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INTRODUCTION

The Global Acceleration Framework for Sustainable Development Goal Six (SDG 6) calls for a dramatic acceleration towards the goal of ensuring the availability and sustainable management of water and sanitation for all by 2030. SDG 6 on water, sanitation and hygiene (WASH) goes beyond the construction of infrastructure to propose safely managed water and sanitation, which require sustainable local service models operating within a robust regulatory framework.

Estimates indicate that, despite the progress made in recent decades, in 2020 around one in four people lacked safely managed drinking water at home and nearly half the world's population lack safely managed sanitation (UNICEF and WHO, 2021). This situation is critical in rural areas, where access to services is more limited, with reduced quality and sustainability. Thus, in the Latin American and the Caribbean region, 65.1% of the people who have no access to at least basic water services, and 44.6% of the population who do not have access at least to basic sanitation, live in rural areas. The lack of drinking water and mismanagement of wastewater and sanitation have serious repercussions on public health, the environment and people's economic development.

The SDGs recognize water and sanitation as human rights and pledge an international commitment to sustainable water and sanitation utilities for all. They require closer attention both to extending coverage by facilities and services and guaranteeing the quality of the services provided to the entire population, including the most vulnerable. The regulation of the economic, social, public health and environmental dimensions of water and sanitation utilities are an essential governance function which ensure better service outcomes in terms of affordability, consumer protection,

service quality, public health and environmental protection.

Among the factors holding back the development of regulation in the drinking water and sanitation industry in rural areas, are the lack of standards specific to certain contexts and the unclear roles and responsibilities of the key players in the regulation of this field. Similarly, the institutions responsible for ensuring the performance and regulation of services in rural areas are weak. These institutions are generally centralized, and in the regions, their human resources, technical capabilities and funding are limited. Information of good quality, vital for decision-making, is in short supply, while coordination between institutions is unsystematic. Information about the numbers and features of utilities in rural areas is scarce, very informal, contradictory and fragmented. All these factors undermine the development of regulation of this sector in rural areas. What little experience there is of regulation in a rural context is concentrated on service quality aspects. Aspects of key regulatory importance such as economic factors (setting of rates and charges and investment planning), water quality and environmental factors (contingency planning and other adaptation and mitigation measures) are sidelined.

This publication, "The WASHREG Approach: Good Practices in Rural Areas," addresses the main challenges of regulation in a rural setting. It offers 42 examples of how regulation is put into practice in rural contexts in Latin America and the Caribbean. It supplements the three core documents of the WASHREG approach: The WASHREG Approach: an Overview; The WASHREG Approach: Methodology; and The WASHREG Approach: Action Sheets.

The WASHREG approach is a diagnostic tool.

The WASHREG approach is a multi-stakeholder diagnosis, used to identify gaps in the national regulations and the challenges facing the provision of water and sanitation utilities. The method facilitates the development of a set of

actions and practical solutions to launch a process of developing, strengthening or aligning regulatory roles and responsibilities.

This publication presents examples of good regulatory practices in the Latin America and Caribbean region in response to the following challenges: (i) differentiated regulation; (ii) capacity development; (iii) technical assistance; (iv) formal recognition of service providers; (v) regionalization and partnering; (vi) information reporting; (vii) coordination between institutions; (viii) non-economic incentives; (ix) economic incentives and other subsidies; (x) integrated water resource management; (xi) accountability and user participation; (xii) inter-cultural and gendersensitive approach; and (xiii) raising awareness and changing behaviour.

This product has been developed as part of the Building Governance Capacity for Improved Water Security (GO-WATER) Programme, funded by the Swedish International Development Cooperation Agency (SIDA) and implemented by the Stockholm International Water Institute (SIWI).

We believe that, by strengthening their regulatory activity, especially in rural areas, countries can make the delivery of water and sanitation services more efficient and sustainable and achieve the SDGs so that the human right to water and sanitation becomes a reality for all.

1. DIFFERENTIATED REGULATION

DESCRIPTION

To regulate the drinking water and sanitation industry effectively in rural areas, it is essential to clarify how to allocate regulatory functions to different tiers of government. Consideration must be given to the devolution or decentralization of the main functions to municipal or local levels, bringing the institutions closer to utility operations. The national regulator needs to adapt the general rules (contract clauses, rate-setting principles, performance indicators) to the specific features of rural areas throughout the regulatory cycle for the water and sanitation industry (rule definitions; monitoring and reporting; application of standards) to adjust the standards and processes to a rural reality. Regulation in a rural context must be simple, flexible and progressive. Instruments and tools must be easy to implement, in both technical and economic terms, and accommodate community capabilities.

EXAMPLE 1: COLOMBIA

In Colombia, the Drinking Water and Basic Sanitation Commission [Comisión de Regulación de Água Potable y Saneamiento Básico — CRA] is the national body tasked with promoting competitiveness and regulating market conditions to improve the quality and efficiency of Colombia's water, sewage and sanitation services and for driving forward social welfare and sustainable development. In turn, Colombia's Superintendency of Public Domestic Utilities [Superintendencia de Servicios Públicos Domiciliarios — SSPD] is responsible for supervising compliance with the regulations by the public service contractors under its supervision, and for upholding the rights and enforcing the obligations of the users of these services. Both bodies have developed strategies for the differentiated regulation of water, sewage and sanitation services in rural areas.

Thus in 2011 SSPD set up the Single Rural Information System (SUIR) to collect information from community utilities about the features of the services they provide. SUIR presents a set of forms adapted to the reality of the information these providers are able to supply in a rural context. The number of performance indicators is reduced, and there are 'help' forms as an aid to handling the requested information.

Later, in 2014, the Policy for Drinking Water Supply and Basic Sanitation in Rural Areas was issued (CONPES Document 3810). One of its strategic guidelines for action states that "the CRA must devise specific arrangements for providers located in rural areas and set targets for service performance indicators." These policy approaches were incorporated in Law 1753 of 2015, which requires both government and the CRA to define and regulate differentiated schemes for water supply and sanitation services in rural areas.

Based on the above, the CRA has issued differentiated regulations for providers in rural areas (CRA Summary Resolution 943 of 2021). These concern not only tariff aspects, but also the information required to calculate performance indicators for assessing the management of the operators of the public domestic water and/or sanitation services, and the results achieved by them. These providers then have to be classified according to risk exposure, features and conditions, with a view to deciding which of them require inspection and special or detailed monitoring.

EXAMPLE 2: PERU

In Peru, the National Superintendency of Sanitation Services [Superintendencia Nacional de Servicios de Saneamiento – SUNASS] has been the regulator of the drinking water and sewage utilities since 2000 (Law 27732). The communal organizations are responsible for administering, operating and maintaining

sanitation services in rural areas. These organizations consist of representatives of the users of a property or estate in the settlement in which they live.

From its foundation until 2016, SUNASS issued tariff regulations applicable to all types of water and sewage utilities without distinction. The communal organizations were governed by Supreme Decree 023 of 2005 and Resolution 207 of 2010 of the Ministry of Housing, Construction and Sanitation. These measures obliged communal organizations to levy household tariffs so that the costs of administration, operation, maintenance, equipment replacement and repair would be at least covered. While these measures laid down some general criteria of calculation, they established no clear set of methods or systematic monitoring of effective implementation. As a result, the proportion of communal organizations establishing specific household tariff figures was notably low, slightly over 20%.

Legislative Decree 1280, issued in 2016, is the Framework Law on the Management and Provision of Sanitation Services. Since then, SUNASS has been the body tasked with establishing specific methods to set the value of the household rates charged by water and sewage operators in rural areas. In that capacity, in 2018, SUNASS adopted Resolution 28-2018-SUNASS-CD, establishing the Methods of Pricing the Household Tariffs for Sanitation Services Provided by Communal Organizations. The Resolution applies to rural settlements whose populations do not exceed 2000 inhabitants. This set of methods goes further than seeking to recoup the costs of supply. It includes provisions relating to efficient management, how many members are exempt from paying the household rates, rollout of micrometering and differentiated rates according to member category and ability to pay.

In 2020, SUNASS went on to adopt the Regulation on Quality of Sanitation Services Provided by Communal Organizations in Rural Areas, pursuant to Supreme Decree 019-2017-VIVIENDA, which ordered SUNASS to adopt a legal instrument prescribing differentiated quality requirements for water utilities and sanitation according to the type of utility. The regulation adopted establishes the quality requirements for water and sanitation services provided by communal organizations in rural areas. Where a communal organization lacks the resources or technical capacity to implement and conform to the service quality requirements, the regulation requires it to apply in writing to the municipality responsible so that the appropriate action can be taken.

EXAMPLE 3: COSTA RICA

The regulatory authority for public services in Costa Rica is called ARESEP [Autoridad Reguladora de los Servicios Públicos]. Its main purpose is public wellbeing in Costa Rica, to ensure public services and improve quality of life. To fulfil its mission, it deploys a series of strategies to bring it closer to the public, such as establishing relations and ties with leading bodies, public institutions, municipalities and community groups. ARESEP oversees the provision of public services, their prices and performance.

The Management Associations of the Communal Water Distribution and Sewage Systems [Administradoras de Acueductos Comunales – ASADAS], formed in accordance with Law 218, are not-for-profit organizations. Their sole and specific purpose is to manage, operate, maintain and develop the water and/or sanitation systems in their communities. In Costa Rica, the ASADAS run about 2000 drinking water and sewage systems, serving around 30% of the population.

In 2020, ARESEP promulgated the ASADAS Regulation (Executive Decree 42582 of 2020). This establishes a legal framework for the regulation of the functioning of the organizations, recognized in the national legal order, for the community management of drinking water and sewage services, and their relations with the Costa Rican Institute of Water Distribution and Sewage Systems [Instituto Costarricense de Acueductos y Alcantarillados – AyA], the lead institution in technical matters. The Regulation lays down specific approaches to ASADAS management and financial accounting and reporting. It also seeks to take

account of the specific difficulties ASADAS may face, especially when engaged in vulnerable or rural areas, where educational levels and technical training are more basic. These differentiated provisions include:

- an obligation for each ASADA to engage an accounting professional affiliated to the relevant professional council
- a possibility for ASADAS to merge and form federations, leagues, unions and/or confederations as partnerships of second or third-tier ASADAS which can offer services or training to their members in legal, financial and accounting aspects
- the right to receive general and specific skills development from AyA and other public or private institutions or organizations.

LINKS

Colombia

- Law 1753 of 2015: https://normas.cra.gov.co/gestor/docs/ley 1753 2015.htm#18
- Conpes Document 3810: https://www.minvivienda.gov.co/normativa/conpes-3810-2014
- Resolution CRA 943 of 2021: https://www.cra.gov.co/sites/default/files/marco-legal/2021-05/Resolucion-CRA-943-2021-002-vf.pdf
- PowerPoint presentation of SSPD:

https://www.superservicios.gov.co/sites/default/files/inlinefiles/1.%20Vigilancia%20Diferencial%20de%20prestadores%20rurales%20-%20Superservicios 1.pdf

Peru

- Web portal for SUNASS regulations: https://www.sunass.gob.pe/sunass/marconormativo/normativa-general/
- Resolution 207 of 2010:
 - https://cdn.www.gob.pe/uploads/document/file/23903/RM 2010 207.pdf?v=1530744469
- Resolution 28-2018-SUNASS-CD: https://www.sunass.gob.pe/wpcontent/uploads/2020/09/re28 2018cd info.pdf
- SUNASS news portal: https://www.sunass.gob.pe/lima/sunass-aprobo-metodologia-para-lafijacion-de-la-cuota-familiar-para-organizaciones-comunales/

Costa Rica

- Article by the National University of Costa Rica: https://www.revistas.una.ac.cr/index.php/dialogo/article/view/14762/20443
- Executive Decree 42582 of 2020: https://www.aya.go.cr/transparencialnst/acceso informacion/MarcoNormativo/Reglamento de ASADAS.pdf

2. CAPACITY DEVELOPMENT

DESCRIPTION

Strengthened capacity at all institutional levels (national, municipal and local) and from multiple perspectives (management, technical, coordination and others) must drive progress in the regulation of the drinking water and sanitation industry in rural areas. Capacity development must consider utilities' existing characteristics and expertise and deploy innovative tools and methods. The aim is to maximize the number of people who have practical skills (through in-person programmes, use of wireless and social media, use of local languages and other methods) which they can apply to the real management of services.

