

# The Role of Incentives in Integrating Social Equity into Water Utility Performance Reporting: The Use of Incentives to Report on Low-Income Households

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There is consensus amongst most policy analysts that in invoking the agency of regulatory requirements, to have someone report on something, the possibility for compliance plausibly abounds. However, when the requirement comes with incentives or the stakes are raised, the reported is bound to transcend minimal compliance over time and improve in quality and quantity. The latter notions draw from the salutary benefits of accountability, akin to how workers exhibit the tendency to do the inspected, as opposed to what is merely expected<sup>1</sup>, and the plausible view that one gets what they reward<sup>2</sup>. *Therefore, to ingratiate the poor folk communities relegated to the fringes of enjoying water services with utilities, including women, refugees, internally displaced people (IDP), and other persons of concern (PoC) living in reduced circumstances, it is necessary to optimize incentives for water utilities to report on their service levels to the marginalized.* Incentives afford strategic business units within water utilities, such as branches and area offices, the mandate to think laterally and pilot salutary initiatives in a bid to not only reach and serve PoC, but also report to the utility leadership the progress registered. The water utility, in turn, gets to report to its line ministry. However, water utilities are wont to report on standard key performance indicators (KPIs),

which are exclusive of PoC variables of interest (VoI). This think piece qualifies the value utilities should attach to inclusive reporting, recognizing the benefits that accrue to them in serving PoC. Most importantly, the overarching purpose of inclusive reporting is to account for investments made into water utilities, besides the preferential treatment governments afford them, and to support and facilitate with referenceable data the pursuit of society's objectives.

The poor are marginalized and vulnerable in the global water sector. Akin to refugees and internally displaced folk, the poor remain confined at the edges of water service provision, largely because they are so strapped for cash that it is nearly impossible for them to patronize water utilities at operating cost recovery rates. As the commercial orientation of water utilities gains traction across the developing world, recouping costs, even from folks with the wherewithal to pay, has proven difficult. One often-proffered reason potable water providers have for discounting the poor is water inadequacy, in terms of quality and quantity. This is because water scarcity has a tendency of obfuscating the needs of PoC to the extent that those needs become subordinate to the utility's efforts to stay afloat. Indeed, the poor's vulnerability to being left out of water

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1 R. Keith Mobley's Third Law: "People Do What You Inspect, Not What You Expect." (<https://www.ice.com>)

2 <https://medium.com/mind-munchies/you-get-what-you-reward-cd184ec3f2f> Gary Ryan Blair (2019)

service enjoyment has never been higher, especially as governments are relieving themselves of the financial burdens from potentially income-generating entities. The poor are marginalized because water utilities are increasingly becoming demand driven, hence prioritizing not just the willingness to consume but more so the ability to pay. Bill defaulters' service disconnections, priority water rationing, and demand-driven extensions or upgrades are now par for the course in most water utilities.

Take, for example, the more appealing outlier or salutary consumptions registered by large accounts, many a time stinting on the water directed to slums or poor communities. The latter is manifest when utilities divert or direct water to more salubrious neighborhoods when contending with water dearth. Often times the inclusive nature of diversion schedules is wanting, because they are devoid of the frequency and volume supplied per area in a week. Consider also the utility pursuit of a demand-driven distribution network, accentuated by potable water dearth, which accounts for long treated-water lines dedicated to large industrial and institutional water users, besides the deliberate targeting of viable and planned residential estates. More so, when it comes to water rationing and service extension programs, the "Pareto Principal" of focusing on the 20% of accounts contributing 80% of the revenue engenders the relegation of PoC communities to the fringes of water services enjoyment. Indeed, even at Uganda's National Water & Sewerage Corporation (NWSC), bill defaulters' service disconnections are rather common, with the poor and folk in reduced circumstances bearing the biggest brunt. This is because to self-sustaining and business-oriented water utilities, maintaining non-payers on supply is untenable and inimical to continuous service delivery.

