitation are working with local governments to address PIR-related binding constraints to improved water services.

**The urgency of a renewed and updated focus on PIR stems from several factors.** Several cities increasingly face “day zero” events or risk crossing a “tipping point” at which WSS service provision starts to degrade. Water utilities and other service providers, which traditionally had narrow mandates, have to increasingly tackle problems outside their remit, such as the public health crisis related to the

COVID-19 pandemic. The interconnectedness of water and sanitation with other development priorities such as health, environment, social, and economic goals, is putting pressure on the siloed approach to WSS, while new technologies and innovations offer unprecedented opportunities to transform the water sector. Climate change is compelling many policy makers, regulators, and other actors to change their way of developing WSS services by adapting to increasing water security challenges. This requires dramatic change in the current course of action to address these growing pressures and achieve better WSS services for all. The PIR report provides several examples of how some countries have successfully undertaken PIR reforms and interventions that have led to improved WSS outcomes.

**Both the challenges and opportunities facing the water and sanitation sector require a focus on PIR.** In addition to the fundamental building blocks of policies, institutions, and regulation, this report proposes an expanded analytical framework that includes some hitherto less developed themes: intergovernmental context, financing, and resilience. Figure 2 illustrates this expanded analytical conception of PIR, with six clusters in a constant feedback loop. These themes were identified through the application of an institutional diagnostic tool and through stakeholder consultations, as well as lessons from other relevant

**FIGURE 2.** The Policies, Institutions, and Regulation Concept



Source: Original to this publication.

methodologies and water, governance, and infrastructure assessment tools.

## SUMMARY OF THE OVERARCHING MESSAGES OF THE REPORT

The report draws on case studies and advisory work by the World Bank in various countries. Table 1 provides a summary of the key insights from the six PIR clusters, with three overarching messages from the new report:

**Key Message 1: Understanding the PIR context of water and sanitation provision is a precondition for all other efforts to achieve meaningful and sustainable water and sanitation outcomes.**

The design and integration of incentives into WSS operations are still a work in progress that will require more scale-up and action to succeed. The findings from various cases show how incentives such as legislative requirements, budget allocations for implementing entities, benchmarking of utilities and other service providers, performance-based grants, and career opportunities for water professionals can all make a difference in the impact of PIR initiatives. While the report echoes previous calls for a reform champion to spearhead reforms, it advocates for a

collaborative leadership model, where actors at all levels of the sector work together for change. Despite the positive examples, this report is frank about the paucity of good practices and the need for more deliberate efforts to align policy goals with implementation incentives to achieve sustainable WSS outcomes.

**Key Message 2: Progress in achieving meaningful PIR reforms starts with a rigorous assessment of the root causes of WSS service bottlenecks.**

This report argues that part of the reason for recurrent service delivery challenges is the lack of attention paid to identifying the root causes of weak service performance. Water and sanitation governance assessments often highlight the same endemic challenges, such as fragmentation among institutions, political interference in regulation, or tensions between local and national governments on WSS roles and responsibilities. But often these assessments only skim the surface rather than identifying the real “pain points.” For example, assessments frequently point out that a lack of local capacity contributes to suboptimal WSS service delivery outcomes. However, if we probe deeper into the root causes of these challenges, it becomes clear that the intergovernmental system itself—its design, incentives, and coordination structures—is often the real issue, rather than local capacity or national governments’ reluctance to delegate services. In the absence of a proper diagnostic, initiatives and projects consider the lack of administrative capacity or funding as the leading causes of service delivery failure, whereas the reasons might run much deeper or lie elsewhere. More efforts are needed to identify the stakeholders and interests that contribute to service delivery bottlenecks and the incentives (including resources) that could compel them to act differently.

Several tools and approaches exist to support a root cause analysis of PIR WSS service bottlenecks. The World Bank’s new PIR Framework Tool offers an updated methodology for undertaking PIR diagnostic assessments and facilitating dialogue on reforms. It covers the six themes of the PIR Conceptual Framework: policies and legislation, institutions, intergovernmental context, regulation, finance, and resilience. It also incorporates elements of methodologies such as the problem-driven iterative approach encapsulated in other analytical work, including the World Bank Governance Practice’s GovEnable initiative.

