# NONPROFITS PROMOTING FOR-PROFIT STRATEGIES: A VERIFIABLE AND EFFECTIVE CONTRIBUTION TO THE RIGHT TO WATER?

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#### Abstract

Poor rural areas often lack an effective and financially sustainable access to drinking water, and weak governance poses a major risk: that private operators, often informal, supply water at high prices or of dubious safety without respecting the human right to drinking water. In this context, the role that nonprofit organizations can play by developing financially sustainable strategies deserves attention. In order to assess this potential contribution, information -public and internal data- is gathered from three innovative experiences. Can this information be analyzed according to criteria related to the right to drinking water? A first finding is that the criteria can be used -often, not always- to analyze the nonprofits' deeds and performance even if they are not organizing their reports according to this right. Secondly, these non-profits frequently have positive impacts, especially in relation to major elements of the right, such as availability and quality. These results suggest that nonprofits can have a beneficial role in facilitating the take-off of effective, financially viable initiatives in poor

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rural areas for accessing drinking water; nonetheless, sound policies and monitoring from public authority are necessary. This triple casestudy shall contribute to future research on related topics.

#### Introduction and Motivation

The United Nations (UN) just celebrated the World Food Day under the theme "Water is Life. Water is Food: Leave no one behind" (October 16). A major international conference took place in New York, in March 2023. The access to drinking water (DW) in inadequate quantity and/or quality is a well-known challenge and, alas, we are not on track to reach the DW part of the sixth Sustainable Development Goal (SDG). In 2020, only 74% of the world's population had access to safely managed drinking water services, available when needed, on site (or at least not far away), and free from fecal and priority chemical contamination.<sup>2</sup> That leaves the troubling percentage of over 25% who do not have access to it. This is an issue affecting health, wellbeing, and in the end human dignity and life itself. In arid contexts, the lack of access to water coupled with soil degradation can be a major trigger of migrations.<sup>3</sup> For instance, it has been predicted that some 60 million people could leave the drought regions of sub-Saharan Africa in the coming decades.<sup>4</sup>

Therefore, serious questions need to be asked about what possibilities there are for the sustainable provision of DW in poor rural areas in which often weak governance poses the following risk: That private operators, often informal, supply water at high prices or of dubious safety without respecting the human right to drinking water.

<sup>&</sup>lt;sup>1</sup> See generally Csaba Kőrösi, Summary of Proceedings, United Nations Conference on the Midterm Comprehensive Review of the Implementation of the Objectives of the International Decade for Action "Water for Sustainable Development" 2018-2028 (2023), https://www.un.org/pga/77/wp-content/uploads/sites/105/2023/05/PGA77-Summary-for-Water-Conference-2023.pdf.

<sup>&</sup>lt;sup>2</sup> The Sustainable Development Goals Report 2022, at 38 (2022), https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf.

<sup>&</sup>lt;sup>3</sup> See David Wrathall et al., Water Stress and Human Migration: A Global, Georeferenced Review of Empirical Research (2018).

<sup>&</sup>lt;sup>4</sup> Stephen Adaawen & Benjamin Schraven, *When deserts displace humans The challenges of "drought migration,"* CURRENT COLUMN (June 17, 2019), https://www.idos-research.de/uploads/media/German\_Development\_Institute\_Adaawen\_Schraven\_17.06.2019.pdf.

Specialized literature and documents published by the United Nations (UN) or the Organization for Economic Co-operation and Development (OECD) have abundantly discussed these challenges; a lot of attention has been given to the responsibility and the role of Governments, companies, investors, academia and communities, as well as of not-for-profit non-governmental organizations such as charities and foundations.<sup>5</sup> Big private companies – here 'big' encompasses the multinational company as well as the company managing the water system of a single capital city – are usually under particular scrutiny from both public authorities and civil society. Data are available (at least some data), journalists and activists follow the call for bids and related political discussions, and researchers are interested in learning more about such processes. 6 This situation has been called the "Lamppost Syndrome." The Lamp-post metaphor assumes that there is little interest in knowing and researching what happens far from the illuminated area; that is, what semi-formal or informal market solutions or charities are doing in poor areas. Such a situation has to be fixed, especially for the strategy that has come to be known as "service differentiation," which is being adopted in low-income areas to simultaneously contribute to universal access and achieve financial sustainability (cost recovery). "Service differentiation" implies that technologies, procedures, distribution networks, and business models used in this context often differ from conventional ones.<sup>9</sup>

Charities and similar nonprofits seem at first to be effective and meaningful players in poor remote areas, for they are not looking for profits and have their own fundraising schemes in order to bear

<sup>&</sup>lt;sup>5</sup> Organization for Economic Co-operation and Development [OECD], *Financing Water Investing in Sustainable Growth*, (2018), https://www.oecd.org/water/Policy-Paper-Financing-Water-Investing-in-Sustainable-Growth.pdf.

<sup>&</sup>lt;sup>6</sup> Inês Machete & Rui Marques, Financing the Water and Sanitation Sectors: A Hybrid Literature Review, 6 INFRASTRUCTURES 1, 9 (2021).

<sup>&</sup>lt;sup>7</sup> Jack Moss, *Private Operators delivering performance and efficiency for water-users and public authorities*, Asian Dev. Bank (2013), https://events.de velopment.asia/system/files/materials/2013/03/201303-private-operators-delivering-performance-and-efficiency-water-users-and-public-authorities.pdf.

<sup>8</sup> See Gérard Payen, De l'eau pour tous! Abandonner les idées reçues, AFFRONTER LES RÉALITÉS 149-169 (2013).

<sup>&</sup>lt;sup>9</sup> AKOSUA S. BOAKYE-ANSAH, PRO-POOR STRATEGIES IN URBAN WATER PROVISIONING: WHAT KENYAN WATER UTILITIES DO AND WHY THEY DO IT 76 (2021).

water supply costs. Nonetheless, since nonprofits usually give access to water for free, their projects do not seem sustainable in the long run. But what about the counterintuitive stance of nonprofits aiming at financial sustainability by selling water? In the context of poor areas, the role that nonprofit organizations can play by developing financially sustainable strategies has yet to be examined.

In this context, the following research questions are developed: Can we evaluate, according to the human right to drinking water (HRDW), the nonprofits that are contributing to develop financially sustainable access to drinking water? (*verifiability*) If yes, what are their results? (*performance*).

The rest of this paper is structured as follows. In the second section, I give an overview of the financial and geographical issues related to drinking water (DW) in rural areas and of the peculiarities and the role of nonprofits. Such theoretical background allows me to also consider the relevance of the HRDW and value-based businesses. In the third section, I describe the methodology: the establishment of a tailored HRDW framework; the selection of three cases for the study; and the process of obtaining information from the three nonprofits and sorting it according to the aforementioned framework in order to assess both verifiability and performance. The fourth section presents the results: The description of three nonprofits promoting for-profit strategies for DW and how they stand in comparison with the framework. Subsequently, in the fifth section, the results are discussed in the light of *verifiability* and *performance*. Finally, in the conclusion, I outline the limitations of the study, propose some policy recommendations, and suggest avenues for future research.

#### I. Literature Review

#### A. Financial Challenges

DW undoubtedly presents a challenge when it comes to its funding - especially in poor rural areas. Building, maintaining, and extending water networks is expensive. <sup>10</sup> Educating and promoting

<sup>&</sup>lt;sup>10</sup> See RONALD C. GRIFFIN, WATER RESOURCE ECONOMICS: THE ANALYSIS OF SCARCITY, POLICIES, AND PROJECTS 16–28 (Bonnie Colby et al. eds., 2nd ed. 2016);

awareness-raising activities that inform and facilitate the advent of a culture supportive of the safe use of water also comes at a cost. Major monetary institutions advocate for not just seeking billions but trillions in funding and constantly devise new methods of financing water services by getting the private sector involved. The World Bank and other international banks highlighted the necessity "for inclusive and sustainable business models. Inclusive business models that involve low-income consumers, distributors and suppliers can bring income generating opportunities and provide products and services where they were previously unaffordable or unavailable. A growing number of innovative business models are reaching under-served populations in financially sustainable ways." The aforementioned banks invited "all businesses to apply their creativity and innovation to solving sustainable development challenges."