As a senior commercial officer at the NWSC Kansanga Branch, I expended telling efforts to actually reach and serve PoC, including designing and restructuring

PoC arrears payment agreements with the NWSC, and compiling and submitting their arrears for bad debts write-off. The latter interventions conducted into considerable growth in public standpipes (PSPs) for PoC. I parlayed the latter success and more into my current work as a finance and commercial operations expert at 2ML Consulting Ltd, where shades of NWSC are frequent and replicable approaches to inclusive reporting abound. *I have observed that mandated utilities with policy power, private sector operators with eleemosynary interests in PoC, development partners extending concessional finance to utilities, and governments with international universal water-access commitments all have the potency of incentives, which can cause utility action to not only reach and serve PoC, but also to report on service levels to PoC.* Often utilities report their service coverage as a ratio of their grid-connected households to the total jurisdictional households, regardless of whether the connections are inactive or active. *However, I submit that it is the provision of potable water to PoC that counts the most, since water pipes may actually exist connecting premises of PoC to the distribution network. But if PoC are not enjoying the service, the service is devoid of social equity. Perhaps in nothing other than consumption of potable water by PoC do utilities affirm their commitment to PoC and show PoC dignity.*

I also venture to submit that KPI data typically reported by water utilities' monitoring and evaluation units, throughout my time at the NWSC<sup>3</sup> and as a consultant for urban water utilities, have conspicuously been devoid of feedback on the level of water service interaction by PoC. *The reported performance is so general in nature that the specificity of the quantity and quality of water services to PoC is not patently manifest for progress tracking and assessment.* Take, for example, Taraba State Water Corporation (TAWASCO), whose service coverage is rather low at about 12.03%, given its 5,637 total customer connections relative to the estimated 46,875 households reckoned at Jalingo's average household

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3 Ended in December/2017

size of four members<sup>4</sup> in a population of about 187,000 people<sup>5</sup>. The exact figures for urban poor being served are unknown and rarely extracted in reported data. The common KPIs preferred or prioritized by water utilities include abstracted raw water, plant capacity utilization, plant losses, water produced, water supplied, service coverage, active connections, water sales, billing, billing operating costs coverage, non-revenue water (NRW)<sup>6</sup>, revenue collections, collection efficiency<sup>7</sup>, arrears reduction, debtor's age, and collections operating costs coverage. Often times, PoC-specific data hardly appear in the “bigger picture.”

Indeed, water utility performance reporting sans feedback on service levels to PoC denotes a certain level of indifference to the plight and value of PoC. This is because when large numbers and standard indicators alone are considered, it obscures the predicament of marginalized persons and communities. In my experience working and consulting for water utilities, it is the perceived PoC low patronage of water utilities and the lack of PoC-specific VoI that explain the utilities' indifference to reporting on water service levels to PoC. The low financial gains utilities trace to PoC serve to circumscribe the utility will to report on performance levels unique to PoC, hence encouraging the utility settlement for generalized reporting. There is also agreeable interest in the whole rather than the less appealing and often patchy parts. The latter explains why to water utilities, tradeoffs exist between being financially sustainable and serving the poor, plus progress reporting on salvaging billing or operating costs coverage and on serving “distractions” from viability. *Indeed, Dr. William Muhairwe's start as the managing director (MD) of NWSC in 1998 primarily focused on leveraging revenue collections, which enabled*

*his predecessor's service expansion program across Uganda. Had it not been for the financial cushion afforded by earlier reforms, the current leadership's pursuit of water for all would be inconceivable.*

Besides the 1998–2001 Kampala Revenue Improvement Project (KRIP) and foreign management contracts to up service delivery, the NWSC contrived to extend water services to PoC only later in 2007 when, under the aegis of the World Bank, an Urban Pro-Poor Branch (UPPB) was set-up at Kisenyi slum in Kampala to scale up the community's water service interaction. Installation of prepaid standpipes and postpaid PSPs at accessible and vantage points for PoC helped reach legions of the indigent in informal settlements. *Propitiously, the NWSC had already embarked on service efficiency (in terms of responsiveness<sup>8</sup>, reliability<sup>9</sup>, and reachability<sup>10</sup>) improvements, a rigorous customer growth strategy, and subsidizing access to pipe water for all by providing all the connection materials within 50 meters from the tapping point to the premises.* When potable water access subsidies did not suffice, as applied rates were beyond the poor's indifference range, legions of customers with transactional means and high service satisfaction came in handy, as the NWSC invoked cross-class subsidies in its rate schedules to subsidize the urban poor water consumption. The NWSC was now set to serve the urban poor and also report on its service levels to them.