EXAMPLE 1: EL SALVADOR

The National Aqueducts and Sewers Authority [Administración Nacional de Acueductos y Alcantarillados – ANDA] is El Salvador's principal drinking water and sanitation utility, serving 64% of the national population. ANDA is self-regulating, while the Ministry of Health monitors the quality of water supplied. The Drinking Water Administration Boards provide the water and sewage utilities in rural parts of El Salvador.

In 2011 ANDA set up Management Focused on Rural Systems and Communities [Gerencia de Atención a Sistemas y Comunidades Rurales, also known as Gerencia Rural]. Gerencia Rural's mission is to offer technical assistance and skills training which enhance the operational and maintenance capacity of non-state operators in rural settings.

During 2016, 63 training courses were delivered for rural administrative boards. Each board trained for five days, making a total of 315 training days delivered. Furthermore, a total of 43 technical assistance sessions were offered in support of rural management. These sessions verified the working order of electrical and mechanical equipment. They also surveyed deep wells and carried out troubleshooting of problems of system pressure, chlorination, etc. In addition, 70 inspections were carried out in connection with declarations of social interest. In total, during 2016, 176 community systems received assistance, benefiting 171,267 residents of rural areas. Training days were also reported in 2017 and 2018, on systems maintenance and operation, water treatment and chlorination, harvesting micro-catchments, new technologies and other topics requested by water boards and communal associations.

The recipients of Gerencia Rural's technical assistance include community organizations. Since its creation, Gerencia Rural has improved the managerial skills of rural utilities, including training in water quality and monitoring and technical, theoretical and practical skills in the administration, operation and maintenance of water systems, and other subjects, all resulting in efficient service to communities.

EXAMPLE 2: BOLIVIA

In Bolivia, the Law on Drinking Water, Sewage and Sanitation Services (Law 2066 of 2000) sets out the principle of charging for the total recovery of utility operation and maintenance costs. The Drinking Water, Sewage and Sanitation Utilities [Entidades Prestadoras de Servicios de Agua Potable y Alcantarillado Sanitario — EPSA] must ensure that this happens, by approving and applying the rates based on agreements with the communities they serve.

Spain's Cooperation Fund for Water and Sanitation (FCAS) is financing the Water and Sanitation Programme for Small Localities and Rural Communities in Bolivia. It aims to increase access to drinking water and sanitation in Bolivian rural communities of fewer than 2000 residents and small settlements

of 2000 to 10,000 residents. It also promotes the creation and consolidation of utilities in such communities. The Water and Sanitation Programme ran from 2012 to 2018, spending a total of USD 53 million. It focused on rural communities in the Chuquisaca, La Paz, Cochabamba and Potosí Departments and on small settlements nationwide. The Programme's specific objectives were the institutional consolidation of EPSA utilities in order to generate service management capacity and community development so that local people gained effective access to these services, made proper use of them and met their obligations to pay the rates.

In relation to training, activities were carried out with the EPSA utilities to improve their identification of running costs (administration, upkeep and repairs) so that they could set rates and strategies to cover their costs of administration, operation, maintenance and replacement of assets in the short and long term.

The result was skill enhancement in 165 utilities. Of these, 105 achieved rate collection levels greater than 85%, due to better service quality. This improvement was a result of both of the training courses held and of the activities designed to change people's behaviour in the target communities.

EXAMPLE 3: PARAGUAY

In Paraguay, the National Environmental Sanitation Service [Servicio Nacional de Saneamiento Ambiental – SENASA] fulfils the function of supporting community organizations in forming boards responsible for providing water and sanitation in rural areas and small towns with fewer than 10,000 residents. SENASA also runs training courses and offers technical, administration and financial advice to these sanitation boards.

SENASA and the Moisés Bertoni Foundation implemented the Y Kuaa project (the name means 'water knowledge' in the Guaraní language). The project ran from August 2017 to December 2022 and benefited approximately 72,000 people and 109 communities in Paraguay. Y Kuaa included action to improve infrastructure and raise public awareness. The programme also ran activities to enhance the skills of water committees.

The enhancement activities benefited more than 3100 members of community water and sanitation committees. The 118 training sessions dealt with topics such as the administration and financial management of water, sewage and/or hygiene systems. Delivered by SENASA technicians, these courses included materials written in Guaraní and Spanish and were adapted to the profiles of the communities served.

EXAMPLE 4: HONDURAS

The Honduran Drinking Water and Sanitation Utilities Regulator [Ente Regulador de los Servicios de Agua Potable y Saneamiento — ERSAPS] plans training for the Water and Sanitation Boards [Juntas Administradoras de Agua y Saneamiento — JAAS] which provide utilities in rural settings. The purpose is twofold: to ensure the sustainability and proper administration of water resources; and to improve the performance of the drinking water service. The training methods impart a knowledge of how drinking water systems function, operate and are maintained. Some of the workshops deal with fundamental aspects of the law and regulations governing the work of the boards, plans for rates, and water quality control.

For its part, the Project Global Village organization [Proyecto Aldea Global – PAG] has also supported the boards to enable them to report back to water consumers and to the National Autonomous Water Distribution and Sewage Service [Servicio Autónomo Nacional de Acueductos y Alcantarillados – SANAA], the body responsible for organizing drinking water supply utilities in Honduras. PAG has given the boards

basic training in response to participants' expressed needs. Topics have included efficient drinking water supply, protection of the water resource and catchment conservation, access for the whole community, water quality, fair rates which make water affordable for all and system sustainability. The training and support which the board members received enabled them to be more transparent. It is now easier for water users to insist on accountability and reporting. Water users can now trust in regulations and rates which ensure transparent use of funds, and in a water supply system which works and is sustainable and accessible to all.

EXAMPLE 5: COLOMBIA

The Swiss Embassy in Colombia implemented the ASIR-SABA (Integral Rural Water and Sanitation) project from 2014 to 2023. The project took place in liaison with the rural communities, the public institutions in the water and sanitation industry at municipal, departmental and national levels, and with other strategic allies of civic society and the private sector. Their shared objective was to contribute to the sustainable management of water and sanitation in rural parts of the country, by promoting community involvement and dialogue between sectors to further the peace process.

Part of the project was to build municipal technical assistance offices [Oficinas de Asistencia Técnica Municipal – ATM] which play a liaison role between communities and institutional players. Twelve plans were drawn up and implemented for offices providing technical assistance for water and sanitation processes in the municipalities of Buga, Trujillo, Buenaventura district (Valle del Cauca); Santander de Quilichao, Corinto, Cajibío and Caloto (Cauca); Tumaco (Nariño); Teorama (North Santander); Riohacha district (La Guajira), and at regional level in Gámeza and Mongua (Boyacá) and Pueblorrico, Caramanta and Támesis (Antioquia). During implementation, it was proposed that the municipalities should fund the lead technician of the technical assistance offices.

This way, it was possible to reinforce 72 community organizations which manage water and basic sanitation services, improving both their operational and institutional performance and their relations with users, public institutions and others. Furthermore, 11 communities were reinforced in their monitoring and control of water quality. They were given the technological equipment to do so (monitoring kits). During the project, community water and sanitation service organizations [Organizaciones Comunitarias de Servicios de Agua y Saneamiento - OCSAS] were provided with equipment for field monitoring of water quality, backed by training on how to use it. Actions were identified for implementation according to the results obtained. For its part, the utility company Empopasto, based in Pasto, offered the OCSAS technical assistance with operational and commercial activities focused on the ASIR-SABA project in Santander de Quilichao and Trujillo.

LINKS

El Salvador

- Context of provision of drinking water and sanitation services in rural El Salvador and the Management Focused on Rural Systems and Communities project: https://es.ircwash.org/sites/default/files/hacia un sistema de monitoreo de agua y sanea miento en el salvador v2.pdf
- ANDA report. Focus on Rural Systems and Communities 2018: https://www.transparencia.gob.sv/institutions/48/documents/274756/download
- The drinking water and sanitation service in a rural context: https://www.ohchr.org/sites/default/files/Documents/Issues/Water/ForciblyDisplacedPersons/ ElSalvador.pdf

Bolivia

- National Strategy on Water and Sanitation for Rural Areas and Small Localities: https://sihita.org/wp-content/uploads/2022/03/DOC059.pdf
- Law 2066/2000: https://sea.gob.bo/digesto/CompendioII/O/160 L 2066.pdf
- Memorandum of the Water and Sanitation Fund in Bolivia: http://www.aecid.bo/portal/wpcontent/uploads/2019/04/BID Memoria Agua V2.pdf

Paraguay

- **UNICEF** document:
 - https://www.unicef.org/paraguay/media/6161/file/Revisi%C3%B3n%20del%20gasto%20p% C3%BAblico%20en%20agua%20y%20saneamiento%20en%20el%20%C3%A1mbito%20rural
- The Lazos de Agua project: https://www.lazosdeagua.org/es/y-kuaa-paraguay/

Honduras

- Regulation on water boards: https://www.ircwash.org/sites/default/files/827-HN06-18887.pdf
- Post "support for water boards in Honduras": https://learn.tearfund.org/eses/resources/footsteps/footsteps-71-80/footsteps-76/supporting-water-councils-in-honduras
- Post: "training drinking water and sanitation boards": https://www.ersaps.hn/30072021.html
- Post: "Reinforcing water board capacity in Santa Rosa de Copán": https://www.ersaps.hn/10082021.html

Colombia

- ASIR-SABA website: https://asirsaba.com.co
- ASIR-SABA infographic: https://asirsaba.com.co/wpcontent/uploads/2023/05/INFOGRAFIAMAY-08-1.pdf
- Information on the Integrated Rural Water and Sanitation project (ASIR-SABA), phase III: https://www.eda.admin.ch/countries/colombia/es/home/cooperacion/proyectos.html/content /dezaprojects/SDC/es/2014/7F09231/phase3?oldPagePath=/content/countries/colombia/es/h ome/internationale-zusammenarbeit/projekte.html

3. TECHNICAL ASSISTANCE

DESCRIPTION

The purpose of technical assistance to rural community utilities is to support them in conforming to standards and regulations, possibly with a focus on administrative and managerial aspects. Technical assistance may be needed for systems operation and maintenance, or in setting rates and other tasks for which the utilities are responsible. A successful technical assistance programme should lead to fewer penalties, by developing 'preventive regulation' so that shortcomings or non-conformities to standards are corrected before they occur, bearing in mind the deficiencies of rural service management due to the utilities' limited human and financial resources. It is also important to consider that utilities often lack the financial capacity to act in response to penalties. In relation to the regulator, this may act as a disincentive to obtaining formal recognition.

EXAMPLE 1: ECUADOR

In 2014 Ecuador issued Executive Decree 310 restructuring the country's water industry. It set up the Water Regulation and Control Agency [Agencia de Regulation y Control de Agua – ARCA] as the regulator of water-related public services in Ecuador. Its functions include the following: (i) to announce and establish industry technical standards and parameters to regulate the technical level of water management, and supervise compliance with them, in accordance with national policy; (ii) to gather, process, administer and handle water-related technical and administrative information; and (iii) to regulate and control the technical management of all basic water-related public services. The same decree also set up the Public Water Corporation [Empresa Pública de Agua – EPA] which took over some functions from the Water Secretariat SENAGUA, such as technical and commercial advice and assistance to providers of public and community water utilities.

Thus, community organizations which provide water and sewage services, or Drinking Water and Sewage Boards [Juntas de Administradoras de Agua Potable y Alcantarillado – JAAP] may apply to EPA for technical and/or commercial advice on how to draw up and follow specific plans and procedures required by ARCA. They may also apply to the Devolved Autonomous Governments for support in strengthening the organization of communities and JAAPs. Procedures exist for access to both support initiatives, which are free of charge.