Certainly, where the state truly struggles the private sector can play a significant part. Nonetheless, there are many risks inherent in providing DW through a public-private partnership (PPP), as pointed out by Heller and by Effah Ameyaw and Chan, which include profit maximization and the transfer of profits outside the local water sector. From an ethical point of view, there are good reasons to be skeptical about a plan to achieve financial sustainability and make profit targeting people who are already in financial trouble, since such a plan could be either financially unsustainable for its promoters or for the poor. There are also good reasons to be skeptical of private water

11 J. FACIL. MANAG. 152, 152 (2013).

<sup>13</sup> See Leo Heller (Special Rapporteur), Human rights and the privatization of water and sanitation services, U.N. Doc. A/75/208 (July 21, 2020), https://documents.un.org/doc/undoc/gen/n20/189/97/pdf/n2018997.pdf?token=68PmcIlry-waU45GrYr&fe=true; see also Ernest E. Ameyaw & Albert P.C. Chan, Identifying public-private partnership (PPP) risks in managing water supply projects in Ghana,

see also Julian Montoya, Global Water Crisis and Human Rights: A Glass Half Empty, 13 INTERCULTURAL HUM. RTS. L. REV. 175, 192 (2018).

<sup>&</sup>lt;sup>11</sup> African Development Bank et al., From Billions to Trillions: Transforming Development Finance. Post-2015 Financing for Development: Multilateral Development Finance, World Bank 16 (Apr. 2, 2015), https://thedocs.worldbank.org/en/doc/622841485963735448-0270022017/original/DC20150002EFin ancingforDevelopment.pdf.

<sup>&</sup>lt;sup>12</sup> *Id*.

<sup>&</sup>lt;sup>14</sup> GARY WHITE & MATT DAMON, THE WORTH OF WATER: OUR STORY OF CHASING SOLUTIONS TO THE WORLD'S GREATEST CHALLENGE (2022).

utilities in areas where no public administration is strong enough to implement a PPP. It would be serious to devise and foster business strategies that target the need of people ready to pay for water "whatever the cost" in weak governance countries: Businesses exist that take advantage of precarious and informal situations selling water of dubious safety at high prices. <sup>15</sup> Unsurprisingly, the development of private operators as the main or the sole suppliers of DW in weak governance areas is considered as an alarming and potentially dangerous trend by the promoters of the HRDW. <sup>16</sup> Whenever water services are managed by a private company, consumers should be protected by a strong legal and regulatory system which is precisely what is often missing in poor rural areas. <sup>17</sup> From an ethical point of view, this is a highly controversial and emotional issue. <sup>18</sup>

#### B. Peculiar Geographical Concerns: The Rural Areas

The proportion of population using safely managed DW services in rural areas in 2020, was of 62% in Central and Southern Asia; 13% in Sud-Saharan Africa; and 53% in Latin America and the Caribbean. Pollution extends into remote areas, making the water used up until recently unhealthy. The rural areas (including small urbanization) struggling on the path to an inclusive and sustainable development are particularly at risk for various reasons:

<sup>17</sup> SUNITA KIKERI, JOHN R. NELLIS & MARY M. SHIRLEY, PRIVATIZATION: THE LESSONS OF EXPERIENCE (1992); Organization for Economic Co-operation and Development [OECD], *OECD Principles on Water Governance*, (May 11, 2015), https://www.oecd.org/cfe/regionaldevelopment/OECD-Principles-on-Water-Governance-en.pdf.

<sup>19</sup> UN WATER, https://www.sdg6data.org/en (last visited Nov 25, 2023).

<sup>&</sup>lt;sup>15</sup> U.N. Press Release, Water 'Vital to Human Survival, Economic Development, Prosperity of Every Nation', Says Secretary-General in Message for World Day Observance (Mar. 16, 2023), https://press.un.org/en/2023/sgsm21727.doc.htm.

<sup>&</sup>lt;sup>16</sup> Heller, *supra* note 13.

<sup>&</sup>lt;sup>18</sup> GRIFFIN, *supra* note 10, at 3.

<sup>&</sup>lt;sup>20</sup> Pedro Arrojo-Agudo, *UN Special Rapporteur on the human rights to safe drinking water and sanitation*, (Oct. 20, 2022), https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.ohchr.org%2Fsites%2Fdefault%2Ffiles%2Fdocuments%2Fissues%2Fwater%2Fstatements%2F2022-10-21%2F20221020-stagement-sr-water-ga77-en.docx&wdOrigin=BROWSELINK.

- Urbanization has diverted some of the government's attention and resources away from rural areas. Rural areas have relatively fewer public services, and consequently, "living in a rural area increases a person's probability of suffering from poverty and deprivation." Maintenance of water systems is a major problem according to various studies and testimonies. It has been estimated that in some areas of Africa between 15% and 60% of community based water points are non-functional at any one time. <sup>24</sup>
- Development cooperation is still insufficient in quantity and questionable in terms of targeting when it comes to meeting the needs of rural populations for DW.<sup>25</sup>
- Investors see medium and especially small DW systems in poor areas as unprofitable and risky. 26 Least developed

<sup>&</sup>lt;sup>21</sup> MICHAEL LIPTON & ROBERT L. PAARLBERG, THE ROLE OF THE WORLD BANK IN AGRICULTURAL DEVELOPMENT IN THE 1990S: REPORT TO THE GROUP OF TWENTY-FOUR / PREPARED BY MICHAEL LIPTON AND ROBERT PAARLBER 7–8 (1990); See Malin Falkenmark, Approaching the Ultimate Constraint: Water Shortage in the Third World, in Resources and Population: Natural, Institutional and Demographic Dimensions of Development 71, 77 (1996); See also Diana Mitlin & David Satterthwaite, Urban Poverty in the Global South: Scale and Nature 126–129 (2013).

<sup>&</sup>lt;sup>22</sup> David Suttie, *Overview: Rural Poverty in Developing Countries: Issues, Policies and Challenges*, INT'L FUND FOR AGRICULTURAL DEVELOPMENT (2019), https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2 019/03/Rural-poverty-EGM\_IFAD-overview.pdf.

<sup>&</sup>lt;sup>23</sup> Rural Poverty Report 2011, INT'L FUND FOR AGRICULTURAL DEV. 32–33 (2010), https://www.fao.org/fileadmin/user\_upload/rome2007/docs/IFAD%20Ru ral%20Poverty%20Report%202011.pdf; Reducing Inequalities in Water Supply, Sanitation, and Hygiene in the Era of the Sustainable Development Goals, WORLD BANK GROUP (2017), https://openknowledge.worldbank.org/server/api/core/bitstre ams/53be894e-9f11-53be-8715-810600e3f582/content.

<sup>&</sup>lt;sup>24</sup> Luke Whaley et al., *Evidence, Ideology, and the Policy of Community Management in Africa*, 14 ENV'T RSCH. LETTER 1 (2019).

<sup>&</sup>lt;sup>25</sup> Leo Heller (Special Rapporteur), *Human rights and the privatization of water and sanitation services*, U.N. Doc. A/71/301 (Aug. 5, 2016), https://documents.un.org/doc/undoc/gen/n16/250/63/pdf/n1625063.pdf?to-ken=rWJ12SXvdUoV4lx37W&fe=true.