**TABLE 1. Overview of Key Messages by Cluster**

<b>Policy</b>	<ul style="list-style-type: none"><li>• Understand the historical legacies and political economy context of WSS services.</li><li>• Transparent and inclusive policies and legislation, bolstered by policy dialogue, increase the probability of success.</li><li>• Water laws can provide powerful incentives for the adoption of new behaviors, models, or approaches to service delivery.</li></ul>
<b>Institutions</b>	<ul style="list-style-type: none"><li>• The traditional understanding of water institutions needs to be expanded to reflect all service delivery models and actors, and also to “work with the grain” and make use of entry points in particular contexts, both technically, and often politically.</li><li>• The role of individuals in designing, implementing, and sustaining reforms is hard to understand but crucial for the success of policies, institutions, and regulation (PIR).</li><li>• The link between strong water institutions and good service delivery outcomes is evident but needs to be further explored.</li></ul>
<b>Intergovernmental Context</b>	<ul style="list-style-type: none"><li>• Multilevel aspects of water sector governance are an important part of the enabling environment for effective WSS service delivery.</li><li>• Problems related to weak local capacity for WSS service provision cannot be resolved by technical solutions alone.</li><li>• Recognizing the unique features of WSS services—and aligning them with the prevailing intergovernmental framework—is often key to successful service delivery outcomes.</li></ul>
<b>Financing</b>	<ul style="list-style-type: none"><li>• There is an urgent need to build institutional capacity to plan and monitor WSS funding and financing.</li><li>• Performance-based financing is an emerging area that can be a game changer for service provision.</li><li>• PIR is often the binding constraint, but can also provide opportunities for increasing financial flows in the water sector.</li></ul>
<b>Regulation</b>	<ul style="list-style-type: none"><li>• While there is strong interest in the role of regulators, it is just as important to understand how regulatory functions are mapped across various entities, and in different contexts.</li><li>• Strengthening governance arrangements for regulation, as well as the technical capacity of regulatory entities, is crucial for effective regulation.</li><li>• Regulators are gradually shifting from regulating monopolies toward regulation of economic, social, environmental, and health externalities.</li></ul>
<b>Resilience</b>	<ul style="list-style-type: none"><li>• Understanding risks and planning for stresses and shocks is crucial for maintaining momentum on reforms.</li><li>• The alignment of policies, institutions, and regulation determines the sustainability of reforms to a great extent.</li><li>• Mechanisms are needed to bridge the gaps between policy setting and implementation.</li></ul>

**Key Message 3: PIR reforms are long term in nature and require mechanisms that foster evaluation, learning, and adjustment.**

**While some PIR interventions can be done in incremental steps, at heart, all PIR reforms require sustained efforts over time for their impacts to materialize.** The report illustrates this by documenting long-term reforms in several countries. The example of WSS regulation in Colombia, for instance, illustrates how incremental but intentional and well-conceived steps over a 25-year period have positioned the Potable Water and Basic Sanitation Regulation Commission (CRA) as a leading regulator. The

careful use and revision of regulatory cycles to reflect new challenges and opportunities are among the cornerstones of the regulatory successes reviewed under this work. The WSS sector is in flux. COVID-19 and the growing impacts of climate change, which are manifested through the water cycle, are cases in point. Sector institutions need to develop the adaptive capacities to respond accordingly. The report provides lessons from utility responses to COVID-19; from countries that have developed programs to address water resource threats, including through transboundary cooperation; and from the experience of central delivery units in driving cross-sectoral collaboration in pursuit of national development goals. A focus on PIR must be tailored toward the long term with aligned approaches that consider

how laws, policies, regulations, programs, and projects can best contribute to building and sustaining momentum for WSS reforms over time.

## CONCLUSION

**While PIR is an essential piece of the WSS puzzle, it is not the only one.** The report does not assume that the six areas it covers offer the definitive response to tackling WSS challenges, but provides insights from a wide range of countries that show the need for a more robust focus on PIR. It also points to other tools that offer more specific resources for topics beyond the scope of this report. The PIR methodology will continue to evolve as new insights emerge and lessons are learned from its application in participating countries.

**Moving forward, the report advocates the use of the renewed PIR approach through projects, technical assistance, and continued dialogue with key sector stakeholders in countries and around the world.**

The systematic use of the PIR Framework Tool in WSS operations (investment projects, performance-based financing, technical assistance, and advisory services) can help to facilitate stakeholder dialogue, identify root causes of systematic service delivery challenges, and lay the groundwork for incremental, long-term reforms.

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