In 2016 ARCA issued Regulation DIR-ARCA-RG-003-2016 entitled Technical Regulation on Performance Evaluation and Diagnostics of Public Drinking Water and/or Sanitation Utilities in Urban and Rural Areas of Ecuador. This defines the requirements for periodic information from community providers. To increase compliance with this regulation in rural areas, where reports were found to be fewer in number, and of poorer quality, in 2018 ARCA launched a self-assessment process for a total of 1726 community utilities, to improve their feedback of information to the regulator. The municipal government coordinated with the utilities for the delivery of information to ARCA. Based on the self-assessment results, ARCA then shared recommendations for improvement plans with each utility. The improvement plans will be implemented with technical assistance from ARCA and other municipal and departmental authorities.

EXAMPLE 2: HONDURAS

In Honduras, rural utilities such as the Water and Sanitation Boards (JAAS) set the rates payable by users for their services. They may also receive subsidies, grants and support in kind, such as materials for operating their systems, so that they can offer and improve their services.

The water boards receive training and legal advice from SANAA, the body responsible for organizing the drinking water supply utilities Honduras-wide. In 2006, the Honduran Drinking Water and Sanitation Utilities Regulator (ERSAPS) issued a Water Boards Regulation, giving the boards access to legal advice whenever they need it. This ensures they fulfil their responsibilities for offering a viable water system and applying for legal status. Technicians from SANAA or from other, local organizations train board members. This training covers tariff regulation, administration and maintenance of rural water distribution systems and management of water boards. Boards also receive training in how to conduct a social audit which ensures proper and transparent resource management. Each board records its meetings in a minutes book and has a daily account ledger to log income and expenditure.

Water boards also receive technical assistance from the municipalities, which are responsible for the conditions in which water and sanitation services are provided. From 1993, a function called the Operation and Maintenance Technician (TOM) has been implemented. It consists of a team of SANAA technicians tasked with supporting community water boards in all aspects of systems operation, administration and maintenance. The TOM teams provide informal training, advice and encouragement, especially in cases where water boards have neither the resources nor the expertise to solve specific problems.

EXAMPLE 3: COLOMBIA

In 2001, Colombia created a Single Information System (SUI) managed by the Superintendency of Public Domestic Utilities (SSPD). Since then, the government has adopted various strategies to help smaller utility companies and community organizations with accounting and financial aspects, and with reporting on these subjects to the competent authorities.

One of these initiatives has been the promotion of the INTEGRIN computer tool by the Ministry of Housing and Town and Country Planning, as part of its technical assistance programmes. The purpose of this tool is to enhance and modernize the business management of providers of public water, sewage and sanitation services with up to 2400 customers. At no cost to the utility, INTEGRIN is an integrated and interactive way of meeting the needs of administration of human, physical and financial resources. It also offers an option to create records as a basis for reporting to the SUI and account auditing bodies. SSPD also conducts regional training courses with community organizations and small utilities to encourage them to gain formal recognition, support them in returns of information to SUI and other systems, bring its own role closer to them and strengthen links with the country.

EXAMPLE 4: CHILE

Chile launched a Rural Drinking Water Programme [Programa de Agua Potable Rural – APR] in 1964 by adopting the Basic Rural Water and Sanitation Plan for the supply of drinking water to rural communities. Built infrastructure is handed over to committees or cooperatives which already exist or are formed for the purposes of administration, operation and maintenance. The APR Programme includes maintenance and investments in improvement and extension of the requisite systems. APR acknowledges the committees' and cooperatives' need for technical, administrative and financial knowledge and resources to participate fully in the programme and fulfil the duties assigned to them. Nevertheless, a lack of technical, administrative and/or financial knowledge prevents members of community organizations from taking part in decision-making and/or management of rural water distribution systems. One element of APR is that the technical units set up by drinking water supply utilities must supervise and advise the committees and cooperatives (which are not-for-profit) community organizations whose members are volunteers. The technical assistance to committees and cooperatives under APR is outsourced through the technical units. Its purpose is to support the community systems with various technical and administrative tasks and training. The Water Works Directorate of the Ministry of Public Works mainly awards technical assistance contracts to private sanitation companies operating in each region of Chile.

One of APR's sustainability aspects is the development of a community work plan to reinforce the rural drinking water committees and cooperatives, by activities led by the technical units of the regional sanitation companies. These include support with the formation of APR committees or cooperatives, appointment of their directors, and advice and supervision in technical, administrative, financial and community matters.

LINKS

Ecuador

- Regulation DIR-ARCA-RG-003-2016. Available at regulacionagua.gob.ec
- Regulator's website: regulacionagua.gob.ec
- Evaluation of information feedback. Available at regulacionagua.gob.ec
- Executive Decree 310/2014: https://www.gob.ec/sites/default/files/regulations/2018-10/DECRETO-EJECUTIVO-310-DE-CREACIÓN-DE-LA-EMPRESA-PÚBLICA-DEL-AGUA.pdf
- Citizen procedures portal. Technical advice request: https://www.gob.ec/epa/tramites/solicitud-asesoria-tecnica-comercial-prestadores-serviciopublico-comunitarios-agua

Honduras

- Context of municipal public funding in direct support of rural water and sanitation services in Honduras: https://es.ircwash.org/sites/default/files/working paper apoyo directo web.pdf
- Document: Community management of water and sanitation services https://www.cepal.org/sites/default/files/publication/files/26079/S2011150 es.pdf
- Enhancement of community management models for drinking water and sanitation in the region. Central American and Dominican Republic Water and Sanitation Forum (Focard-APS): https://www.sica.int/download/?103112

Colombia

- Portal of the Colombian Ministry of Housing and Urban and Rural Planning: https://www.minvivienda.gov.co/node/1336
- CRA diagnostic smaller utilities: https://www.cra.gov.co/sites/default/files/documents/2022-06/Bases%20NMT%20pequen%CC%83os%20prestadores%20AA_28jun2022.pdf
- INTEGRIN software portal: https://integrin.toys4baby.co/

Chile

- Executive summary of evaluation of Chilean government programmes: https://www.dipres.gob.cl/597/articles-141243 r ejecutivo institucional.pdf
- Drinking water partnerships in Chilean rural communities: https://www.chilesustentable.net/wp-content/uploads/2015/07/Asociaciones-comunitariasde-agua-potable-rural-en-chile.pdf

4. FORMAL RECOGNITION OF SERVICE PROVIDERS

DESCRIPTION

Rural service providers feature a large number of small providers, scattered across the country. They tend to be informal, and vary widely in type. In this context, service regulation becomes complex. Providers need support with quality assurance and the general availability of services. It is important to offer rural service providers incentives to gain recognition at both local and central levels. Incentives include access to subsidies and non-economic incentives, including technical assistance. If the numbers and types of rural water and sanitation utilities are unknown, it means that they cannot be regulated, and the quality of services to the public cannot be guaranteed.

EXAMPLE 1: COLOMBIA

Colombia's drinking water supply and basic sanitation are inadequate, especially in rural areas, reflecting municipalities' limited institutional and financial resources. In these rural communities including indigenous reserves, black communities and others spread across the country, so-called 'community aqueducts' which manage access to water and sanitation.

CONPES document 3810, published in 2014, was the Policy on Drinking Water Supply and Basic Sanitation in Rural Areas. It required municipalities to devise planning and local intervention strategies to assure universal services of high quality and allow the initiatives, once started, to develop with and for the community. To ensure that municipalities acknowledged the importance of rural water distribution systems, in 2020 follow-on Decree 1688 stated that municipalities and districts "may support the processes of legal formation and community enhancement of the organized communities which administer alternative solutions, and shall respect the independence of communities' decision-making about the services which benefit them".

Thus, the Ministry of Housing and Town and Country Planning has devised communication programmes about the process of formal recognition of rural utilities, to close the gap between towns and rural areas in access to drinking water and basic sanitation and improve living conditions for rural people. The information documents state that the municipalities and/or districts, backed by the departments with their Departmental Water Plans [Planes Departamentales de Agua - PDA], must offer the necessary technical assistance to providers of public domestic services so that they can obtain legal status, taking account of the different legal forms open to them. Accordingly, the information describes the process of formal recognition, the benefits, and other key aspects.

EXAMPLE 2: BOLIVIA

Bolivia's water and sanitation inspectorate is the Autoridad de Fiscalización y Control Social de Aqua Potable y Saneamiento Básico - AAPS. In 2017 AAPS wrote a guide to applying for licensing and registration to normalize the provision of drinking water and sewage processing services.

Licensing for the provision of service, and permission to use and supply water resources for human consumption are requirements for all drinking water, sewage and sanitation utilities (EPSAs) in settlements with more than 2000 people, which normally supply drinking water in towns or conglomerations. As for registration, this is granted to villages of fewer than 2000 residents, such as indigenous and native villages, indigenous and peasant communities, associations, syndicates, organizations of smallholders and water users, which have a drinking water service providers. The service providers in a rural setting are usually drinking water and sanitation committees [Comités de Agua Potable y Saneamiento - CAPyS]. Registration guarantees legal status for its holders and remains valid during the lifetime of the service. Registration takes place collectively. It is free of charge and quick, but is not open to private individuals. Registration is a prerequisite to access governmental projects and programmes in the water sector.

To facilitate the process of formal recognition, AAPS coordinates activities with certain municipalities to publicize the rules on formal recognition and its benefits. It also supports the compilation of municipal registers of drinking water supply utilities and water and sanitation committees. These processes require activities to raise awareness, provide information and establish effective channels of communication between the municipality and AAPS and between the municipality and the water and sanitation utilities.

EXAMPLE 3: NICARAGUA

In rural Nicaragua community organizations, consisting of members of the same communities, run more than 5000 projects. These communities have taken over the installation, operation and maintenance of various water treatment and distribution systems and other sanitation works. They represent a valuable form of support to central government in providing these services to the public. However, most of these community organizations function on an informal, ad hoc basis, because there is no specific statutory framework which would confer any legal safeguard for their actions.

In 2010, Law 722 was issued: the Special Law on Drinking Water and Sanitation Committees. It provides for the formation, legalization and functioning of the drinking water and sanitation committees existing in Nicaragua. Article 2 recognizes "the existence of Drinking Water and Sanitation Committees as nonprofitmaking community organizations whose members are persons democratically elected by the community. The Committees contribute to economic and social development, to democratic participation and national social justice. In this case they create the necessary conditions to ensure access to drinking water and sanitation for the public, in order to carry out actions which further the Integrated Management of Water Resources (GIRH). Central government is bound to ensure their promotion and foster their development."

The same law defines some aspects of committee management. Article 22, for example, exempts drinking water and sanitation committees "from payment of all types of central, municipal or other taxes on their property, income, sales made and drinking water, sewage and sanitation services, and on the works which they build." Article 23 goes on to state that committees "shall be exempt from payment of all fiscal and taxation liabilities on local procurement of machinery, equipment, materials and supplies destined solely for the extraction, processing or distribution of drinking water for human consumption and the drainage, processing and disposal of wastewater."

This law was regulated by Decree 50-2010 of 11 August 2010 "regulating the Special Law on Drinking Water and Sanitation Committees (CAPS)." Section II states that "CAPS shall be formed at general meetings of villagers interested in organizing the community self-management of their drinking water supply. One member of each family and/or household supplied shall represent it at the general meeting of villagers. The villagers' meeting shall first be convened by at least half the members of the community who live within a given geographical district. Subsequent meetings shall be convened in accordance with the committee's articles of association. This general meeting of villagers shall elect members of the committee's directorate from among the attendees. The election shall be democratic and direct, by public ballot, for each position, by straight majority. The deed of formation of the committee, recording the election of the directorate, the approval of the articles of association and rules and any agreements passed at the general meeting of villagers shall take the form of a private deed, which each participating villager shall sign."