*The telling lesson from the aforementioned NWSC experience is that a unit or department dedicated to serving PoC, such as the poor, is rather necessary, since the unit would be mandated to report on its initiatives to reach and serve PoC, and on the registered service levels. In addition, not many utilities take pleasure in reporting on nothing to report about, hence*

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4 <https://knoema.com/atlas/Nigeria/Taraba/Household-Size>

5 <https://www.citypopulation.de/php/nigeria-admin.php?adm2id=NGAo35007>

6 NRW is water produced and is “lost” before it reaches the customer. Losses can be real losses (through leaks, sometimes also referred to as physical losses) or apparent losses (for example, through theft or metering inaccuracies).

7 [(Monthly Collected Operating Revenue/Monthly Consumption Billing)] X 100

8 The celerity of resolving service issues.

9 Continuous quality water-service provision.

10 Customers' ability to physically or remotely lodge or transmit issues to the NWSC

accentuating the prefacing of inclusive reporting with actual service delivery to PoC. In the general scheme of things, and for the sake of setting off for the poor, Uganda's NWSC is plausibly structured to facilitate inclusive reporting and remains a model utility to other global water agencies. For example, in January 2006, Indonesia had neither a law nor a regulation that mandated utilities to target equal service to the poor in specific terms, and thus they were not targeted<sup>11</sup>. Even as the Ghana Water Company Limited (GWCL) ponders and limbers up for its Low Income Consumer Support Unit (LICSU), it has in Uganda's Urban Pro-Poor Branch (UPPB) a benchmarkable unit. Most importantly though, setting up pro-poor units or pro-PoC departments within a water utility structure goes a long way in fostering PoC accountability across the utility and qualifies the need for pro-PoC indicators and performance targets or standards to evaluate success.

To define pro-PoC indicators and set related targets though, the NWSC needed need to define who constituted PoC, such as the urban poor, especially since they are scattered in the thousands beyond the Kisenyi Slum and not mustered in one residential area. This was necessary to assess and report with apposite VoI the level in quantity and quality of NWSC services to the urban poor. *The number of PSPs and water sales registered on PSPs came across as plausible VoI for consideration. The provisos employed to determine the fitness for a PSP connection, and hence benefit from PSP preferential treatment, included involuntarily unemployment, protracted stay in a makeshift house, not being among the landed folk, susceptibility to waterborne diseases, and subsisting on social benefits.* The World Bank defines the urban poor as the bottom 40 percent by income (or a proxy for income, such as asset ownership) of people living in cities. After addressing the issue of accessing the urban poor's informal settlements with PSPs, next up the NWSC tackled sustainable consumption for PoC with instruments such as the arrears payment agreements (APAs) and cross-class subsidies in its rate schedules. See Table 1 showing how the NWSC has differentiated prices across its served customer classes to make water

consumption affordable to the country's urban and per-urban poor, and Figure 2 showing Kampala Central's Kisenyi slum. See also Figure 1, showing the NWSC KW UPPB water service points (WSPs).

**Table 1:**  
**Price Differentiation & Urban Poor PSP Rate at the NWSC**

Consumer Category UGX/ M3 VAT Inclusive	Cost per 20ltr/UGX Jerrycan VAT Inclusive
Public Standpipe at UGX 1060 Per M3	25
Domestic Customer at UGX 3516 Per M3	83
Institution/Gov't at UGX 3558 Per M3	84
Commercial <500m3/ Month at UGX 4220 Per M3	99
Commercial 500-1500m3/ Month at UGX 3373/M3	79
Industrial <1000m3/Month at UGX 4220/M3	99
Industrial >1000m3/Month at UGX 2500/M3	59

Source: Uganda's National Water & Sewerage Corporation

However, the NWSC's maintenance of a redistributive tariff policy to serve PoC constituted a scenario that did not augur well for payment compliance and authorized consumption practices from all payers with means. *The latter scenario scaled up my interest in consumption data for high-tariff band customers. Potentially, unmitigated price differentiation and annual tariff indexations engendered perverse habits and effects, such as water theft among the utility subvention instruments unwilling to adjust their consumption patterns, hence impinging on revenue growth. To mitigate illegal water use, I revved up audits on high-tariff band customers, since analyzing their consumption data afforded me pointers to possible delinquent accounts.*