<sup>&</sup>lt;sup>26</sup> Guy J. Alaerts, Financing for Water—Water for Financing: A Global Review of Policy and Practice, 11 SUSTAINABILITY 1 (2019).

countries in particular attract little attention.<sup>27</sup> This is for multiple reasons that can also add up depending on the case. <sup>28</sup> Furthermore, small loans are as expensive to manage as a large loan and require as much paperwork, but the profit is relatively much less. In other words, "a smaller loan size results in a higher cost per dollar lent."<sup>29</sup>

• There are indeed, on a small scale, "innovative technologies and business models to provide safe water or sanitation in remote areas on a paying basis. However, all these operations struggle with barriers such as willingness to pay and overall profitability. This limits their ability to scale up and replicate." 30

#### C. The Peculiarities and the Role of Charities

Charities and nonprofits seem, at first sight, to be effective and meaningful players in poor remote areas, since they are not looking for profits.<sup>31</sup> Moreover, they have their own fundraising schemes in

 $<sup>^{\</sup>rm 27}$  Roberta Greco, The Human Right to Water and International Economic Law 9 (2022).

<sup>&</sup>lt;sup>28</sup> For example, the risk that plans for extending piped water coverage may not reach the intended beneficiaries because of the lack of official house titles, the lack of trained workers for the extension or maintenance of water infrastructure, the risk of capitals being devoured by corrupted officials and politicians, the fear that poor communities will not invest in maintenance, and the threat posed by civil wars and conflicts during which water wells and reservoirs are seldom spared.

<sup>&</sup>lt;sup>29</sup> A.J. Blanco-Oliver, A.I. Irimia-Dieguez & M.J. Vazquez-Cueto, *Is there an optimal microcredit size to maximize the social and financial efficiencies of microfinance institutions?*, 65 RESEARCH IN INT'L BUS. & FIN. 1, 2 (2023).

<sup>&</sup>lt;sup>30</sup> Impact Investing for Water Innovative Finance for Scaling-Up "Water, Sanitation and Hygiene" (WASH) Market-Based Solutions, WATERPRENEURS 32 (2018), https://docs.wixstatic.com/ugd/2c9167\_b0967ace4d414079a30da4c46e6013da. pdf.

<sup>&</sup>lt;sup>31</sup> The concept of "charities" encompasses a variety of organizations such as foundations, humanitarian religious institutions, and other kinds of non-governmental organizations which are not oriented towards making profits and provide graciously goods and services to their intended beneficiaries. In this article, by using the noun "nonprofits," I intend to designate organizations which are not traditionally associated with donations and philanthropy, for example firms or cooperatives, and are nonetheless conceived without the purpose to redistribute profits to the entrepreneurs or owners. Owners, entrepreneurs, and employees have a salary, indeed, but it

order to bear water supply costs.<sup>32</sup> This said, the decision to rely on charities for the provision of DW in a given area is not exempt from questioning: local inhabitants may be perceived as mere "beneficiaries-receivers" thus not being significantly involved in the organization of water services, and the longevity of their fundraising is never granted.<sup>33</sup>

On the one hand, they have the advantages of all charities (they are not looking for profits and have their own fundraising schemes for water supply costs) serving population in areas characterized by poverty and weak governance.<sup>34</sup> Moreover, their attempts to develop financially sustainable DW services can be a remedy to the afore-mentioned problems (longevity of fundraising and limited involvement of

is usually a fixed salary that does not increase when the firm makes high profits, thus, excess revenues are redistributed in the business itself, for example lowering its prices and making it more competitive. It may happen that a national legislation recognizes (for example through the status of social enterprises) that some firms do not have profits as their main or sole purpose, possibly granting them some advantages (e.g., fiscal advantages). See ANUP MALANI & ERIC A. POSNER, THE CASE FOR FOR-PROFIT CHARITIES (2006); see also Molly F. Sherlock & Jane G. Gravelle, An Overview of the Nonprofit and Charitable Sector, Cong. Rsch. Serv. R40919, (2009).

<sup>&</sup>lt;sup>32</sup> For example, these fundraising schemes may consist in one or more of the following: regularly soliciting a large amount of donors, organizing campaigns and big events to quickly raise money, or adapting the organization's plans and activities to the current Government's priorities in order to apply for funding from Development cooperation agencies. *See* SCOTT HARRISON, THIRST: A STORY OF REDEMPTION, COMPASSION, AND A MISSION TO BRING CLEAN WATER TO THE WORLD (2018).

<sup>&</sup>lt;sup>33</sup> A clear distinction should be drawn between those merely gaining access to DW without any significant involvement, who can be referred to using the concept "beneficiaries-receivers", and those who are somehow involved in designing and implementing the DW project. The latter could be considered beneficiaries who participate and have a feeling of ownership. See Alassane Bandé, Lavagnon A. Ika & Salmata Ouédraogo, Beneficiary participation is an imperative, not an option, but does it really work in international development projects?, 42 INT'L J. PROJECT MGMT. 1 (2024); see also Adrian Flint & Christian M. zu Natrup. Ownership and Participation: Toward a Development Paradigm based on Beneficiary-led Aid, 30 J. DEVELOPING SOCIETIES 1 (2014).

<sup>&</sup>lt;sup>34</sup> According to the OECD, "[w]eak governance zones are areas where governments are unwilling or unable to carry out their responsibilities. This means that public authorities do not protect rights (including property rights) or provide basic public services." OECD, *Investments in Weak Governance Zones, Summary of Consultations* (2005), https://www.oecd.org/corporate/mne/35397593.pdf.

beneficiaries). On the other hand, their nonprofit status means that they are often not subject to the controls typically targeting formal DW providers, so this reduced scrutiny poses a problem for the HRDW when it comes to the affordability or non-discrimination of DW provision.<sup>35</sup>

Finally, according to Cheng, nonprofits do not perform as well when trying to develop for-profit initiatives (lower success rate if compared to normal businesses).<sup>36</sup>

#### II. Methodology

## A. Building a Framework According to the Human Right to Drinking Water

A number of important elements for assessing compliance of the HRDW have been proposed by the Committee on Economic, Social and Cultural Rights<sup>37</sup>; the UN Special Rapporteurs on the HRDW,

<sup>&</sup>lt;sup>35</sup> Indeed, several researchers have highlighted the dangers posed by inadequate accountability and scrutiny in the nonprofit sector. *E.g.*, Margaret Graham Tebo, *Greater Scrutiny for Nonprofits*, 90 ABA J. 51, 51-55 (2004); Alnoor Ebrahim, *Making Sense of Accountability: Conceptual Perspectives for Northern and Southern Nonprofits*. 14(2) NONPROFIT MGMT. & LEADERSHIP 191, 191-212 (2003).

<sup>&</sup>lt;sup>36</sup> Willie Cheng, *Social Enterprises: Profits for Nonprofits, in* Doing Good Well: What Does (and does not) Make Sense in the Nonprofit World 185–195 (2012).

<sup>&</sup>lt;sup>37</sup> U.N. Comm. on Econ., Soc.& Cultural Rts, General Comment No. 15 (2002), U.N. Doc. E/C.12/2002/11 (Jan. 20, 2003).

such as De Albuquerque, Heller and Arrojo Agudo<sup>38</sup>; and by groups of practitioners and scholars such as Waterpreneurs and Waterlex.<sup>39</sup>

Drawing from their works, I established a table of elements defining the HRDW, divided between criteria (availability, quality, acceptability, accessibility, affordability) and principles (non-discrimination, access to information, participation and involvement of civil society, accountability including access to justice, environmental and financial sustainability).

A number of principles defined as secondary have been included (progressive realization, a favorable legal framework, if the HRWS is included in the initiative's policy, content of the contract on delegating service provision, usage of the maximum of the available resources).

#### B. Selection of Cases

I selected three nonprofit organizations – 501(c)(3) type – established in the United States of America, a country whose Federal Government is traditionally unsupportive of the concept of 'human right to drinking water'. <sup>40</sup> This makes the search for information related to the HRDW particularly interesting.

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<sup>&</sup>lt;sup>38</sup> See Virginia Roaf et al., Realising the Human Rights to Water and Sanitation: A Handbook by the UN Special Rapporteur Catarina de Albuquerque (Special Rapporteur), Rep. of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Common Violations of the Human Rights to Water and Sanitation, U.N. A/HRC/27/55 76 (June 20, 2014), https://documents.un.org/doc/undoc/gen/g14/069/10/pdf/g1406910.pdf?token=uQqX6yEAS6MdzaLGCS &fe=true; Heller, supra note 25; Leo Heller (Special Rapporteur), Rep. of the Special Rapporteur on the human rights to safe drinking water & sanitation, U.N. Doc. A/73/162 (July 16, 2018), https://documents.un.org/doc/undoc/gen/n18/224/81/pdf/n1822481.pdf?token=cNuKD3fstF8PiAN83W&fe=true; see also Heller, supra note 13; Arrojo Agudo, supra note 20.