LINKS

Colombia

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- Decree 1668/2020: https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=153326
- Communication programme on formal recognition of utilities: https://minvivienda.gov.co/sites/default/files/documentos/abece-formalizacion-deprestadores-comunidad.pdf

Bolivia

- Guide to applying for licensing and registration: http://www.aaps.gob.bo/images/DER/Guia de Solicitud de Licencias y Registros RAR 515 2017 Form Menor a 10 mil.pdf
- Extended Sectoral Approach (ESA) to Water and Sanitation in Rural Areas with Populations less than 2000 (Ministry of the Environment and Water): https://sihita.org/wpcontent/uploads/2022/05/ESA Rural enfoque agua saneamiento tomo 1.pdf

Nicaragua

- Law 722/2010: http://legislacion.asamblea.gob.ni/Normaweb.nsf/3133c0d121ea3897062568a1005e0f89/ a63305b993cddb210625775f0069e8b3
- Regulation implementing the Special Law on Drinking Water and Sanitation Committees (CAPS):
 - legislacion.asamblea.gob.ni/normaweb.nsf/b92aaea87dac762406257265005d21f7/48f858 3f454249b2062577c9005df023?OpenDocument

5. REGIONALIZATION AND PARTNERING

DESCRIPTION

One of the features of the rural areas served is the large number of rural utilities, at locations scattered across the country. In some cases, it may be necessary to promote regionalization and/or partnering of these small utilities, to generate economies of scale and reinforce regulatory processes in rural areas, whether concentrated or scattered, and improve the structuring of the sector. For example, partnering can facilitate cheaper access to consumables to operate the systems, specialist technical assistance, etc.

EXAMPLE 1: BRAZIL

Brazil's Integrated Rural Sanitation System [Sistema Integrado de Saneamiento Rural - SISAR] is a federation of community associations formed for the specific purpose of self-management of local water supply and rural sanitation systems. Each unit of SISAR has the legal form of a non-profit partnership in private law, which manages water supply and sanitation systems operated by its community association members.

A SISAR is implemented at state level under the coordination of a state drinking water and sanitation company or a federal secretariat. In Ceará state, for example, the state-run Companhia de Água e Esgoto do Ceará [Ceará Water and Sewage Company – CAGECE] has created an in-house SISAR counterpart called Rural Sanitation Management [Gerência de Saneamento Rural – GESAR]. This body specifically manages CAGECE's rural business, including SISAR-related work and set-up of the respective units.

Activities have been under way since 2001 to implement SISAR in every state. In the federal state of Ceará, CAGECE is the systems' owner and responsible for installing them. The financial support for implementing a system comes from state and federal programmes and, on a smaller scale, from municipal government. Each community association joins a SISAR unit and so assumes responsibility for the proper functioning of the community water supply and sanitation utility it represents. It also becomes liable for paying the operator and for using water rate income to pay for power consumption.

There are eight SISAR units in Ceará state: one per catchment. They are located in the towns where CAGECE maintains its business offices. Logically, this makes it easier for the company to offer technical and administrative support and keep track of SISAR activities. The SISAR units work under tripartite agreements: between the state government, CAGECE and SISAR; and between the SISAR, the municipality and the community association. The aim is to provide technical assistance and open the way to grants.

Ceará's experience in implementing the SISAR model is outstanding for its geographical scope, the permanent expansion of water collection and distribution services in the rural areas, and its prospects for sustainability. Its main strengths are collaborative working and contribution to universal access to drinking water, environmental conservation, social responsibility and the assurance of longer lifetime for water supply and sanitation systems.

EXAMPLE 2: ECUADOR

In Ecuador, the Association of Drinking Water and Sewage Boards [Asociación de Juntas Administradoras de Agua Potable y Alcantarillado – ASOJAAPA] is a self-managed community body. Its members are the chairs of the drinking water and sewage boards (JAAPs) and it has offices in every canton which has such an organization. These offices provide advisory services, including consultancy/legal assistance to JAAP directorates which require legalization or contracting services or need to bring civil or criminal lawsuits to fulfil their duties and train in and familiarize themselves with the regulations applicable to JAAPs. The association offices also keep information literature and manuals on technical standards, laws, regulations, technical documents, catalogues etc. available to JAAPs to help with the appropriate operation, maintenance and administration.

EXAMPLE 3: HONDURAS

In the early 1990s, 17 rural communities founded the first Honduran association of water system boards (AHJASA). Since then, from 1991 to 2017, 28 associations of drinking water and sanitation boards (AJAAPS) have been formed, 10 of which have gained formal recognition. There are more than 2800 drinking water and sanitation boards [Juntas Administradoras de Aqua Potable y Saneamiento – AAPS] in Honduras and 2.1 million consumers.

The AJAAPS receive logistical support from the municipalities, which also act as project stakeholders. Other sources of support are NGOs and cooperation agencies, as donors and training providers. Then there are the regional offices of the national water authority SANAA and of the water regulator ERSAPS, both of which offer training and technical assistance.

The main forms of support from the AJAAPS to boards are: assistance with the form and legalization of the boards, strengthening their capacity, making them more representative and increasing their political impact, technical assistance, water quality monitoring, economies of scale, management of chlorine reserves, mobilization of public or agency funds for projects, devising and assessing projects for the construction of water and sewage systems, expediting sanitation projects for the boards, support in reporting back to the regulators, promoting community involvement and reinforcing water governance in catchments and conservancy areas.

LINKS

Brazil

- The SISAR model in Ceará State:
 - https://scioteca.caf.com/bitstream/handle/123456789/918/Agua potable y saneamiento en la nueva ruralidad de América Latina.pdf?sequence=7&isAllowed=y
- Also on the SISAR model in Ceará State: https://www.gwp.org/globalassets/global/toolbox/case-studies/americas-andcaribbean/brazil.-an-innovative-management-model-for-rural-water-supply-and-sanitation-inceara-state-411-spanish.pdf
- The SISAR project: http://sisar.org.br/institucional/#nossa-historia

Ecuador

- Website of ASOJAAPA (the Association of Drinking Water and Sewage Boards): http://asojaapa.nativeweb.org/servimos.html
- Fundamental law on water resources and supply: http://www.regulacionagua.gob.ec/wpcontent/uploads/2019/06/Ley-Orgánica-de-Recursos-Hídricos-Usos-y-Aprovechamiento-del-Agua.pdf

Honduras

- First national meeting of AJAAPs: https://ptps-aps.org/wpcontent/uploads/2017/12/Primer-Encuentro-Nacional-AJAAPS2017R.pdf
- AHJASA website: https://www.ahjasa.org/

6. INFORMATION REPORTING

DESCRIPTION

Informed decision-making depends on the reporting of information and on better systems for monitoring and inspecting compliance with regulatory processes. This, in turn, assures better accountability and reporting between players (consumers, service providers, the regulator, decisionmakers and others). Processes and decisions become more transparent. Considering the features of rural areas, it is necessary to adopt innovative strategies which overcome the challenges of remoteness, such as the use of new ICT and enabling consumers to take part in inspection processes and information reporting.

EXAMPLE 1: MEXICO

Since 2011, Mexico has developed a platform for monitoring the development and performance of the rural water and sanitation sector. The aim is systematically gathering reliable sector information. Known as the Rural Water and Sanitation Information System (SIASAR), the platform has relied on the support and assistance of the World Bank, the Swiss Agency for Development and Cooperation (SDC), the International Water and Sanitation Centre (IRC), the United Nations Children's Fund (UNICEF), the Spanish Agency for International Development Cooperation (AECID), Water for People, the Interamerican Development Bank (IDB) and others.

By 2022, SIASAR had been, or was being, rolled out to 11 countries of the LAC region (Bolivia, Brazil, Colombia, Costa Rica, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru and the Dominican Republic). In Mexico, this included Oaxaca, considered one of the country's poorest states. SIASAR has been instrumental in gathering information from 133 communities about their service levels. This is condensed into 60 performance indicators, from various perspectives: community, water distribution system, service provision and provision of technical assistance. This information leads to classification of each community's performance level into four categories: A. Service in working order; B: Problems which the community is able to solve; C. Service needing external attention and support; or D. Non-existent or failed service requiring external finance and thorough redevelopment.

The bodies which have led this process in Oaxaca are: the State Water Commission [Comisión Estatal del Agua] and the Finance Secretariat SEFIN. Academic analysis of the experience of Oaxaca State has prompted the following recommendations:

- Subjectivity may be a problem in the information compiled from the questionnaire, which assesses performance from the community perspective, because it depends directly on the community leader and a household survey is not mandatory (this is an option).
- System does not include user views on the service in terms of infrastructure.
- SIASAR is a snapshot of the state of services in communities at a given moment; the challenge lies in periodic updating of this information by the responsible institutions.

In 2022, SIASAR updated the concept underlying the tool by a process of participation led by the World Bank and SIWI. This entailed some field trials. The process of redefinition and improvement of the set of performance indicators and indices led to SIASAR version 3.0. This version aligns the SIASAR indicators with the global monitoring frameworks such as the Joint Monitoring Programme (JMP) for Water Supply Sanitation and Hygiene. This converts SIASAR into a suitable tool for measuring SDGs 6.1 and 6.2.

The questionnaires have also been extended to apply the tool beyond the LAC region, adjusting its precision and simplicity and differentiating the analysis in schools and health centres.

EXAMPLE 2: COSTA RICA

Costa Rica's communal water distribution system administrators [ASADAS] are responsible for managing around 2000 water systems serving approximately 30% of the Costa Rican population. Many ASADAS reveal limitations in their service management, due to low levels of technical and administrative capacity. Their compliance with their obligations to supervisory bodies and regulators, including periodic reporting of information, is also limited.

From 2015 to 2018, the Water Resources Centre for Central America and the Caribbean at the National University of Costa Rica (Hidrocec-UNA) teamed up with the Costa Rican Institute of Water Distribution and Sewage Systems (AyA), the national reference body, to develop a project for reinforcing the capacity of a group of 34 ASADAS, identified as highly vulnerable. This entailed implementing best practices and techniques, training and innovation in community water management. One aim of the initiative was to improve the processes of gathering service quality information and feeding this back to the municipalities, so that the right technical assistance could be given, and service to the public assured.

During the project, surveys were conducted to obtain information, using a single form specific to the features of the ASADAS. A team of researchers visited each ASADA and achieved their objective of obtaining the information required by the national reference body. They gave guidance to the ASADAS on how to improve their internal information gathering processes, how to manage this, and the processes of feedback to the requesting bodies. The project detected that the information forms are very lengthy, with some repeated or ambiguous questions. This may impair the quality of the information reported. It is therefore necessary to simplify the reporting and analyse the relevance of the requested information, to facilitate the information management process and motivate the ASADAS.

EXAMPLE 3: COLOMBIA

The Colombian water regulator, CRA, has devised a specific method of formulating tariffs for providers of public domestic water and sanitation utilities which serve up to 5000 consumers in urban areas or which serve rural areas, irrespective of consumer numbers (Resolution CRA 825 of 2017, incorporated in Resolution CRA 943 of 2021).

Diagnostics carried out by the CRA concerning this regulation found that only 11% of the 2810 utilities registered with SSPD, the body responsible for monitoring and control, had reported information about their application of the regulated tariff plan. There were multiple reasons for this, including: (i) utilities low technical, administrative and financial capacity; (ii) unfamiliarity with industry rules and regulations; and (iii) complexity in the formulation of tariffs. As a general consequence of all of the above, utilities serving small municipalities and rural areas do not report properly, if at all.

The CRA has developed a Strategy to Drive Participation and Regional Presence. This has the twin aim of promoting understanding and proper application of the tariff frameworks and improving the reporting of information about them to the national regulators. In 2022 the CRA implemented "The CRA Gymkhana," an innovative strategy which seeks to facilitate knowledge transfer under Resolution CRA 825 of 2017.

In general, the Gymkhana is an activity where those present have to form teams, run a race in stages, complete tasks and overcome challenges, accompanied by the CRA team, depending on their understanding of how to apply tariff methods.

In addition, the CRA devised a free virtual workshop on regulation which used modules and plain language to improve understanding and correct application of tariff frameworks and the reporting of information to the regulator. More than 1500 people took part in this workshop in more than 350 municipalities.

SSPD is also working to improve information reporting, by simplifying the reporting for the Single System of Indicators (SUI) for rural areas. The number of performance indicators has been reduced, and the language simplified. Linked to this technical aspect of the information gathering tools, workshops are being held at regional level to train community providers and raise their awareness, show them the new tools and encourage them to understand and use them. The Stockholm International Water Institute (SIWI) has participated in the design and facilitation of some of these workshops, jointly with SSPD's Rural Development team.