11 World Bank Report on "Indonesia: Enabling Water Utilities to Serve the Poor," January 2006.

**Figure 1:**  
**NWSC KW UPPB & Water Service Points (WSPs)**

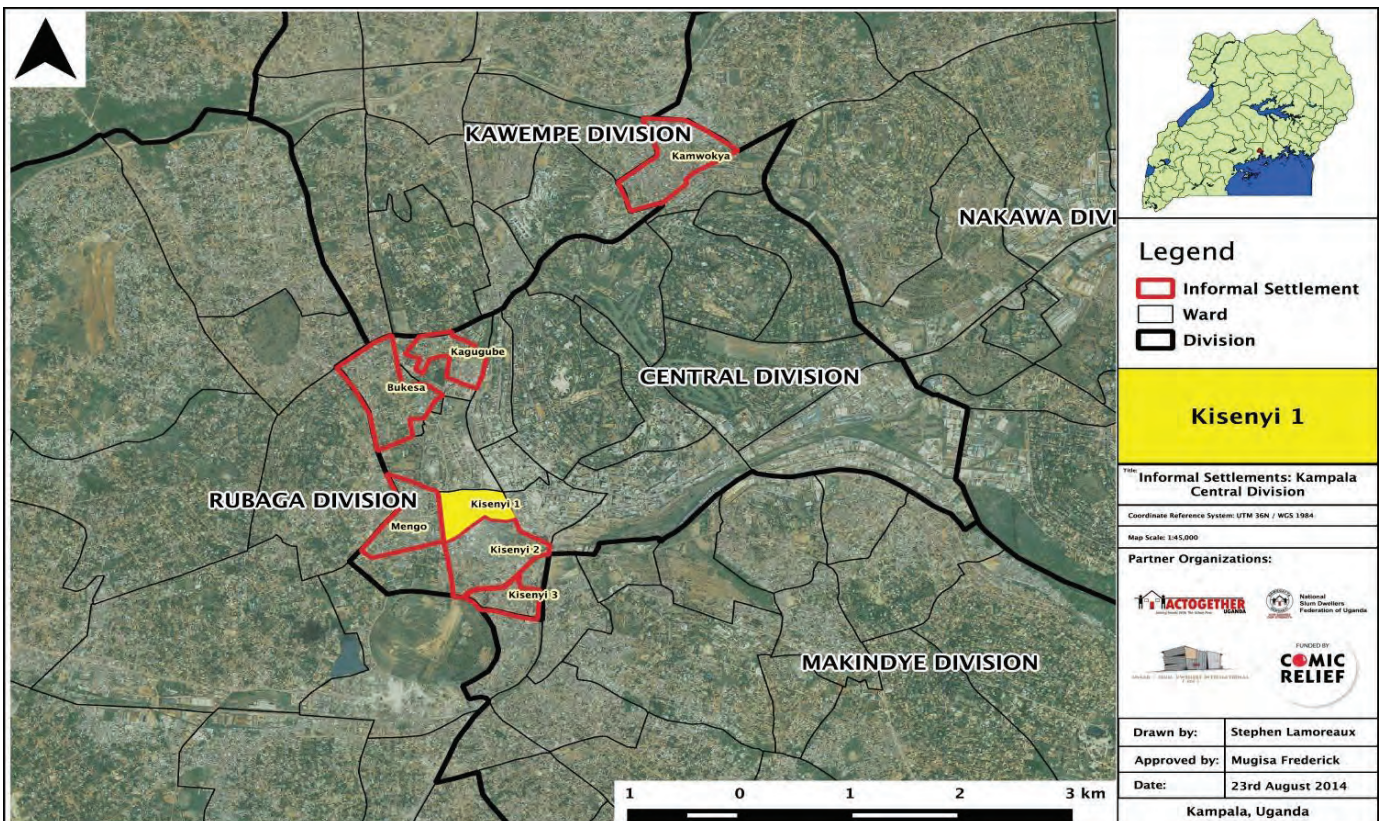


Uganda's National Water & Sewerage Corporation's Urban Pro-Poor Branch (UPPB) at Kisenyi