<sup>&</sup>lt;sup>39</sup> Waterpreneurs, *supra* note 30. *CHECKLIST ON HUMAN RIGHTS TO WATER AND SANITATION FOR SMALL SCALE WATER PROVIDERS*, WaterLex (May 8, 2019), https://www.waterlex.org/wp-content/uploads/2021/04/191023-Checklist\_Water.pdf.

<sup>&</sup>lt;sup>40</sup> See G.A. Res. 64/292, (2010) (U.S. refrained from voting); see, e.g., USAID Water and Development Strategy 2013-2018 (2018), https://www.usaid.gov/sites/default/files/2022-05/USAID\_Water\_Strategy\_3.pdf (omitting "human right to drinking water"); see, e.g., USAID, U.S. Government Global Water Strategy, (2018), https://www.globalwaters.org/sites/default/files/global\_water\_strategy\_ 2017\_fina l\_508v2.pdf (omitting "human right to drinking water"); see also Tamar Meshel,

Furthermore, all three organizations ask for charitable donations on their websites. As *nonprofits*, they have nonetheless designed and promoted financially sustainable and *for-profit* solutions for access to DW.<sup>41</sup>

These nonprofits have achieved significant visibility (through press coverage and/or their involvement in major international meetings). They also aim at an increasingly bigger impact (by replicating and disseminating or by scaling)<sup>42</sup>; this only makes an analysis of their work all the more pertinent.

#### C. Obtaining and Sorting Information

The website of each of the three 501(c)(3) organizations has been carefully analyzed. Other open access documents considered are the following: reports, a book authored by the founders of one of the nonprofits, media coverage and press releases, a previous case study describing one of the nonprofits.

From January 2022 to December 2022, I had an extensive dialogue with several representatives of each of these nonprofits, and was granted access to some of their internal databases.

From the abundant data describing these 501(c)(3) organizations, I extracted elements that could relate to the criteria and principles. This implies searching through all available information to identify, precise items that can be consistently used to assess (*verifiability*) whether a given criteria or principle of the HRDW is respected, not respected, or simply not applicable at all. It shall be kept in mind that the responsibility of companies "to respect human rights applies to all enterprises regardless of their size, sector, operational context, ownership and structure. Nevertheless, the scale and complexity of the means through which enterprises meet that responsibility may vary according to these factors and with the severity of the enterprise's

Environmental Justice in the United States: The Human Right to Water, 8 WASH. J. Env't L. & Pol'y 264, 264-97 (2018); see generally White House Action Plan on Global Water Security (2022), https://www.whitehouse.gov/wp-content/up-loads/2022/06/water-action-plan final formatted.pdf.

<sup>&</sup>lt;sup>41</sup> See infra, Table 1-3.

<sup>&</sup>lt;sup>42</sup> For example, Water4 aims to engage and work cooperatively with public authorities in order to serve 20 districts in 15 countries by 2030, and Azure has started working in other countries in Central America. *See infra*, Table 4.

adverse human rights impacts".<sup>43</sup> Therefore, it would be naïve to think of applying in a standardized way the elements defining the HRDW to any initiative, regardless its targets and its scale (For instance, a single vendor reselling water in kiosks is a 'one-person company' which certainly cannot be expected to fulfill all the criteria and principles as a bigger WU could and should do). With that being said, one should not be surprised if information and data of a very different nature, depending on the nonprofits, were used to evaluate the same HRDW element.

I elaborated a table for each nonprofit, assessing its deeds through the lens of the HRDW. In the context of this research, elements such as accountability and participation are considered only at local level (the local mechanisms, institutions, and service providers) bearing in mind the people whose access to DW is at stake; that means the accountability of the nonprofit organizations' headquarters (being taken for granted) isn't taken into consideration.

The findings about *verifiability* and *performance* for all non-profits are presented together in a final summary table. Rather than constructing an index or score (by assigning numerical values), a graphical representation was chosen.

#### IV. Results: A Triple Case Study

#### A. Fideagua

Catholic Relief Services (CRS), a non-profit headquartered in Baltimore, launched the Azure initiative to mobilize capital and technical services to improve and expand water services for communities living in poverty, in rural and peri-urban areas of Central America; This initiative consists of two integrated parts: Azure Technical Services and Azure Source Capital (ASC). The latter, a limited liability company, is an impact investment fund established in 2018 by CRS and the Inter-American Development Bank (IDB).<sup>44</sup> ASC raises debt capital from social impact investors to on-lend to local banks which in

<sup>&</sup>lt;sup>43</sup> UN OHCHR, Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework 15 (2011), https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr\_en.pdf.

<sup>&</sup>lt;sup>44</sup> See Azure Source Capital, *Total Impact Cap.*, https://www.totalimpactcapital.com/azure (last visited Mar. 26, 2024).

turn lend at market rate to water services providers (WSPs) or water utilities (WUs - the two concepts will be used in the article as synonymous). ASC has established two trust funds (Fideagua) in El Salvador and Honduras that administer locally the impact investment funds.45

Through its blended finance initiative, CRS is filling a gap in the local financial market (chiefly through its smallest loans ranging from 50,000 to 100,000 USD). 46 The WUs are also supported through technical assistance (TA) covering both operational issues (such as engineering guidance for water management and maintenance) and administrative issues (business and finance)<sup>47</sup>. TA is offered graciously to the WUs, and is funded via CRS's philanthropic fundraising, along with grants secured by the CRS team from the IDB, Taiwanese development cooperation, and others. 48 This mix of TA and financial capital is well-suited for WASH investments, and it enables water service providers to upgrade their services and protect water sources while de-risking loans.<sup>49</sup> The initiative also rates WUs' service level: their performance is periodically reviewed according to a set of performance indicators (PIs). 50 CRS' objective is to see and help the WUs move along a scale (each level corresponds to a letter), reaching the highest levels of service.<sup>51</sup>

Up to February 2023, 26 loans were disbursed, supporting 19 water service providers,<sup>52</sup> chiefly in El Salvador. These are small-size WUs that provide services to communities ranging from 300 to 1500

<sup>&</sup>lt;sup>45</sup> *Id*.

<sup>&</sup>lt;sup>46</sup> See generally USAID, Desk Study: Professionalizing Rural Water (2023), https://www.globalwaters.org/sites/default/files/7feb\_real-water\_deskstudy.pdf (discussing Oksana Tkachenko & Goufrane Mansour, Case Study Assessment: Blended Finance in Water, Sanitation and Hygiene (WASH) – Lessons for Development Partners (2021)).

<sup>&</sup>lt;sup>47</sup> Interview with Cath. Relief Serv.'s, in Vatican City (2023).

<sup>&</sup>lt;sup>48</sup> Taiwan Int'l Coop. & Dev. Fund., 2020 International Cooperation and Development Fund Annual Report (2020), https://www.icdf.org.tw/public/MMO /icdf/2020 AnnualReport(%E8%B7%A8%E9%A0%81%E7%89%88).pdf.

<sup>&</sup>lt;sup>49</sup> *Total Impact Cap.*, *supra* note 44.

<sup>&</sup>lt;sup>50</sup> Azure, Social Impact, https://azure.mwater.co/#/impact (last visited Mar. 26, 2024).

<sup>&</sup>lt;sup>51</sup> Cath. Relief Serv.'s, *supra* note 47.