EXAMPLE 4: PERU

In Peru, about 24,000 communal organizations exist to provide water and sanitation services, mainly in rural settlements. This situation has caused great difficulty to the regulator, the National Superintendency of Sanitation Services (SUNASS) in its duty of oversight of these utilities. SUNASS has to collect and process a large volume of information for use in its fulfilment of its duties and objectives, not only in terms of supervision, but of improvement in the performance indicators for public services. Thus, one of the challenges which the Peruvian regulator has faced has been to develop information systems which not only function as a database but also as a tool of activity planning, execution and evaluation.

SUNASS has various information systems at its disposal to gather and process information on water and sanitation utilities operating in rural areas and small municipalities. The two main systems are the Municipal Technical Areas Information Registration System (ATM) and the System of Separate Rural and Urban Monitoring of a Sanitation Service provider (EPS). SUNASS administers both systems, the purpose of which is to provide information which enables proper planning of supervisory activities for providers and municipalities, and the respective files. In this regard, the following functions of these systems can be highlighted:

- Six-monthly reports cover general information, system types, service quality, billing, income, payment arrears, capacity reinforcement and municipal assessment of the utility's management.
- The reports are used to calculate the indicators applied in national performance programmes such as the Municipal Seal Programme, which rewards municipal management in various areas, including public services.
- Reports dealing with inspection work and the related files ae used to assess improvement and recommendations made to each utility, and to proceed with rural benchmarking exercises.

It should be emphasized that many of the reports, indicators, graphs and tables are accessible to the public for use free of charge. Thus, the different systems may interact through common codification and master tables which link the existing information and facilitate the generation of more substantial indicator and reports, to assure much more efficient supervision and monitoring.

LINKS

Mexico

- UNESCO document: https://unesdoc.unesco.org/ark:/48223/pf0000383912
- CAF document:

https://scioteca.caf.com/bitstream/handle/123456789/918/Agua_potable_y_saneamiento_en la nueva ruralidad de Am%C3%A9rica Latina.pdf?sequence=7&isAlloed=y

- Universitat Politècnica de Catalunya thesis: https://upcommons.upc.edu/bitstream/handle/2117/170785/Treball%20de%20Final%20d e%20M%C3%A0ster.pdf
- SIASAR website: https://globalsiasar.org/

Costa Rica

Article "Gaining systematic experience in reinforcing the capacity of communal water distribution systems (ASADAS) in Santa Cruz, Abangares, La Cruz and Nicoya": https://www.revistas.una.ac.cr/index.php/dialogo/article/view/14762/20443

Colombia

- CRA diagnostics for small utilities: https://www.cra.gov.co/sites/default/files/documents/2022-06/Bases%20NMT%20pequen%CC%83os%20prestadores%20AA_28jun2022.pdf
- CRA news portal: https://www.cra.gov.co/prensa/noticias/prestadores-pequenos-rurales-del- $\underline{segundo-segmento-acueducto-alcantarill} ado-participan-actividad$

Peru

- SUNASS virtual conference: https://www.youtube.com/watch?v=Gqi C7sETOO
- SUNASS information system: https://aplicaciones.sunass.gob.pe:8080/RegistroATM/indicadoresATM.html

7. COORDINATION BETWEEN INSTITUTIONS

DESCRIPTION

The presence of institutions in rural areas is limited, especially in the most remote areas. Generally, municipalities have few human and financial resources to serve rural areas properly. The percentage of the population who live there is small, and the logistics for implementing activities are generally more complex and expensive. This limited presence requires closer coordination with other institutions and organizations present in the area, and with the national regulatory bodies. This makes it possible to make the regulations known and monitor compliance with them. It also ensures more efficient functioning of the channels of communication between institutions, strengthening relations between them and assuring service quality. Also important is liaison with other sectors working in rural areas, with community development objectives, to pool efforts and achieve economies of scale.

EXAMPLE 1: NICARAGUA

In May 2010 Nicaragua passed a Special Law on Drinking Water and Sanitation Committees (CAPS), the purpose of which is to establish arrangements for the organization, formation, legalization and functioning of CAPS in Nicaragua. Under Law 722, the Nicaraguan Institute of Drinking Water Supply and Sewage Systems [Instituto Nicaraqüense de Acueductos y Alcantarillados – INAA] and the Nicaraguan Drinking Water Supply and Sewage Systems Company [Empresa Nicaragüense de Acueductos y Alcantarillados Sanitarios – ENACAL] will give technical advice and training to the CAPS to ensure that they operate and function in accordance with their objectives.

Further to this requirement, a number of projects are under way to improve the quality and continuity of water supply in rural areas. Various players are involved to make the implementation more efficient and the result more sustainable. For example, the Sacuanjoche CAPS has coordinated its management with the NGOs and the community. This has enabled the Municipal Water and Sanitation Unit [Unidad Municipal de Aqua y Saneamiento – UMAS] to link the CAPS to the Meso-American Sustainable Agriculture Information Service (SIMAS) and Living Water Nicaragua to install a water distribution minisystem with electric pump. The Los Ébanos CAPS has also sunk a well which supplies water seven days a week, 24 hours a day, under community management in coordination with the municipality and national and international organizations (SIMAS, Amigos For Christ, and UMAS).

On the other hand, the Technology for Sustainable Water Resource Management (TGSRH) starts by improving water governance and coordination of action and responsibilities between the municipality, the CAPS, governmental authorities and civic organizations. Work according to this structure has led to support for the drilling of two new wells and improvements to water systems, by direct investments cofunded by 12 mayors' offices, the TGSRH project, community and international and national organizations. Investments have also been made in improving water quality, following the delivery of batching pumps, tablet chlorinators, stocks of consumables (chlorine) and filters for families with adults and disabled people.

There has been coordination between players such as the municipalities, governmental authorities, service providers, national institutions, organizations of civil society and international organizations. This has enabled projects to go ahead to upgrade the technology of the drinking water service, meet the minimum quality requirement and ensure continuity of service. Once it obtains these resources and implements the technological upgrades, the community has the capacity to continue proper maintenance of the system to maintain water quality.

EXAMPLE 2: COLOMBIA

Colombia's Law 2056 and National Decree 1821, both of 2020, deal with the general rules on the cycle of public investment projects likely to be funded with resources from the General Resources System (SGR). The investment projects must be designed by the methods defined by the Colombian National Planning Department [Departamento Nacional de Planeación - DNP], which administers the SGR database of investment projects. Department DNP also verifies compliance with the guidelines on the stages of formulation and presentation, viability and registration, prioritization, approval and execution, and with the approaches adopted by the SGR's Governing Committee.

National Decree 1821 of 2020 also requires investment projects to be resourced by direct allocations of funding or by regional investment to be submitted to the planning secretariats of the relevant department, municipality or Autonomous Regional Corporation (CAR), or those acting in lieu of them, for the geographical area or corporation which stands to benefit from the resources.

Bogotá Capital District has assigned operational responsibilities for Bogotá's General Royalties System to the District Secretariats for Planning and for Treasury. It has ordered the Planning Secretariat to review and verify the requirements for projects for SGR funding, and to refer projects eligible for System finance to the Joint Administrative and Decision-Making Body [Órgano Colegiado de Administración y Decisión -OCAD]. Parallel to this, Bogotá Capital District has ordered its District Treasury Secretariat to supervise, coordinate and follow up the accounting, budget and financial allocation of the public investment using SGR resources between central government and the centralized and decentralized bodies of the Capital District.

Pursuant to these orders, applications were submitted to the SGR for allocation of regional investment resources, by compiling a project for "Improvement of the Drinking Water Treatment Systems of Community Utilities in the rural part of Bogotá Capital District."

These resources led to an improvement in drinking water purification processes to improve the quality of water in the target community distribution systems. This included supply and installation of technology: disinfectant production equipment (chlorine) was installed to treat the drinking water. This operates with renewable energy (solar). Metering and control valves were delivered and fitted for the correct processing of the water. These pose little risk for human consumption.

EXAMPLE 3: ECUADOR

The Drinking Water and Sewage Board (JAAP) of Santa Cecilia, in Sucumbíos Province, in Ecuador's northern Amazonia Region, was serving 80 households in 2008 and 360 households in 2020. This reflects how the system has grown to keep pace with the actual population. To achieve this expansion of service coverage, it was necessary to identify the need to capture water from new springs and wells meeting the growing demand, given that the main spring was insufficient. Once the JAAP had identified this need, a resourcing process began. Resources came from the Ecuadorian Sanitary Works Institute [Instituto Ecuatoriano de Obras Sanitarias – IEOS] and authorities such as the Cantonal Devolved Autonomous Government and the International Organization for Migration (IOM). In the same way, the mayor's office of Lago Agrio, through the Lago Agrio Public Municipal Drinking Water and Sewage Company, EMAPALA EP, offered resources for the increase in capacity.

Coordination and partnerships between community organizations, private companies and the state bodies with a public sanitation obligation, enable community organizations to obtain the required resources to connect new users and enlarge or extend drinking water supplies in rural areas. Thus, the organization of activities and the development of channels of communication between organizations and public bodies can facilitate access to these resources. Finally, one factor to bear in mind, when extending coverage, is to make sure that new households or users of the community water management system are aware of the board's activity and gain a sense of belonging to the organization, in accordance with the community's vision for, and connection with, water.

LINKS

Nicaragua

- Regulatory context of access to water and sanitation in Nicaragua: https://docstore.ohchr.org/SelfServices/FilesHandler.ashx?enc=4slQ6QSmlBEDzFEovLCuW51ul 9l9m7seQKKrd9UyAE3ofHPNCRzKsCpelvvlTPYCWTT36Pbs5he7nNBT0q1z3hF%2FVhXpeyAE66g KaTsDGb8XmJhrOUPDlTi8y1co70DT
- Water quality in Nicaragua: https://caps- nicaragua.org/media/adjuntos/Calidad de Agua Nicaragua.pdf
- TGSRH project: https://caps-nicaragua.org/noticia/gobernanza-del-agua/
- Good practices with detail of projects in the CAPS: https://capsnicaragua.org/media/adjuntos/20052BuenasPracticasFinal.pdf

Colombia

- Information on the project to improve drinking water treatment systems in rural communities of the Capital District:
 - https://regaliasbogota.sdp.gov.co/es/proyectos/fdr/2021011010002/general
- Decree 228 of 2021: https://regaliasbogota.sdp.gov.co/sites/default/files/proyectos/2021-10/Decreto 228 de 2021.pdf

Ecuador

- Compendium of good practices in the community management of water: https://esfcat.org/wp-content/uploads/2020/04/BUENAS-PRACTICAS-GESTION-COMUNITARIA-AGUA.pdf
- EMAPALA website: https://emapala.gob.ec/repotenciacion-para-la-planta-de-agua-en-santacecilia/

8. NON-ECONOMIC INCENTIVES

DESCRIPTION

Drinking water and sanitation services in rural areas are complex to manage. Incentives are needed to ensure the universal availability, quality and sustainability of the services. These are not always economic incentives. They may relate to other aspects, such as technical assistance with the infrastructure construction and improvement, streamlining of administrative processes, training and courses in improving service operation and maintenance, prizes and awards for improved management, and others. The incentives may be managed at municipal or national level. What matters is to ensure that community providers are aware of their existence and, potentially, eligible for them.

EXAMPLE 1: PERU

The Sanitation Service Boards [Juntas Administradoras de los Servicios de Saneamiento – JASS] in Peru are governed by Law 27972 which allows the provincial and district municipalities to manage the drinking water and sewage utility, either directly or under concession to the JASS. The JASS are formed for the purpose of managing, operating and maintaining the sanitation services. They are community-elected and serve on a voluntary basis. Peruvian Supreme Decree 023-2005-VIVIENDA prescribes the requirements for registration of these organizations so that they can be formally recognized as sanitation utilities.

In 2009 Law 29332 launched the Programme of Incentives to Improve Municipal Management. One of its aims is to simplify procedures, leading to more businesslike conditions and opening up to local competition. Another aim is to improve the provision of local public services by local government. For this purpose, streamlined procedures were established for achievement of goals and allocation of resources. If the municipalities fall short of any of their set targets, they do not receive the funds associated with the achievement of that target.

This Law seeks to improve the effectiveness and efficiency of public spending. It offers an incentive to rural utilities to gain formal recognition. It sets, as one of their objectives, that they should form and register JASS in their first years. They must also improve their services, including targets for registration of their operational and maintenance activities. Efforts for chlorination of drinking water systems are a priority.