UPPB's Prepaid Water Standpipe

UPPB's Postpaid WSP

**Figure 2:**  
**Kampala Central Showing Kisenyi Slum (1, 2, &3)**



Source: Kampala Capital City Authorities Slum Settlement Profil

Qualitative efforts, such as APAs and cross-class subsidies, help PoC communities sustain potable water consumption by PoC communities and hence qualify as reportable utility progress and amenability to serving PoC. However, despite the APAs and cross-class subsidies within the NWSC rate schedule, PoC, such as the poor and IDP at Kasokoso, still failed to pay water bills, given a multiplicity of demands they faced, and reneged on the agreements to settle their arrears, even where the APAs were restructured. Indeed, water consumption preclusion, due to the PoC inability to settle water bills, remains an albatross to water utilities. In some cases, PoC even present commodities, such as bunches of bananas to NWSC, in exchange for NWSC-preferred cash payments. Indeed, while at KW Kansanga Branch, over 50 percent of the urban poor PSPs would default on their monthly water bills, hence goading me into authorizing their supply disconnection. Subvention from goodwill private sector operators and humanitarian agencies' cash-based interventions can facilitate utilities' installation of WSPs and utility patronage by PoC, such as IDPs and refugees. PoC without legal status and access to finance lack the capacity to even get or start jobs. But with eleemosynary assistance, they also get dignity when they pay their own bills and in doing so can practice water conservation or efficient use. It suffices to note that revenue collections from the PoC category under PSPs is a credible pro-PoC indicator.

A case in point is in 2019, when the NWSC entered into a memorandum of understanding (MoU) with the UNHCR (United High Commission for Refugees), in which the NWSC acceded to taking over the management of the water distribution system and assets from UNHCR, at the Rwamwanja Refugee Settlement in Uganda's Kamwenge district. The Rwamwanja Refugee Settlement in southwestern Uganda has over 84,000 refugees, with more fleeing political conflicts in nearby Democratic Republic of Congo (DRC). Inherent in the MoU is the clause that the PSPs provide water at the national pro-poor rate of UGX 25/Jerrycan, while the first 20 liters (i.e., Jerrycan) per person per day are paid for directly to

NWSC by UNHCR. The latter commitment from the UNHCR nudges the NWSC to appreciate the import of service returns to PoC, such as refugees. The NWSC, under the inclusive leadership of Dr. Silver Mugisha, affirms that the NWSC is not reneging on its "water for all" promise. In addition, PSPs and pre-paid WSPs, referenced in the NWSC's 5-Year Strategic Business Plan 2016-2019, remain central to its efforts to serve the urban poor in informal settlements. NWSC's inclusive value system is indeed commendable. See Figure 3 for the MoU Signing.

**Figure 3:**  
**MoU Signing Between the NWSC & UNHCR,**  
**16th/October/2019**



The NWSC Managing Director, Dr. Eng. Silver Mugisha, and the UNHCR Representative in Uganda, Mr. Joel Boutroue, at the signing of the Landmark Agreement to Serve PoC in the Rwamwanja Refugee Settlement of Kamwenge District.

Source: <http://www.theinsider.ug>

I also tracked in my jurisdictional area of Namuwongo proxy VoI, such as the reduction of the incidence of waterborne diseases, to appreciate the benign effects of potable water on PoC. Other usable qualitative pro-poor indicators, as per Oduro-Kwarteng et al (2014)<sup>12</sup> in their proposal to the GWCL, include regulatory agency pro-poor policies with related implemented interventions; utility pro-poor policy with related implemented interventions, mapping the urban poor physical locations,

12 Oduro-Kwarteng, Sampson & Nyarko, Kwabena & Dwumfour-Asare, Bismark & Adjei, Kwaku & Adjekum (2014). Indicators for Benchmarking Water Supply to the Urban Poor in Ghana. International Journal of Innovative Research & Studies

and flexible payment of new connection fees. It is also commendable that the NWSC, under its GIS and Block Mapping Department, has mapped all its informal settlements within Kampala. In addressing the lack of PoC-specific indicators, targets-setting and performance-incentives design will be possible. Utilities will also latch onto PoC specific reporting, because the data of interest (DoI) assume value via the

agency of targets and incentives. Therefore, a sine qua non for a PoC-centric water utility is having pro-PoC indicators, targets, and incentives. It is only latterly that the NWSC assigned performance targets to its UPPB under its January-June/2021 IMPACT (Improved Performance & Accelerated Customer Service Techniques) Program, but laudably with territorial incentives. See Table 2 showing UPPB IMPACT Targets.