<sup>&</sup>lt;sup>52</sup> Cf. Desk Study: Professionalizing Rural Water, supra note 46.

households.<sup>53</sup> It is worth highlighting that these communities created the majority (80,4%) of the WUs that receive TA from Azure.<sup>54</sup> For example, neighboring villages created their own cooperative for granting access to water, maintenance, and for collecting payments, and these bodies are called *juntas*.<sup>55</sup>

"Catholic Relief Services carries out the commitment of the Bishops of the United States to assist the poor and vulnerable overseas" 56; however, Fideagua is not presented as a faith-based initiative. It should be noted that a Water Law, the *Ley General de Recursos Hídricos*, recently came into place in El Salvador, and the Government still has not finalized the regulations that will guide the application of the Law. 57 A major accomplishment has been to set up the new Water Authority that will lead change. 58 So far, according to CRS, there hasn't been a clear impact of the Law on Fideagua. 59

Criteria or Is it considered and as-What is the situation? Are there **Principles** sessed? Can it be inpositive outcomes? ferred or is it at least applicable? **Availability** Assessed as a PI (de-Several WUs improved letter grade (according to Figeagua's evaluation liver water to housescale) in community access to water (8 hold, number of hours / WUs) and in continuity of service (10 day) WUs). Quality Assessed as a PI (the Several WUs improved letter grade about testing: for microbiological regularity of testing and quality standard compliance (11 WUs) test results)

Table 1: Fideagua According to the HRDW

<sup>55</sup> Azure, *Asistencia técnica y acceso a financiamiento para la sostenibilidad de Juntas de Agua y pequeños Operadores Municipales*, Stockholm World Water Week, slides 8-14 (2021), https://programme.worldwaterweek.org/Content/ ProposalResources/PDF/2021/pdf-2021-9908-1-Azure%20SIWI%202021%20 (ESP).pdf (last visited Mar. 26, 2024).

<sup>&</sup>lt;sup>53</sup> Cath. Relief Serv.'s, *supra* note 47.

<sup>&</sup>lt;sup>54</sup> Azure, *supra* note 50.

<sup>&</sup>lt;sup>56</sup> Cath. Relief Serv.'s, *Mission Statement*, https://www.crs.org/about/mission-statement (last visited Mar. 26, 2024).

<sup>&</sup>lt;sup>57</sup> Cath. Relief Serv.'s, *supra* note 47.

<sup>&</sup>lt;sup>58</sup> See La Asamblea Legislativa De La Republica De El Sal., Ley General de Recursos Hídricos [General Law of Water Resources], at art. 10 (2021).

<sup>&</sup>lt;sup>59</sup> Cath. Relief Serv.'s, *supra* note 47.

	I	
		and physical-chemical quality stand- ard compliance (9 WUs)
Acceptability	Not assessed in itself.	It can be assumed that thanks to the TA the WUs usually prove acceptable DW.
Accessibility	Assessed as a PI (percentage of the population with connection to DW).	7 WUs improved letter grade.
Affordability	Not assessed in itself. Yet, some elements of the initiative can provide useful information.	The level of morosity in each WUs is monitored, only 3 WUs reported morosity (ranging from 10 to 20% of users).  According to CRS, the repayment rate of WUs benefitting from Fideagua's loans are very satisfactory.  Community-based WUs define their tariffs through a participatory approach involving assemblies, thus it can be assumed that this safeguards affordability and that a community knows how to address the situation of its poorest members.
Non-discrimina-	Gender-equality as-	6 WUs improved their letter grade.
tion	sessed as a PI (if the WUs have a gender equality policy, and have a woman in leadership positions)	
Access to infor-	Not assessed in itself.	The ratings of each WU are formally
mation	Yet, some elements of the initiative can pro- vide useful information.	presented to WU's leadership and the baseline diagnostic report is shared.  Meters are used at macro and, in some WUs, also at micro level.  8 WUs improved their letter grade regarding the amount of households with water meters.
Participation	Not assessed in itself. Yet, some elements can provide useful infor-	Many WUs are managed by <i>juntas</i> , direct offspring of local civil society, with an elected board. It can therefore
	mation.	be assumed that there is a high level of participation. The majority of WUs are small and thus well connected to local communities.

Accountability	Not assessed in itself.	WUs receive TA for legal issues, in-
	Yet, some elements can	cluding learning about law and regula-
	provide useful infor-	tion and accountability.
	mation.	j
Sustainability	Financial sustainability	The WUs receive training about sus-
•	is assessed as a PI (the	tainable tariffs.
	ability to meet repair	4 WUs improved their letter grade in
	costs and improvements	environmental sustainability.
	costs).	,
	Environmental sustain-	
	ability is assessed as a	
	PI (if the WUs adopt	
	and implement environ-	
	mental protection and	
	conservation plans).	
Progressive re-	The initiative uses a set	In the long run, the majority of the WU
alization	of 12 PIs <sup>60</sup> to rate the	should reach the A and B levels.
	level of service of the	
	WU on a scale from A	
	to D.	
A favorable le-	Not assessed in itself.	Both Honduras and Salvador recog-
gal framework	Yet, some elements of	nize the HRDW. <sup>61</sup>
	the initiative as well as	CRS collaborates with the new Water
	of the national juridical	Authority in El Salvador and the Hon-
	context can provide	duran Water Services Regulatory
	useful information.	Agency.
		Rural WUs are supported through TA
		to register in the national register.
Inclusion in pol-	Not assessed or sought	The documents and websites of Az-
icy	by the initiative, but	ure/Fideagua don't mention the
	verifiable by reading its	HRDW. <sup>62</sup>
	publications.	

<sup>61</sup> See WaterLex, Metodología: Mapeo legal de un país HONDURAS [Methodology: Legal mapping of a country HONDURAS] (July 2018), http://humanright2water.org/wp-content/uploads/2020/07/LegalMapping-template ES-Honduras.pdf; see also Legis. Assembly of El Sal., supra note 58 at art 1.

<sup>&</sup>lt;sup>60</sup> Azure, *supra* note 50.

<sup>62</sup> See Cath. Relief Serv.'s, Water Security Strategy for 2030 (2019), https://www.crs.org/sites/default/files/tools-research/water\_security\_for\_2030\_\_strategy.pdf (lack of HRDW being mentioned in documents related to Azure/Fideagua can lead one to infer that CRS does not support nor promote it; in reality, CRS does support and promote the HRDW).

Content of the contract on delegating service provision	Not assessed in itself at WU level. Yet, some elements of the initiative as well as of the national juridical context can provide useful information. Hardly applicable due to on-going regulatory evolutions. In El Salvador, prior to the enactment of the new Water Law the <i>juntas</i> worked without any PPP agreement (some were simply registered by the local municipality).	Most <i>juntas</i> are still operating without any contract with a public administration.  In the case of private WUs, some had authorizations issued by the National water utility (these authorizations are not concession agreements with levels of service).
Usage of the maximum of the available re- sources	Not assessed in itself. Yet, some elements of the initiative can pro- vide useful information.	The interest rates of the loans are aligned with the market, and the entire initiative has to meet the expectations of the investors in the blended finance facility.  This said, as previously explained, the TA is provided graciously to the WUs.

Note: The contents of this table are based on the conversations between CRS representatives and the author as well as on internal Azure documents except where otherwise stated.

#### B. Water.org

Water.org is a nonprofit organization headquartered in Kansas City.<sup>63</sup> It was formed when Matt Damon and Gary White, the founders of two pre-existing charities (WaterPartners and H2O Africa), decided to merge them into one in 2009. With its network of partners, Water.org promotes small loans that bring access (or facilitate the access) to DW and sanitation to people living in poverty.<sup>64</sup> This initiative grew exponentially in a few years only. In total, more than 12 million loans were disbursed up to May 2023 via local microfinance institutions (MFIs) that introduced water and/or sanitation loans in their portfolio across

<sup>&</sup>lt;sup>63</sup> Careers, Water.org, https://water.org/careers/ (last visited Mar. 26, 2024).

<sup>&</sup>lt;sup>64</sup> WHITE AND DAMON, *supra* note 14.

13 countries.<sup>65</sup> As the loans are repaid, those funds are then reinvested to other households. Many of the borrowers are Joint liability Groups or Self-help Groups.