Incentives, designed as medium to long-term goals, give the organizations providing public water services and community sanitation a greater interest in getting financial resources to improve their management. As a result, they obtain formal recognition. They also have more incentives to improve the service they provide in rural areas, by investing in JASS which have completed their registration, and pursuing initiatives to achieve their targets.

EXAMPLE 2: BOLIVIA

A review of 20 years of progress in the drinking water and sanitation industry in Bolivia was presented in 2018 as part of the National Water and Sanitation Strategy for Rural Areas and Small Localities. The conclusion was that one of the challenges facing the Drinking Water, Sewage and Sanitation Utilities (EPSA) serving small localities with fewer than 2000 residents or rural areas is the failure to charge tariffs structured in accordance with legal principles. In 70% of the cases assessed, lower tariffs were being paid than are prescribed in the regulated tariff structure. This was due to decisions made by the general meetings of users of each EPSA.

The plan under the National Strategy is that, as part of their duties of technical assistance, municipalities must receive a letter, signed by the authorities, from the EPSAs working in rural communities and small localities. They must also be given a breakdown of tariff payments by households and a statement of income and expenditure, showing that there are no arrears. EPSAs which can demonstrate that their tariff payments are not in arrears will be rewarded with a prize. This may consist of an internship for their members with a better-run EPSA or a certificate awarded by the Water and Sanitation Inspectorate (AAPS) for being an efficiently managed EPSA. The internships seek to motivate EPSA members or officers to charge the regulated rates.

To supplement the above, processes of social communication of tariff structures to the community must be followed before they are adopted, to reduce public opposition when the time comes to pay the tariff.

If the tariff is introduced after construction of a new water or sewage system, it is thought relevant that the municipality should supervise compliance with payment of the approved tariff because it has been shown, in many cases, that users reduce the tariff amount at the time when the new EPSA takes over responsibility for administering the service.

LINKS

Peru

- Law 29332/2009:
 - https://www.munimoguegua.gob.pe/sites/default/files/archivos/pb/1 ley 29332 creacion de incentivos.pdf
- Procedure for meeting targets and assigning resources: https://www.munimoquegua.gob.pe/sites/default/files/archivos/pb/2 decreto supremo 394 2016 ef.pdf
- Analysis of results of standard: https://revistas.uniandes.edu.co/index.php/rdi/article/view/7487/7886

Bolivia

- National Water and Sanitation Strategy for Rural Areas and Small Localities: https://sihita.org/wp-content/uploads/2022/03/DOC059.pdf
- Law 2066/2000: https://sea.gob.bo/digesto/CompendioII/O/160 L 2066.pdf
- Guide to tariff calculation: https://thewashroom.waterforpeople.org/wpcontent/uploads/sites/2/2019/09/Sostenibilidad-Servicios-Saneamiento-Modulo-4-Calcular-Tarifas-Bolivia-Feb-2018.pdf

9. ECONOMIC INCENTIVES AND OTHER SUBSIDIES

DESCRIPTION

Among the incentives available to management, one which stands out is the promotion of ways to make utilities economically and financially viable. This includes the offer of subsidies which, when added to affordable rates, open up these services especially to the most vulnerable populations. Common measures include government subsidies for infrastructure, operation and maintenance so that the rates become affordable; rates structured in incremental blocks with a highly subsidized first block (e.g. up to 7 m³) to meet basic subsistence; cross-subsidies between major urban corporations and other service providers; subsidized rates for specific population groups, etc.

EXAMPLE 1: CHILE

Chile launched a Programme of Subsidy for Payment for Consumption of Drinking Water and Wastewater Treatment Service (SAP) via Law 18.778 of 1989. The Law subsidizes rates for drinking water consumption and use of the wastewater treatment service up to a monthly drinking water consumption figure of 15 m³. The percentage subsidy of standing charges and variables cannot total less than 25% or more than 85%. It must be equal for consumers in the same region who are subject to the same maximum rates and are of similar socio-economic class.

The Subsidy Programme has implemented various changes to sharpen the focus of the criteria and broaden the scope of the subsidies. This means beneficiaries are genuinely residents living in vulnerable socio-economic conditions. Indeed, since Law 19.338 of 1994, the SAP subsidy has extended to rural drinking water systems. It is pointed out that, in 1995, the percentage monthly subsidy of the first 15 m³ was 30%, but since 1996 this percentage has risen to 50%.

Later, the government added support programmes for very vulnerable households called *Chile Solidario* (currently cancelled) or Subsistema Chile Seguridades y Oportunidades [Chile Subsystem Safeguards and Opportunities – SSOO]. Beneficiaries, in both urban and rural areas, are eligible for a monthly 100% subsidy of their first 15 m³ consumed. This means the percentage subsidy to be granted varies according to whether the beneficiary is an SSOO member.

Important note: the award of benefits under SAP is not automatic. The beneficiary must apply for them and meet the requirements. A key requirement is to be up to date with payments to the rural drinking water utility. Eligibility is temporary (three years) and not automatically renewed, so a beneficiary must prove again, on renewal, that they still meet the requirements. Finally, the subsidy may be forfeited if payments of the unsubsidized portion of the rates fall short for three consecutive months. This factor is considered relevant to instil a sense of responsibility and encourage rational use of the resource by user beneficiaries.

EXAMPLE 2: DOMINICAN REPUBLIC

In the Dominican Republic, rural water and sanitation services are provided through rural community water associations [Asociaciones Comunitarias de Agua Rural – ASOCAR], other community organizations or the National Drinking Water and Sewage Institute (INAPA), the state body responsible for planning, coordination, advice, design, building, supervision, maintenance and administration of water and sewage systems.

The existing systems are generally pumped (e.g. 80% of INAPA-operated systems are pumped). The associated costs are high. In the cases of the community associations and organizations, each system has set rates to cover at least operating and maintenance costs. However, the high cost of energy in pumped schemes prevents recovery of those costs through the rates, especially in the most vulnerable communities.

Due to high electricity costs of pumped systems, in most cases INAPA or another institution has to subsidize this item. Supplementing this, the National Energy Commission [Comisión Nacional de Energía – CNE] has carried out projects investing in the INAPA water systems, aiming to reduce the power consumption involved in pumping, based on technology replacement to save these consumption costs, which vary between 25% and 40%.

EXAMPLE 3: EL SALVADOR

In 1998 Decree 354 was issued. This contains the Law on the National Electricity and Telephony Investment Fund (FINET). Known as the FINET Law, it allotted the following responsibilities to the Fund:

- to subsidize infrastructure building and improvement of the electricity supply and telephone services in low-income rural areas
- to subsidize electricity consumption and telephone services in low-income rural areas, provided such utilities are of communal benefit; and domestic electricity consumption. Consumption of communal benefit means that electricity is used for water collection projects, pumping and repumping.

Later, in 2010, the Fund entered into an agreement with the National Aqueducts and Sewers Authority (ANDA), the state entity responsible nationwide for capture, production and distribution of water for human consumption and for wastewater treatment. The purpose of that agreement was to implement a strategy for the management of drinking water and basic sanitation systems in urban and rural areas, and to implement mechanisms to make those systems sustainable.

Within the framework of that agreement, established by the FINET Law, rural communal associations providing water and sanitation utilities have gained subsidies for the electricity consumption involved in water extraction, pumping and repumping projects. These vary between 61% and 72% of the total energy invoice cost. The subsidies significantly cushion the impact on rates payable by users. To make the subsidy effective, the following criteria had to be met: a) the association had to have legal status; b) it could not be in receipt of any similar subsidy; c) it had to undertake to provide the requested information to FINET and FISDL; d) efficient use of electricity; e) community benefit (the electricity consumed by the drinking water system must be used for the extraction, pumping and repumping of water for community consumption).

One of the identified success factors in such subsidy grants was the need to make them conditional on fulfilment by the beneficiary of certain requirements. A key aspect among these was to provide information to the Fund, maintain certain minimum levels of energy efficiency in their working installations and draw up improvement plans, monitored annually, to justify the benefit granted. These conditions mean the beneficiaries not only receive the subsidy but move forward with the implementation of good operating and business management practices.

EXAMPLE 4: COSTA RICA

The ASADAS Regulation establishes the legal parameters for the engagement of these water and sewage management associations. It describes their duties and obligations and those of the Water and Sewage Institute (AyA). It also provides the mechanism for delegation, whereby ASADAS must sign the agreement with AyA authorizing them legally to provide the water and sanitation utility in their communities.

Many ASADAS associations lack the economic resources to carry out work like that done by AyA; indeed, they do this work for free. Their infrastructure is obsolete, needs renewal and is extremely expensive to maintain. Hence the payment of contributions may make their own work, and their desire for legal recognition by AyA, more difficult.

Costa Rica has recognized the economic plight of the ASADAS and the important work they do for the wellbeing of so many Costa Rican communities. Thus, in 2009, an ASADAS Exemption Law was passed (no. 8776), with the purpose of boosting the funding of ASADAS and facilitating procurement of goods and services which make the effective operational management of communal water and sanitation systems sustainable. Moreover, this Law declared the management of ASADAS to be in the public interest, as associations increase the sustainable development and welfare of the communities. That Law exempted the ASADAS from paying stamp duty and fees, sales tax, general levy, selective consumption tax and duties on imports of vehicles, equipment and working materials.

Law 10075 of 15 December 2021 amended the Exemption Law. It reaffirmed the purpose of Law 8776, exempting ASADAS from the levy payments in force at that point in time: effluent levy, environmental levy and regulation levy, which have different legislative bases. It therefore reworded Article 3 so that the purpose of this Law – that ASADAS are liable to no levy – was no longer open to interpretation by any of the institutions involved: the Ministry of the Environment and Energy or the Public Service Regulation Authority.

LINKS

Chile

- Study assessing the SAP programme: https://www.dipres.gob.cl/597/articles-163133 r ejecutivo institucional.pdf
- Web portal of the state multi-service network: https://www.chileatiende.gob.cl/fichas/51314-subsidio-al-pago-de-consumo-de-aguapotable-y-servicio-de-alcantarillado

Dominican Republic

- Document of the Central American and Dominican Republic Water and Sanitation Forum (Focard-APS): https://www.sica.int/download/?103112
- ACENTO news portal: https://acento.com.do/el-financiero/arriba-tambien-el-costo-aguapotable-inapa-confirma-aumentos-en-sus-tarifas-9070907.html
- HOY news portal: https://hoy.com.do/usaran-energia-bajo-costo-para-acueductos/
- EL CARIBE news portal: https://www.elcaribe.com.do/sin-categoria/agua-servicio-publicoinundado-por-subsidios-generales/

El Salvador

- Decree 354/1998: https://www.jurisprudencia.gob.sv/DocumentosBoveda/D/2/1990-1999/1997/03/888AF.PDF
- Social Investment Fund document: https://www.transparencia.gob.sv/institutions/finetfisdl/documents/449852/download
- PowerPoint document of the National Energy Council: https://usea.org/sites/default/files/event-/ELEC.%20RURAL.pptx
- Opinion of the Legislative Assembly: https://www.asamblea.gob.sv/sites/default/files/documents/dictamenes/9D6F4255-2EE8-48A3-B232-F4B5CB51A9F6.pdf

News from Diario Co-Latino: rate payment exemption: https://www.diariocolatino.com/organizaciones-sociales-piden-exoneracion-de-cargo-porextraccion-a-juntas-de-agua/

Costa Rica

- Law 8776/2009:
 - http://www.pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm_texto_completo.aspx?para m1=NRTC&nValor1=1&nValor2=66583&nValor3=78384&strTipM=TC
- Decree 36064-II: https://faolex.fao.org/docs/pdf/cos95628.pdf
- Draft law: https://d1qqtien6gys07.cloudfront.net/wp-content/uploads/2021/03/22011.pdf

10. INTEGRATED WATER RESOURCE MANAGEMENT

DESCRIPTION

Climate change affects all human activities. It also has an impact on drinking water and sanitation utilities, especially in zones which are more vulnerable or more exposed to adverse weather events. Deforestation, the discharge of untreated effluent into bodies of water and, in general, mis-management of the water resource jeopardize the quality of the community systems on which the drinking water supply depends.