**Table 2:**  
**Inclusive Reporting with Pro-Poor Indicators & Targets at the NWSC KW**

Branch	Branch Code	Total Connections as at Dec 2020	Water Sales (Monthly) m3		
			Minimum	Smart Target	Stretch Target
City Center	1	12,717	569,920	636,418	686,691
Kansanga	2	18,184	307,980	343,916	371,082
Najjanankumbi	3	18,904	203,526	223,503	241,456
Bwaise	4	19,142	213,562	238,481	257,319
Ntinda	5	18,197	207,049	231,207	249,471
Nakawa	6	10,966	365,621	408,282	440,533
Nakulabye	7	13,454	191,187	213,495	230,359
Nateete	8	18,096	175,235	195,940	211,398
Nansana	9	13,640	81,808	99,654	106,871
Bunga	A	10,515	161,626	177,491	191,748
Mukono	B	16,152	116,404	141,798	152,066
Kireka	C	17,255	167,527	183,971	198,749
Kyaliwajjala	D	28,575	238,803	287,439	308,504
Gayaza	E	21,214	128,260	149,828	161,142
Kanyanya	F	11,557	91,784	102,629	110,726
Matugga	G	12,181	63,940	77,888	83,528
Salaama	H	12,857	112,856	123,934	133,889
Kyengera	J	13,715	80,352	89,846	96,933
Kakiri	K	334	1,459	1,777	1,906
Wakiso	K	3,963	22,706	27,660	29,663
Ndejje	L	13,048	90,634	110,407	118,402
Luzira	M	8,936	170,730	187,488	202,548
Seeta	N	19,872	225,942	275,233	295,163
Bulenga	P	10,620	72,364	88,150	94,533
Masanafu	R	10,746	92,212	101,263	109,397
UPPB		1,539	54,541	66,440	71,251
<b>TOTAL</b>		<b>356,379</b>	<b>4,208,025</b>	<b>4,784,137</b>	<b>5,155,326</b>

Source: Uganda's NWSC, Kampala Water

Other replicable practices for PoC abound, in Uganda. Take, for example, NWSC's mobile phone application, where customers can input their current meter readings, and then pay the bill using mobile money. The latter system allows customers to make smaller, more frequent payments that are in line with their own household cash flows.. However, the NWSC can replicate the GWCL flexible payment of new connections in Ghana. This is particularly important for the NWSC after it stopped the subsidization of access within 50 meters with connection materials. More so, customer premises are connectable to its distribution grid after full payments for a new connection and a meter installation, and a consumption deposit of at least three months. I must hasten to add that, as an NWSC senior commercial officer, I was disinclined to PSP connections, because, while water sales would be high, billing would be low because of lower tariff and collectable revenue would subsequently be low. The monthly revenue targets I contended with, goaded me into focusing on financially expedient short-run gains. Unlike having a UPPB field office, the NWSC can decentralize the UPPB interests by having full-time pro-poor staff members in all KW branches, akin to Zambia's Lusaka Water & Sewerage Company, where the manager of the pro-poor unit is based at company headquarters and 13 full-time staff

The NWSC's targetized and sweetened IMPACT Program also shows that utilities can appreciate that with a requirement to report on something of interest, indifference to reporting can be no more, and when reporting on it comes with incentives, improving on it is a quasi-given. Therefore, for a water utility to tease out an account of its service delivery to PoC, at least a mandate or regulatory requirement for it to do so is necessary. However, in my experience to the regulated community, rules can infer minimal compliance, while incentives can nudge beneficiaries to transcend the bounds of basic requirements. This means that effective compliance with market-based instruments, such as subsidies is likely to be higher, given that these tools operate via the

economic incentives facing the utility and community members<sup>13</sup>. This is true because the utility's pursuit of financial sustainability, may impinge on the utility's appetite for reaching the poor and other PoC, but when the utility is either subsidized or given tax breaks, it feels emboldened to carry PoC along, with reporting on PoC service levels to boot. More so, it is imperative to note that traditional regulation is literally state interventionism, often implemented where market liberalism has not only failed, but also in the absence of incentives, to guarantee the achievement of targeted societal outcomes.