Water.org provides technical assistance to MFIs, enabling them to design suitable loan products, such as paying municipal water connection fees, purchasing filters, or constructing toilets. <sup>66</sup> If deemed necessary, grants are offered to the MFIs or loans are de-risked (this was especially the case when such loans were introduced for the first time in India). Water.org (as well as its two predecessor charities) solicited the support and partnership of several companies, such as the Pepsico Foundation, Stella Artois, Bank of America, Helmsley Charitable Trust, IKEA Foundation, Northrop & Johnson. <sup>67</sup>

Since 2014, Water.org has been organizing surveys, interviewing samples of borrowers. The surveys (which have been refined over the years) are made of a detailed list of questions, the majority of which are answered by the borrower and a few ones are left to the enumerator's appraisal of the situation. Up to February 2023, more than 10.500 interviewees having taken loans for water (or combined water and sanitation loans) were willing to participate (less than 300 declined), thus creating a significant quantity of data; the first responses were submitted in 2014.<sup>68</sup>

The overall effectiveness of the improvements can be assessed thanks to the surveys: 95% of the loans resulted in a functional improvement during the survey (which usually takes place between 6 and 18 months after the loan has been taken).<sup>69</sup>

Table 2: Water.org According to the HRDW

Criteria or	Is it considered and as-	What is the situation (considering in-
Principles	sessed? Can it be in-	terviewees having taken loans for wa-
	ferred or is it at least	ter or combined water and sanitation
	applicable?	loans)? Are there positive outcomes?

<sup>&</sup>lt;sup>65</sup> Telephone Interview with Water.org (2023).

 $^{67}$  DAVID E. NEWTON, THE GLOBAL WATER CRISIS: A REFERENCE HANDBOOK 222–224 (2016).

<sup>&</sup>lt;sup>66</sup> Water.org, *supra* note 63.

<sup>&</sup>lt;sup>68</sup> Reports from Water.org (2023) (on file with Water.org).

<sup>&</sup>lt;sup>69</sup> Surveys from Water.org (2023) (on file with Water.org).

Availability	Assessed surveys.	through	the	Approx. 60% of the interviewees consider that water availability has improved.
Quality	Assessed surveys.	through	the	The situation improved for 62,4% of households.
Acceptability	Assessed surveys.	through	the	The interviewees observed that water is less dirty (27,3%), tastes better (27,6%) and no longer smells bad (21%).
Accessibility	Assessed surveys.	through	the	According to the surveys, the situation has improved for the majority of households. Approx. 78,5% of them report that they save time thanks to the loan (among women interviewees, 46% report they no longer have to wait in line); 12% feel safer from humans and 7,6% safer from animals. 40% of households with children feel safer.
Affordability	Assessed surveys.	through	the	The initiative applies only for people that can afford a loan; therefore people with no income are excluded from the initiative. This said, a single loan is used to improve access to water approximately for 15 persons; it is likely that some of the beneficiaries of the improvement are poorer than the interviewee, but still they benefit from the improvement. Moreover, 29% of the loans have been taken by people whose income is below 1,90 US dollars per day: reaching this category of borrowers is remarkable. Some interviewees had to give up or postpone some expenses (related to human rights such as meals, healthcare or school fees), sometimes (between 8,8 and 7,2% of the interviewees) or rarely (between 5,5 and 4,4%). Approximately 17,2% of the interviewees recommended more time to repay loans with smaller installments, and 29% to have lower interest rates. 72% considered that it has been easy to make their loan payments.
Non- discrimi- nation		ssed in it irveys can l informat	pro-	The majority of borrowers (89,5%) are women.

Access to information	Assessed through the surveys.	A majority of borrowers considers having received enough information on the loan.
Participation	N/A (except the fact that some borrowers belong- ing to joint liability groups receive special training)	N/A
Accountability	N/A as far as Water.org is concerned. However, in case of (alleged) fraud, in several countries borrowers could in principle sue the MFIs.	Considering the overall positive feed- back in the surveys, it is unlikely that many borrowers sue the MFIs working with Water.org. Therefore it's hard to say whether their potential claims would be duly taken into consideration by local courts.
Sustainability	Environmental sustainability: N/A. Financial sustainability: not assessed in itself even if in principle it could be assessed at MFI level (since only the affordability can be assessed at household level).	Overall, the system works and keeps expanding.
Progressive realization	N/A	N/A
A favorable legal framework	Not assessed in itself. Yet, some elements of the initiative as well as of the national juridical context can provide useful information.	Out of the 12 Countries in which Water.org's partner MFIs facilitate loans, only some of them have recognized the HRDW (at a constitutional level or through the judgment of their courts); consequently it can be said that these MFIs operate in a great diversity of legal contexts.  Microloans are usually taken on conditions that reflect the local credit market, without specially favorable conditions.
Inclusion in policy	Not assessed or sought by the initiative, but ver- ifiable by reading its publications.	Human rights not expressly included in Water.org's policies and communication.
Content of the contract on	N/A	N/A

delegating ser- vice provision					
Usage of the	Not assessed in itself.	Being a charity, Water.org is not extract-			
maximum of	Yet, some elements of	ing any profit. The TA is provided gra-			
the available	the initiative can provide	ciously to the MFIs. Moreover, the			
resources	useful information.	founders highlight that this initiative is			
		designed also to reallocate charitable do-			
		nations for areas and cases in which loans			
		are impossible. <sup>70</sup>			
		The fact that MFIs are charging an inter-			
		est reflects their very nature. Certainly,			
		such profit can be transferred out of the			
		water sector (e.g. reused in another			
		branch of the same MFI).			

Note: The contents of this table are based on the conversations between Water.org representatives and the author as well as on internal Water.org documents except where otherwise stated.

#### C. Water4

Water4 is a non-profit headquartered in Oklahoma City, and was founded in 2008. It has since then worked in both South America and Africa, promoting entrepreneurship for sustainable access to DW. Water4 focused its activity in Africa only. In 2022 and 2023, it was active in 9 African countries, and by February 2024 in 5 African countries only. Water4 created two large wholly owned for-profit subsidiaries (with multinational reach) in Africa. These subsidiaries own the boreholes and the piped infrastructure (into homes and even healthcare facilities) and hundreds of water kiosks (vendors buy water at wholesale prices and then resell that water in kiosks on commission from sales). Water4 has developed its own technology for water treatment and distribution, NUMA, which is described as relatively low-cost, reliable and modular (varying quantities and scales depending on the needs). NUMA is deployed using a vertical and integrated approach. On average, NUMA networks are designed to serve communities of

<sup>&</sup>lt;sup>70</sup> WHITE AND DAMON, *supra* note 14.

<sup>&</sup>lt;sup>71</sup> Water4, *Where We Work*, https://water4.org/where-we-work/ (last visited Mar. 26, 2024).

up to 3000 people.<sup>72</sup> There are also many 'partners,' which are smaller and independently owned companies. These partners use the NUMA system and receive a TA (through Water4's subsidiaries) for drilling and pumping, and training in the fields of technology, business and management. Everyone using NUMA as a brand for piped water is under a specific franchise agreement covering building designs, quality standards, operational procedures, and pricing.<sup>73</sup> Water4 highlights that the NUMA brand is gaining popularity in communities, so more people request connections.<sup>74</sup>

Its documents and annual reports contain a lot of testimonies and statistics, but no public disclosure of PIs.

In communities that are too small to provide the revenues needed to maintain a piped water system, Water4 funds and subsidizes handpumps. Donations are used to drill and install the pump, then a flat monthly fee for maintenance is charged to the local community usually represented by a Water users Committee. As of February 2023, Water4 has installed, and is maintaining 1228 handpumps. Most of them are in Ghana, Zambia, and Sierra Leone.

Water4 is very transparent about its motivation and values. It explains that it's a faith-based organization focused on sharing the Gospel and that good water solutions meet both "the physical and spiritual needs of people living in water poverty." In-country teams are trained through prayer and Bible study, community engagement, and leadership development. It's worthwhile noting that, for some years now, Water4 has avoided describing the communities in which it works as beneficiaries: they are considered and referred to as "customers," as a way of elevating them above the mere "recipient/beneficiary" status.