In light of these challenges, regulatory frameworks in rural areas must include water resource management. The environmental and climate aspects of service provision must be incorporated into the regulations and in the arrangements for oversight, monitoring and control. Criteria of adaptation and mitigation of climate change and other environmental risks must be included. Such organizations must recognize the importance of safeguarding, restoring and sustainably managing ecosystems. The goal is to increase the resilience of these ecosystems, to create capacity to meet societal needs, safeguard biodiversity and enhance overall human wellbeing. Government institutions hold a vital role in this regard, operating both at the national level through the creating regulations and at the local level by providing technical assistance. This multi-level approach aims to realize the objectives of conservation and the sustainable, resilient management of water resources.

EXAMPLE 1: ECUADOR

The 2008 Constitution made a Single Water Authority [Autoridad Única de Aqua – AUA] responsible for the planning and management of Ecuador's water resources. The emphasis was on the need for state authorization for the water supply to all sectors.

The Fundamental Law on Water Resources, Usage and Supply (LORHUyA) allocates the following mission to AUA:

- o to grant permits for all water uses and supplies
- o to grant legal status to drinking water boards
- to maintain and update the Public Water Register.

The Law especially requires providers of water-related public services to be entered in the Public Water Register, including community systems. Permits for water use and supply and for effluent issued by the National Environmental Authority must also be entered on the register.

Accordingly, and based on Agreement 2018-0194 – Instructions for Optimization of Processes Performed by Community Water Organizations at the Water Secretariat - the government has defined the requirements for granting water usage and/or supply permits. There is a simplified procedure for drinking water and sanitation boards and sewer and/or drainage boards, collectives, communal organizations, communities, villages and indigenous nationalities, Afro-Ecuadorean and ethnic Montubio settlements, councils and other forms of community water organization. For 2021, the Public Water Register holds information on 2372 drinking water boards.

The first requirement is to have a username and password at the Public Water Registry. This is to encourage both the legalization of permits for water use and/or supply and the reporting of information associated with these permits in the Public Water Register, by community organizations. Currently the permits in question are processed at the Ministry of the Environment, Water and Ecological Transition (MAATE).

EXAMPLE 2: COLOMBIA

ACUABUITRERA ["water for Buitrera"] is a not-for-profit community organization providing drinking water and basic sanitation in the rural district of La Buitrera in Valle del Cauca, Colombia. It also exists to promote and conserve the environment. It has understood the need to eradicate unsustainable practices from water resource management, which has inspired it to develop a series of initiatives to adapt to climate change and adapt to its impacts.

ACUABUITRERA has developed a reafforestation programme which has a direct and positive impact on the ecosystem from which the water supply comes. It has run courses on environmental themes, with the involvement of various players and residents of the zone they serve. The programme has enabled players to recognize the importance of the services provided by the company and how they relate to the ecosystem.

In liaison with the Public Health Secretariat in its zone of influence, ACUABUITRERA has introduced a project entitled "Defending the Natural Resources of La Buitrera Rural District." Its goals are proper management of community assets, and to buy land where water can be conserved for the community.

Well-managed investments, put together with a focus on nature-based solutions, have yielded tangible results in the medium term. Ecosystem reinstatement initiatives, combined with proper management of water resources, are yielding long-term benefits and offering safe water supply to communities.

LINKS

Ecuador

- Water Law: https://www.aguaquito.gob.ec/sites/default/files/documentos/ley_de_aguas.pdf
- Decree 3327 of 1972: https://www.ircwash.org/sites/default/files/202.2-92LE-16136.pdf
- The "LORHUYA" Law: http://www.regulacionagua.gob.ec/wp-content/uploads/2019/06/Lev-Org%C3%A1nica-de-Recursos-H%C3%ADdricos-Usos-y-Aprovechamiento-del-Agua.pdf
- Agreement 2018-0194: https://faolex.fao.org/docs/pdf/ecu184190.pdf
- Web portal of the Single Environmental Information System: http://suia.ambiente.gob.ec/?page id=750
- Public Water Register: http://rpa.ambiente.gob.ec/senaguaweb/pages/public/consultaPrestadoresComunitariosAPvS.xhtml

Colombia

- Corporate website of ACUABUITRERA: https://acuabuitrera.com/
- Video of the ACUABUITRERA experience: https://www.youtube.com/watch?v=rQGaAvqMQuw

11. ACCOUNTABILITY AND USER PARTICIPATION

DESCRIPTION

The active involvement of users in regulatory processes, whether on an individual or collective basis, is crucial for the successful adoption of standards and the realization of desired regulatory objectives. Appeals and penalties must not be the only focus of these channels of participation. They must also include processes for the improvement of regulation (participation in discussion and finalization of regulations, raising of user awareness, and other processes).

Community organizations generally consist of people from the communities they serve. The technical support offered to them is therefore essential to strengthen their involvement in the management of sanitation services and fulfilment of the duties allocated to them for the administration and operation of those services. It is also vital as a channel of user participation, which makes it possible to assure and improve the quality of services.

EXAMPLE 1: PERU

The communal organizations in Peru which provide water and sanitation in rural areas are bound to calculate and set a household rate which should at least cover their costs of administration, operation, maintenance, equipment replacement and infrastructure repair.

This obligation has existed since Supreme Decree 023 of 2005 and Resolution 207 of 2010 of the Ministry of Housing, Construction and Sanitation. However, it was regulated in detail in 2018 by the Sanitation Superintendency, whose Resolution 28-2018-SUNASS-CD defined the Methods of Pricing the Household Rate for Sanitation Services Provided by Communal Organization in centres of rural population which have no more than 2000 residents.

Despite publication of the methods of pricing the household rate, one of the main challenges facing SUNASS is to ensure that communal organizations set their rates in accordance with the regulation. Generally, in fact, they have not complied with the criteria either of the previous regulation (pre-2018) or of the current one. One example of this situation is Asunción, a district which had 50 organizations in 2013, of which 98% were charging rates, mostly in breach of the regulatory criteria. This meant they did not recover the costs of providing the service.

Since 2013, Water For People has been working in the north Peruvian districts of Asunción, Cascas and Reque, to apply a model of reinforcement called "Total Coverage for Ever". This seeks universal access to sustainable water and sanitation services.

Within the scope of Water for People's intervention, in tandem with SUNASS and the municipalities, a capacity reinforcement process was carried out. This benefited the 101 communal organizations present in the three districts. The result was to compile and validate a methodological pathway suited to the context of these districts and enabling them to calculate, adopt and collect the household rate, following the SUNASS methods.

The main results have been that 96% of organizations have calculated their household rates following the SUNASS methods. Similarly, 66% of organizations have been able to adopt the fixed rate at their respective meetings. At these meetings, users play a key role in agreeing how to calculate the rates, what implications the calculated figure has for the operation of the system, and its impact on their health, the environment and their economy. Thus, in Asunción district, in 2017, 37% of organizations were charging rates which complied with the regulation while, by 2021, the figure was 75%.

During the reinforcement programme activities, it was found that the more users knew about the water production, operation and maintenance process, and about rate collection, the more responsible they became in paying for these services. Likewise, the municipal organizations said that the programme had helped them be better prepared for meetings where the household rates had to be approved.

Finally, the municipalities, as the authorities ultimately responsible for providing the services and tasked with providing technical support to the organizations, concluded that the methodological pathway mapped out in the project had increased understanding of the process of levy of the household rates based on the regulation.

EXAMPLE 2: COSTA RICA

In Costa Rica, the ASADAS are local associations whose members come from the communities receiving the water, sewage and sanitation services they provide.

In 2013, a manual was published entitled "Transparency and Accountability of ASADAS. Manual for Management Associations of Costa Rican Water Distribution and Sewage Systems (ASADAS)." This aimed to clarify the accountability obligation, its importance and its impact in democratic systems. It considers that these are ways of encouraging access to information about the activities carried out and facilitating conditions of participation and closeness to local people. The manual pointed out that ASADAS members and partners and the beneficiaries of the public drinking water supply and sanitation service are stakeholders to whom the ASADAS are accountable. ASADAS must therefore make arrangements to ensure transparency. The manual sets out to design indicators and means of disclosure of information compatible with six fields of management: organizational, business and commercial, operational and maintenance, environmental, risk and financial.

Later, to include accountability and reporting in the regulation, Decree 42582-S-MINAE was issued in 2020. Article 67 specifies who oversees fulfilling the accountability obligations, by means of periodic reports to the community and its bodies. Furthermore, it orders the Costa Rican Institute of Water Distribution and Sewage Systems (AyA) to provide tools and methods for ASADAS to carry out their reporting. Pursuant to that obligation, AyA drew up a model addressing the needs of ASADAS, which offers support with the effective and efficient functioning of accountability processes. This model uses an Attention Cycle which allows for processes of self-assessment, evaluation and training. After selfassessment, an improvement and efficiency plan is drawn up. This establishes strategic planning for improvements in ASADAS processes. Training in accountability and reporting revealed a need for ASADAS to have means of communication with communities, in order to report to them. The training therefore concentrated on tools of communication for implementation, including relations with local and regional media, so that this communication of reporting could be achieved.

LINKS

Peru

- Resolution 207/2010:
 - https://cdn.www.gob.pe/uploads/document/file/23903/RM 2010 207.pdf?v=1530744469
- SUNASS Resolution 28-2018-SUNASS-CD: https://www.sunass.gob.pe/wpcontent/uploads/2020/09/re28_2018cd_info.pdf
- The Water For People project: https://thewashroom.waterforpeople.org/wpcontent/uploads/sites/2/2022/08/Agenda-para-el-Cambio-Estudio-de-Caso-de-Asuncion-ESP FINAL.pdf

• LA HORA SUNASS: family rates in the sustainability of sanitation services: https://www.youtube.com/watch?v=fPEIZ7ehdWY

Costa Rica

- Manual for Aqueduct, Sewer and Sanitation Associations (ASADAS) in Costa Rica: https://www.aya.go.cr/ASADAS/documentacionAsadas/Manual%20para%20las%20ASADAS%2 0-%20Cedarena%20-%20Transparencia%20y%20Rendición%20de%20Cuentas.pdf
- Executive Decree 42582/2020: http://www.pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm_texto_completo.aspx?para m1=NRTC&nValor1=1&nValor2=92344&nValor3=122228&strTipM=TC
- Document "ASADAS capacity enhancement project": https://pnud-conocimiento.cr/wpcontent/uploads/2021/09/Informe-Cierre-ASADAS-AGO21-VF-.pdf

12. INTERCULTURAL AND GENDER-SENSITIVE APPROACH

DESCRIPTION

Regulation in rural areas requires an intercultural and gender-sensitive approach, both in defining rules and in the processes of control and application, or the provisions for user participation, and others. This approach has to consider aspects of social vulnerability and cultural specifics, such as linguistic diversity or ancestral relations with the surroundings and the water resource.

Including the gender-aware approach in community management of water and sanitation services empowers women and closes gaps and existing inequalities. Training, education and specific courses enable a community to follow new approaches which recognize women's rights and their abilities to lead and manage water and sanitation services. This includes compliance with the specific rules and regulations in rural areas.

EXAMPLE 1: NICARAGUA

Since 2010, Nicaragua has had Law 722 on Drinking Water and Sanitation Committees (CAPS) with implementing regulation. These govern the formation and functioning of CAPS. One year later, the PARAGUA initiative was launched, led by the NGO ONGAWA and with support from the Spanish International Cooperation and Development Agency (AECID). PARAGUA focused on tackling gender inequalities in rural water management, fully and systematically.

This initiative worked to incorporate the gender perspective in water and sanitation work in rural areas, concentrating on bringing about change in three areas: (i) in the collective perception of inequalities; (ii) in women's personal empowerment; and (iii) in the surroundings, including men and children, institutions, public policies and local legislative frameworks.

Among the various training experiments which took place during the initiative, it is worth mentioning the Women's Leadership School [Escuela de Lideresas] which sought personal and collective empowerment through training on topics such as the right to water and sanitation, leadership, etc. Various editions of the Women's Leadership School were held with more than 60 women from the local CAPS directorates. To graduate, women participants undertook to replicate the knowledge learned and pass it on to their communities and CAPS.