Perhaps significantly explaining variations in utility PoC services, and hence inclusive reporting is utility or utility staff effort. Due to the necessity of effort that is over and above the required, to especially deliver the UN SDG 6 by 2030 (United Nations Sustainable Development Goal), the corollary urgency foregrounds the compulsoriness of incentives, and the need to optimize their salutary potency. However, budgetary constraints faced by all, and the maintenance of incentives payment a worthy concern, a telling question that pops up relates to who picks up the tab for them. The answer to the latter question is water utilities, since sustainability is securable when the payment of incentives is within their purview. The registered performance can be a locked-in baseline standard in the performance contracts, which is not only leverageable under the next Performance Improvement Program (PIP), but also attracts penalties for realized performances below it. It suffices to note that water utilities can still attenuate their incentives payment burden, by exploiting definite performance contracts and time bound PIPs, which consolidate gains and extend frontiers of success. *I maintain preference for utilities paying performance incentives, having seen water agencies doing so under donor project funds fail to perpetuate the disbursements during post project periods, because they are not inured to incentives payment via their IGR (internally generated revenue).* This means that external aid for utilities to pay incentives can only take the targeted performance to an irreducible level.

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13 OECD Report on "Alternatives to Traditional Regulation."



Against this backdrop, another telling question is how the risk of incentives freezing the staff's sense of duty to discharge mandatory responsibilities is manageable, especially where financial incentives are involved<sup>14</sup>. In my experience, the tendency is always high for doled-out monies to crowd out workers' intrinsic motivation, even for work they were hired to do in the first place. I have seen utility staff demanding to be paid incentives for verifying or counting active customers under their jurisdictions during data migration to new billing systems. It is within the purview of branch staff to know the number of customers they engage and interact with per weekday in a month. A utility legally exists for an overarching purpose, and its strategic direction is a function of its value system; so for the sake of maintaining relevance to their employers, employees pay allegiance to the utility with actions germane to the utility priorities. Therefore, after updating its priorities or focal areas under a new strategic direction or business plan, a utility can engage employees to get the job done. It follows that when water utilities receive financial incentives, as opposed to their individual staff directly doing so, the utilities can invoke their agency of policies and still nudge the staff to deliver on the level of water services to PoC. *Optimizing utility policies frees up money to fund the water-access capital budgeting decisions of utilities and still get their workers to deliver.*

Indeed, the NWSC KW UPPB staff had never been entitled to performance bonuses, even when other NWSC branches had incentives to elicit innovative and creative ways of surpassing their typical KPI targets. For more water services to benefit PoC, meeting stretched targets calls for individuals to do their utmost, and rewards are the best way to affirm recognition of stretched individual efforts. *However, in cognizance of the overarching objective, which is to accentuate the import of utility reporting data on the PoC VoI, incentivizing utilities to mobilize internal efforts packs more punch, facilitating infrastructure gains, addressing inefficiencies to rev-up PoC services, and fostering a utility culture of performance reporting on*

PoC VoI. Moreover, data disaggregation undergirds a water utility's commitment as a government or equity agency to leaving no one behind in accessing and enjoying its services. Basically as the hirer and firer, a utility enjoys the latitude of setting minimum performance standards for its recruits and old timers, which even transcend its actual baseline situation, across the PoC VoI. So financial assistance in the form of grants, soft loans, and subvention constitutes a veritable platform upon which utilities are convinceable to value the VoI data and report on the registered performance.