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<sup>&</sup>lt;sup>72</sup> Water4, 2022 *Impact Report*, https://water4.org/wp-content/uploads/2023/05/2022-Impact-Report-Water4-Digital-1.pdf (last visited Mar. 26, 2024).

<sup>&</sup>lt;sup>73</sup> Water4, *The Wealth of ALL Nations* (Jan. 20, 2022), https://water4.org/2022/01/wealth-of-all-nations/.

<sup>&</sup>lt;sup>74</sup> Telephone Interview with Water4 (2023).

<sup>&</sup>lt;sup>75</sup> Water4, See Pump Insurance Professional Water Services at Scale, https://water 4.org/insurance/ (last visited Mar. 26, 2024).

Table 3: Water4 According to the HRDW

Criteria or Principles	Is it considered and assessed? Can it be inferred or is it at	What is the situation? Are there positive results?
	least is it applicable?	
Availability	In principle both quantity available per person and regularity of service can be somehow assessed in the NUMA model.	The NUMA systems purely on solar power do not provide water 24/7. Limited information is available about the daily amount of water / person, but from the available data it can be assumed that, in principle, on average there are 70 Liters available / person. This is above the critical threshold of 50 Liters. However, people do not collect that much NUMA water. According to Water4, the highest average quantity of NUMA water collected is 35 Liters / day.
Quality	The NUMA model assesses water quality.	The NUMA model relies on central stations in charge of treating and/or filtering water, to ensure the water meets WHO and national standards. Chlorine levels are monitored weekly.
Acceptability	Not systematically assessed. One formal "acceptability evaluation" (taste, odor, appearance) took place in Ghana.	During the evaluation in Ghana NUMA water showed higher scores in odor and appearance compared to the control group.
Accessibility	Not assessed in itself.	The rapid increase of water-kiosks and of prepaid meter extensions directly into homes, schools, clinics, businesses and institutions contributes significantly to water accessibility. Total coverage has been reached in a few districts.
Affordability	Not assessed in itself. Yet, some elements can provide useful information. Water4 works with the following benchmark:	The NUMA system is only for people that can afford tokens for prepaid metering or buying water from kiosks; therefore, people with no income are excluded by defaults. According to Water4, an increasing number of households are

<sup>76</sup> Carmen Brubacher, *Total Coverage in Chinsanka*, WATER4 (2019), https://water4.org/2019/10/total-coverage-in-chinsanka/ (last visited Mar. 26, 2024) (185,920 gallons of drinking water are distributed daily in an area of Zambia inhabited by

10,000 people, equivalent to 70 liters per person).

Non-discrimina- tion Access to infor-	NUMA's prices represent less than 5% of income for 90% of individuals in a given operating area. Pricing indications are contained in the franchisee manual.  Not assessed in itself.	purchasing water at the price "they are willing to pay", and people using NUMA say that DW is affordable.  About hand pumps: if a community covers the cost (or a single individual does) of the pump then all members of the community do have access to DW.  As far as women are considered, many kiosk operators are women.  Meters are used in the households. Ven-
mation		dors are sought within the communities in order to facilitate communications.
Participation	Not assessed in itself, despite the fact that there is a strong emphasis on the involvement and empowerment of the local population. Yet, some elements can provide useful information.	Community leadership, such as the chief or youth leaders, are engaged in signing a water service contract with the company.  As construction begins, a vendor is sought out within the community based on reliability, reputation, and earning potential. This vendor is trained to act as a wholesaler to local community members. A ceremony is conducted prior to commissioning the system, where free water is provided for all to try, expectations are set, and the Gospel is shared. Groups are organized to share weekly around the Gospel (up to February 2023, 5000 groups are active).
Accountability	Accountability could potentially be assessed at various levels.	The two wholly owned subsidiaries have independent audits as well as roll up into our financial audits.  System standards, operations and finances of partners using the NUMA model are audited.
Sustainability	Not assessed in itself. Yet, some elements of the initiative can provide useful information. From the environmental point of view, groundwater recharge is assessed for each well during the drilling process.	Limits to water withdrawals are usually set by Water4's appraisal of local hydrogeological studies. NUMA operations then adjust the flow rate of the solar pumping equipment to the yield of the well.  From the financial point of view, the system keeps expanding.  The oldest handpumps still in use with maintenance contracts with communities were installed in 2019.

Progressive reali-	From the financial point of view, partners are required to cover an increasing share of their own costs with their own revenues.  No scale of progres-	No scale of progression.
zation	sion (the system aims chiefly at geograph- ical expansion rather than incremental im- provements).	The sease of progression.
A favorable legal framework	Not assessed in itself. Yet, some elements of the initiative as well as of the national ju- risdiction can provide useful information.	Out of the African States in which Water4 promotes entrepreneurship, some have expressly recognized the HRDW. Water4's subsidiaries work formally, through municipal and national level PPPs.
Inclusion in policy (by the company)	Not assessed or sought by the initiative, but verifiable by reading its publications.	The human right to drinking water and other human rights are not included in Water4.org documents
Content of the contract on delegating service provision	Not assessed in itself. This depends on the NUMA model. Two issues could be considered: the franchise system, and the PPP.	NUMA contracts are initially a Memorandum of Understanding with the appropriate government entity for each country. Content includes tariff rates, delegated territory, concessions, and contract lengths. Then, a service delivery contract is signed with individual communities.
Usage of the maximum of the available resources	Not assessed in itself. Yet, some elements of the initiative can pro- vide useful infor- mation.	Being a charity, Water4 is not extracting any profit. Its overhead and administrative costs are covered by private donations. Profit remains with the two wholly owned for-profit subsidiaries.

Note: The contents of this table are based on the conversations between Water4 representatives and the author, except where otherwise stated.

## D. Summary Table

The findings of the triple case study are summarized according to our two main questions: *verifiability* and *performance*.

Table 4: Summary Table

	Fideagu	a	Water.o	rg	Water4	
Criteria or	VER	Results	VER	Results	VER	Results
Principles						
Availability						
Quality						
Acceptability						
Accessibility		ľ				
Affordability						
Non						
discrimination						
Access to in-						
formation		0				×
Participation		Š				
Accountability						
Sustainability						
(enviro.)						
Sustainability						
(finance)						
Progressive						
realization						
Fav. legal						
framework:						
countries rec-						
ognize HRDW						
The initiative						
contributes to						
a fav. legal						
framework						
Inclusion in						
policy						
Content of						
contract						
Usage of max.						
resources						

Legend				
Are the elements assessed? Is it po	ossi-	Which are the results? (performa	nce)	
ble to assess them?		4000	0500	
(verifiability 'VER')				
Clearly assessed (by the		There clearly are positive re-		
initiative)		sults (at least some)		
Can be somehow assessed, even		It can be assumed there are pos-		
indirectly, using already avai-		itive results		
lable info				
No (it can overlap with 'Clearly		Negative results (it can overlap		
assessed')		with 'There clearly are positive		
		results')		
Unclear / not enough info avail-		Unclear / not enough info (it		
able (it can overlap with 'Clearly		can overlap with 'There clearly		
assessed')		are positive results')		
Not applicable		Not applicable		

#### V. Discussion

#### A. On Verifiability

The three initiatives have so far tracked their impact with different means and different levels of accuracy, detail and public disclosure. They do not use indicators or parameters that perfectly match the HRDW elements. This is not surprising since their headquarters are in the US: As previously stated, the Federal Government of the US is not supporting the concept "HRDW." Therefore, there is no pressure on US-based organizations to organize their strategies, their monitoring, and their reports according to the HRDW.

The information collected suggests that assessing the situation of given elements related to the HRDW can be possible, but not always. For example, there may be an element that is not applicable in the context of a given initiative; but in other cases, the element could be assessed in theory, and the initiative would not be monitoring it. For instance, Fideagua is systematically collecting data at the WU level and not at the household level, but only households can express a point of view about acceptability.<sup>77</sup> According to Table 1 and Table

<sup>&</sup>lt;sup>77</sup> Cath. Relief Serv.'s, *supra* note 47.