EXAMPLE 2: PARAGUAY

INDI is an independent, self-governing Paraguayan institute with legal status and its own assets. Its mission is to monitor compliance with the rights of indigenous peoples, preserving their socio-cultural identity and defending their heritage and traditions. INDI promotes policy for effective design and implementation as appropriate and with participation in the plans, programmes and projects for the wellbeing of these peoples.

The Institutional Strategy Plan 2021-2025 contains the lines of approach and strategic objectives for INDI, now and for the future. The plan is a key tool of management in responding to demand for services and to the needs of Paraguay's indigenous people. The plan is formulated according to the guidelines of the Technical Secretariat of Planning and Economic Development and is aligned with the overarching multilateral plans such as the Sustainable Development Goals, the National Development Plan to 2030, the "Vamos" [Let's go!] Social Protection System, the Jajapo Paraguay [Let's do it, Paraguay!] National Plan for Poverty Alleviation and the National Indigenous Peoples Plan.

Component 2 of the Plan is inter-institutional coordination which contributes to basic living conditions in indigenous communities, such as access to basic health, education, housing, roads and paths, electricity, water, sanitation, hygiene and natural resources.

The Paraguayan healthcare regulator (ERSSAN) also cooperates with indigenous communities to evaluate existing water systems. This evaluation forms part of the annual supervisory plans. Verification models are adapted to the conditions and features of the indigenous communities. It is important that the institutions liaise with each other to ensure access to water, sanitation and hygiene services in Paraguay's indigenous communities, taking account of the special features of this population.

EXAMPLE 3: PERU

SUNASS fulfils the function of regulating, standardizing and supervising the sanitation services provided to Peru by the utilities. This function helps people to exercise their rights and fulfil their duties. Peru identified a need for specific regulation of the rural sector in connection with the submission and handling of complaints about the water and sanitation services provided. SUNASS is responsible for this, in accordance with the powers granted to it by Legislative Decree 1280 of 2016. Within this framework, a draft regulation on complaints from users of communal organizations was written, drawing on the experience of the communal organizations in rural areas and considering their features and those of their users, partners and applicants for access to sanitation services. Account was also taken of Peru's diversity. The regulation was passed in 2022 by resolution of the Governing Council of SUNASS no. 034-2022.

The regulation establishes the scope, the intercultural approach, the particulars of the complaints system, complaint handling stages and procedure at the first and second instance. It also defines special guarantees for complainants, such as no service shutdown, information access, free complaints procedure, and others.

SUNASS has also published a manual, "How to complain about water and sewage services in rural areas." This seeks to explain the new rules both to users and community organizations. The guide is written in plain and simple language with an intercultural approach which makes it comprehensible to rural communities, including indigenous communities. It adapts processes to community knowledge and develops specific materials in local languages to facilitate understanding by indigenous communities.

LINKS

Nicaragua

- BID/ONGAWA: Right to Water and Sanitation: https://siwi2my.sharepoint.com/personal/alejandro_jimenez_siwi_org/Documents/Documents/RES/z_BIBL IO/BID ONGAWA Buenas practicas DHAS 2020.pdf
- ONGAWA: https://ongawa.org/avanzando-en-equidad-de-genero-en-la-gestion-comunitariadel-agua/
- News about the Spanish International Cooperation Agency AECID: https://www.aecid.es/fr/w/se-inaugura-la-primera-escuela-para-lideresas-de-comites-de-aguaen-nicaragua

Paraguay

- Paraguayan Institute of Indigenous People (INDI: https://www.indi.gov.py/
- Institutional Strategy Plan 2021-2025: https://www.indi.gov.py/application/files/6816/2091/3496/PE_INDI_2021-2025.pdf

ERSSAN: https://erssan.gov.py/index.php/noticias-1/noticias/presencia-del-erssan-en- comunidades-indigenas

Peru

- Regulation on Complaints by Users of Communal Organizations Providing Sanitation Services in Rural Areas: https://www.sunass.gob.pe/wp-content/uploads/2022/08/RCD-N°034-2022-SUNASS-CD_Reclamos-OC-1.pdf
- SUNASS complaint handling manual: https://www.sunass.gob.pe/wp- content/uploads/2022/11/Reglamento_reclamos_rural_web1.pdf

13. RAISING AWARENESS AND CHANGING BEHAVIOUR

DESCRIPTION

In connection with the intercultural approach, and to achieve compliance with the industry regulation in rural areas, it is important to raise the awareness of utilities and their users, and also of local and national institutions. The purpose of this awareness-raising is to change people's behaviour, encourage better conduct in individual actions and promote improvements in service governance by institutions. This leads to better quality and sustainability of the services provide.

EXAMPLE 1: COLOMBIA

The main providers of water and sanitation services in rural Colombia are community water and sanitation service organizations (OCSAS). They supply water to approximately 20,000 communities living in rural areas and on city outskirts in Colombia.

The Superintendency of Public Domestic Utilities (SSPD) launched a rural investment project in 2022. It tried to encourage users to fulfil their obligations. Within the scope of the project, SSPD held workshops on payment culture for rural water distribution systems, addressing representatives of those systems, community leaders and users.

The workshops successfully raised participants' awareness of payment culture via exercises of recognition and acceptance of water systems and their operating costs. In this regard, they held activities to identify items or components on the water systems value chain. Another activity tried to teach users to understand the challenges facing utilities in ensuring drinking water supply, investing or meeting system operating costs, and compliance with the regulations, all with limited resources due to the culture of non-payment. These workshops create better and robust water management possible in these rural areas, so that the provision of the drinking water utility is assured.

EXAMPLE 2: EL SALVADOR

In El Salvador, the water system of the Canton of Chilata, in San Julián municipality, supplies seven communities with 267 households daily. The community system had no micro-meters installed, which led to serious sustainability and management problems. The management did not know how much water the population was consuming. An unsustainable, unfair "single tariff" was introduced which encouraged water wastage and misuse.

The United Community Association for Water and Agriculture [Asociación Comunitaria Unida por el Aqua y la Agricultura – ACUA] ran the project "Access to safe water for human consumption and basic sanitation in the municipality of San Julián, Department of Sonsonate" in the Canton of Chilata from 1 January 2017 to 31 December 2018. The aim was "to contribute to poverty alleviation and improve the quality of life of the population of San Julian municipality, Department of Sonsonate, ensuring the human right to water and sanitation."

The ACUA vision centred on three main elements which helped make the project a success:

- 1. sustainability of systems with an integral vision which embraces the technical, social and economic parts;
- 2. cultural change, becoming environmentally aware and promoting a culture of water saving and care; in addition, the processes of organization and community strengthening promoted the cohesion of communities and their ability to have an impact;

3. health, working on an entire sanitation component to eliminate grey water which pollutes the environment and affects human health.

Among the results noted were the connection of 170 new households to the mains supply. The project initiatives and the labour provided by their own communities meant they now had quality water, available in quantity. Of the 150 people interviewed, 90% concluded that the quantity of water supplied was sufficient to meet their needs, and was of drinkable quality.

The installation of 80 domestic micro-meters gave information on each household's actual consumption. Rates and payments could then be adjusted to consumption (helping the economic sustainability of the system). On the other hand, it caused a positive change in people's behaviour, by giving families an incentive to save water, be careful, and use it efficiently. This saving made it possible to extend the mains supply without increasing water production. Furthermore, the institutional reinforcement process was a success, borne out by the revision of the articles of association and establishment of a new rate which made the system sustainable. This consisted of a minimum standing charge plus the respective consumption in cubic meters (in incremental blocks). Most households interviewed rated the payment system good, which in turn gave them an incentive to pay made the system financially sustainable.

EXAMPLE 3: BOLIVIA

In Bolivia, the Law on Drinking Water Services, Sewage and Sanitation (2066 of 2000) sets out one of the tariff principles, which is that the total costs of service operation and maintenance must be recovered. This must be provided by the drinking water, sewage and sanitation utilities (EPSA) which approve and apply these rates, based on agreements with the communities they serve.

The "water and sanitation programme for small localities and rural communities in Bolivia," funded by the Spanish Cooperation Fund for Water and Sanitation (FCAS) served the purpose of increasing access to drinking water and sanitation services in rural communities with fewer than 2000 inhabitants, and small localities of 2000 to 10,000 inhabitants in Bolivia. It also promoted the creation and reinforcement of utilities in those communities. The programme, which ran from 2012 to 2018, focused on rural communities in the Departments of Chuquisaca, La Paz, Cochabamba and Potosí, and on small localities throughout Bolivia. Among the programme's specific objectives were the institutional reinforcement of EPSAs, in order to generate service management capacity, and community development to give the beneficiary population effective access to services, ensure that they made proper use of them, and fulfilled their rate payment obligations.

To achieve results on the latter element, combined with raising awareness and changing people's behaviour, the activities carried out included sanitary and gender education courses, campaigns to raise awareness of service costs and the environmental and economic benefits of saving water consumption, etc. The awareness-raising activities considered the roles of men and women in household tasks and water management (bill paying, use of water) to direct households and, in turn, provide an incentive for equal sharing of resource management tasks.

The final evaluation of the programme showed that 165 EPSAs had covered their costs of administration, operation, maintenance and short-term asset replacement from their rates. Similarly, 105 EPSAs had achieved levels of recovery greater than 85%.

EXAMPLE 4: PARAGUAY

In Paraguay, the Y Kuaa Programme is funded by the Lazos de Agua programme of the One Drop Foundation and implemented by the Moisés Bertoni Foundation. In the years 2017 to 2022 it engaged with 87 rural communities and five small towns in Paraguay. Its intervention model known as "ABC"

included infrastructure building, the development of markets associated with the provision of water and sanitation services and a behavioural change element through social art.

In view of the culture of the target communities, and after analysis of the forms of social art present and of which of these would be most suitable to convey the programme's key messages, One Drop commissioned local artists to devise programmes to raise public awareness (theatre, radio, pop songs, puppets etc.). After analysis of the main challenges in the community (relating to rate payments, hand washing, water usage, acceptance of micro-meters, water source conservancy and others), One Drop offered training to the artists who were going to develop the tools and methods in the light of the sociocultural characteristics of the population.

In December 2020, the Y Kuaa Project won the SDG Paraguay 2020 Recognition award from the Paraguay Global Compact and the Development Information and Resources Centre (CIRD), with the support of the European Union.

Lazos de Agua is being rolled out to other countries in the region including Mexico, Guatemala, Nicaragua and Colombia.

LINKS

Colombia

- Background to the lack of a payment culture: http://www.vinculossociologiaanalisisyopinion.cucsh.udg.mx/index.php/VSAO/article/view/76 40/6659
- Rural investment project: https://www.superservicios.gov.co/sites/default/files/inlinefiles/1.%20Vigilancia%20Diferencial%20de%20prestadores%20rurales%20-%20Superservicios.pdf
- Project: Workshop on the Payment Culture of Rural Water Distribution Systems: https://www.youtube.com/watch?v=2MhMR0qetOA

El Salvador

Final report on the project "Access to Safe Water for Human Consumption and Basic Sanitation in San Julian Municipality, Department of Sonsonate": https://www.pazcondignidad.org/wpcontent/uploads/2019/10/IF_Evaluacion_exter_OCO302014.pdf

Bolivia

- Law on Drinking Water Services, Sewage and Sanitation (Law 2066/2000): aaps.gob.bo/images/MarcoLegal/Leyes/LEY-2066.pdf
- Water and Sanitation Programme for small localities and rural communities in Bolivia: https://www.iadb.org/en/project/BO-L1065
- Effects of the Water and Sanitation Programme on small localities and rural communities in Bolivia: https://aecid.bo/portal/2022/03/17/impacto-del-programa-de-agua-potable-ysaneamiento-para-pequen%CC%83as-localidades-y-comunidades-rurales-en-bolivia/

Paraguay

- Water Links (Paraguay): https://www.lazosdeagua.org/es/y-kuaa-paraguay/
- Y Kuaa Project: https://www.onedrop.org/en/projects/paraguay/
- Closing gaps in Paraguay: https://blogs.iadb.org/agua/es/cerrando-la-brecha-de-acceso-aservicios-de-agua-y-saneamiento-en-paraguay/

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