3, Fideagua and Water4 (due to the way they operate) tend to have positive impacts on the participation of local communities; still, they don't track participation as a PI.

According to Table 4, if we add up all the times when HRDW elements are clearly assessed and could somehow be assessed, even indirectly (using already available info, that is to say data usually collected by the initiatives), we obtain a total of 15 out of 17 cases for Azure's Fideagua; 10 for Water.org (acknowledging that in 5 cases the HRDW elements are not applicable); and 11 for Water 4 (acknowledging that in 1 case the HRDW elements are not applicable). This is encouraging.

#### B. On Performance

All the initiatives have at least some positive impact on all the criteria listed in the methodology: availability, quality, acceptability, accessibility, affordability, and some of the principles related to the HRDW. Nonetheless, it should be noted that all three initiatives have mixed 'positive/unclear' results when it comes to affordability. This is due to their own business models - the reasons are detailed in tables 1, 2 and 3. This flaw seems to be an intrinsic element of these initiatives and will always be alongside their overall positive contribution to affordability. Water4 and Water.org often highlight that some people that are paying for water, make a profit through utilizing for various businesses.<sup>78</sup> This is an interesting statement; however, it requires vigilance for this shouldn't be a reason to increase tariffs above a 'reasonably safe' level. Affordability, indeed, cannot be reached in poor communities by assuming that some of the DW customers are willing and able to start a business thanks to the water they purchase.

All three initiatives have a mixed 'positive/unclear' score when it comes to financial sustainability. This is because they rely also on fundraising and charitable donations, in order to help the MFIs (Water.org) and to provide TA (Fideagua and Water4). This could probably be another intrinsic element that will always coexist with their very explicit and globally successful search for financial sustainability at a local level. Indeed, these initiatives are consolidating and

<sup>&</sup>lt;sup>78</sup> WHITE & DAMON, supra note 14; e.g., Water4, supra note 72, at 10.

expanding; but even if they consolidate and become financially sustainable in a given spot they will still need donations to support the take-off of their activities in new areas and very likely also for TA. It should be highlighted that for the WUs supported by Fideagua and the NUMA franchisee network, there is also an operational dimension of sustainability: Revenue is used to hire capable staff, perform maintenance, buy spare parts, and improve system design.

Water.org and Water4 have a mixed 'positive/negative' score when it comes to the legal framework because they operate in countries which have not recognized the HRDW as well as in countries which recognized it at different levels. On another hand, Fideagua and Water4 contribute to the improvement of the local/national legal framework, for they strengthen WUs and favor registration or agreements with public authorities, and that is a major contribution in poor rural areas. The fact that the three initiatives also have positive results in the field of non-discrimination on gender basis is remarkable since, for various reasons, women are often in great difficulty in situations of inadequate access to DW<sup>79</sup>. This aspect is a clear contribution to the 5<sup>th</sup> SDG.

#### VI. Conclusions

#### A. Implications

Three innovative nonprofits designing and implementing forprofit strategies for DW in poor rural areas have been described and analyzed according to a number of elements related to the HRDW. The three US-based 501(c)(3) committed themselves to improve access to DW overseas, in contexts where both Government involvement and the traditional private sector are weak. They may not be able to change the entire water delivery system, yet, if they last, the niche they carve will likely progressively extend<sup>80</sup>. Their own fundraising and convening power enable other organizations, funds or intermediaries

<sup>&</sup>lt;sup>79</sup> See Elena Gross, Isabel Günther & Youdi Schipper, Women Are Walking and Waiting for Water: The Time Value of Public Water Supply, 66 ECON. DEV. CULT. CHANGE 489 (2018).

<sup>&</sup>lt;sup>80</sup> See Luigino Bruni & Alessandra Smerilli, The Economics of Values-Based Organisations: An Introduction 89 (Paperback ed. 2020).

to become or to more easily remain financially sustainable. In the long run, this may enable richer combinations of profit and non-profit collaboration, facilitate blended finance initiatives in which some investors accept lower returns than others, and further improve access to DW in areas in need.

The provision of DW in poor areas is usually considered very challenging when it comes to financial sustainability. Unsurprisingly, only a limited number of organizations<sup>81</sup> are trying to meet this challenge. This said, two important achievements of this study are the following:

- Having founded three of these pioneering organizations whose blended approach, as nonprofits fundraising and devising forprofit strategies at the same time, facilitates the implementation of financially sustainable solutions for poor populations, with encouraging records both in *verifiability* of their deeds and *performance* according to the HRDW. This is a way of testing a (human rights) theory in a very peculiar field that is quite relevant for economics (microloans for water) and for sustainable development (access to water).
- Gaining access to internal information related to monitoring and obtaining detailed explanations on how they operate and reorganizing such information according to the HRDW.

#### B. Limitations

Some limitations of this work should be mentioned. First, although many positive results have been listed, this research does not consider if those results are enough and satisfactory or, on the contrary, positive yet insufficient according to expectations and inputs. For the purpose of this exercise, the simple fact that there are tangible and measurable positive results is sufficient. Second, data has been collected from only three initiatives. Third, table 4 is in no way a manner of comparing the initiatives (and not even an invitation to find the

<sup>&</sup>lt;sup>81</sup> If we discard public companies and the WUs supplying water in big urban areas, the organizations left are chiefly community-owned WUs and informal private DW companies.

appropriate tool or methodology for comparing them) since they are in their very essence different in approach, scope, methodology and deliverables; moreover, Water.org could coexist in the same municipality with any of the two others.

#### C. Policy Prescriptions

The way these initiatives and similar ones monitor and report their work should make it possible to check whether it is being carried out in accordance with important criteria and principles of HRDW. Issues related to affordability and accountability deserve a great vigilance, precisely because this work often takes place in weak governance areas. The multiplication and strengthening of such initiatives certainly does not make the involvement of public authorities meaningless nor unnecessary. The latter's role in policy coordination and allocation of roles and responsibilities, across all levels of government and DW-related institutions (including regulation and enforcement, licensing, monitoring and supervision, control and audit, conflict management, identifying and addressing gaps and situations of greater vulnerability for local population) is irreplaceable. The fact that no one should be deprived of the HRDW for economic reasons raises some concern whenever a private WU in charge of an entire area operates through a formal agreement with the public authority which doesn't include any provision for the poorest ones. In those circumstances, the access to DW for the poorest becomes a responsibility of the local community alone: Neither public authority nor WU take responsibility for this, which is in contradiction with the elements defining the HRDW. This assertion shall be nuanced in some circumstances: Let's take as an example the handpumps provided by Water4 to a community or the WUs supported by Fideagua (they are the direct offspring of local communities; therefore, even if they have a formal agreement with the public authority that doesn't include provisions for the poorest ones or no agreement at all, it can be assumed that the local community knows how to care for all its members). Still, since relations can evolve within a single community and tensions may arise, it is certainly recommendable and wise to have those provisions clearly enshrined in an agreement or contract between public authorities and any kind of WU.

Public and systematic disclosure of PIs, with meaningful and comprehensible information, should be encouraged. Quite understandably, these initiatives are often established in very challenging areas (well established operators don't dare to go in some of them) and this leaves ample space for failures, attempts, disappointment, and very slow progress. Still, transparency shall be a core element.

#### D. Avenues for Future Research

It would be worthwhile to study a greater number of these initiatives, to see whether the findings of this study are confirmed. Observing the evolution of the WUs created or supported by Water4 and Fideagua would also be very relevant, notably in order to assess their sustainability and to see whether or not they begin monitoring and reporting their deeds according to elements related to the HRDW (increase *verifiability*). Finally, future research should assess whether the Governments of poor countries, as time goes on, provide legal or fiscal facilitations (such as a clear social enterprise status) for those who set up small WUs in rural areas (thus increasing the chances of good *performance*).