For instance, any concessional financing, and more so doled out in tranches pegged on reporting and meeting the desired performance, can successfully elicit the utmost from utilities for PoC. Even result based financing (RBF) is very feasible in the water sector, where access to a proportion of funds by utilities or government is possible only after agreed upon results are achieved and verified. Subsidies from central governments are also effective inducements, especially considering how the vast majority of water utilities are subsisting on them, and are associable with reporting on water services VoI to PoC. *For example, in Nigeria — where I have consulted for the Water Corporation of Oyo State, Osun State Water Corporation, Ogun State Water Corporation, Borno State Ministry of Water Resources, and TAWASCO — the cost recovery ratios are hardly above 30%, indicating how heavily subsidized they are by the state governments.* The least that state water agencies can do is to report on their commitments and service levels to PoC. Furthermore, reporting on VoI for PoC can be integrated into utility branch performance appraisals to subsequently dispense branches from the percentage deduction for DoI omission against the overall performance registered on the typical KPIs, so that branch teams develop actionable interest in inclusive reporting. Therefore, the incentive for the utility branches to value and report on VoI for PoC would be to insulate their earned incentives against DoI omission deductions.

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14. Marianne Promberger, Theresa M. Marteau, *When Do Financial Incentives Reduce Intrinsic Motivation? Comparing Behaviors Studied in Psychological and Economic Literatures*, Health Psychol. 2013 Sep; 32(9): 950–957.

However, where utility top management opts to incentivize or reward its strategic business units for the good or targeted performance registered, it can use a lump sum per quarter extracted from the utility's IGR, recognizing best performing branches or area offices on PoC VoI. With monthly performance reporting a must, the incentives are dependent on the quarterly percentage improvement against the baseline service level to PoC. The VOI can include, inter alia, the consumption registered on community standpipes or PSPs. The incentive model can take the form  $[(0.25 * 1_c) + (0.25 * NRW) + (0.5 * 1_c)]$  lump sum. Full reporting that constitutes 1 can still be a fraction (0.5), if say data are reported only twice in the four months. However, the 1c for consumption is only considerable if the PSP consumption across the four months improves beyond 8% against the baseline. The efficiency gains from reducing NRW help perpetuate service delivery to PoC. The utility leadership can also peg additional cash imprest to the branches or area offices on the aforementioned incentive model to scale up efforts for PoC. For the NWSC, under its Kampala Water IMPACT Program Rewards Mechanism, each territory is entitled to an incentive of Ushs 1 Million upon achieving the set performance standards below. See Table 3 for the NWSC KW IMPACT Program incentives. The NWSC even guides that the minimum standards for water sales and total billing, are subject to review on a monthly basis to ensure progressive performance.

The non-financial incentives that pack a wallop include plaques, certificates of recognition, general manager's or MD list, and MD's fist bump/handshake. Meanwhile, the MDs can engage in advocacy to scale up reporting on the quantity and quality of water services to PoC as a function of their role in the utility, as a social responsibility for the utility, and for the state subvention and preferential treatment afforded it. Maintenance of indifference to reporting on water services to PoC would then constitute an error too basic to derogate from a utility's reputation. *The latter packs more punch than even advocacy from outside the system of interest, such as a water utility, because advocacy from within and by internal members at the very to, serves to engage overdrive, especially where a government agency would have dragged its feet.* However, cooperation for advocacy across WASH (water, sanitation, and hygiene) NGOs (non-governmental organizations), international or local, is necessary to facilitate inclusive and standardized reporting by utilities, especially on water service levels to PoC. Indeed, a government can choose to achieve its policy objectives by spending taxpayers' money but can also adopt non-spending interventions, such as regulation.

The quality and quantity of public goods and services, such as potable water to all in society, constitute the social scorecard that informs the electorate's voting, a veritable platform upon which inclusive reporting can be embraced and appreciated. *Here advocacy jogs the incumbent's value system,*

**Table 3:**  
**NWSC KW IMPACT Program Rewards Mechanism, January-June 2021**

#	Condition for earning the incentive	%ge incentive to be earned	Total available incentive -1,000,000/=
a)	If a territory registers improvement from the minimum in all the 3 parameters of Water Sales, Total Billing and Non-Government Collection Efficiency (100%)	20%	200,000/=
b)	If a territory achieves its monthly targets in Water Sales and Total Billing	50%	500,000/=
c)	If a territory achieves its monthly targets in all the 3 parameters of Water Sales, Total Billing & Non-Government Collection Efficiency (105%)	100%	1,000,000/=

Source: Uganda's National Water & Sewerage Corporation, Kampala Water

especially when perpetuating political survival holds more water; no water utility can disparage the need to serve PoC, let alone deprecate the reporting on service levels to PoC. Ultimately, no individual staff would derogate from the standard requirement of reporting on either water services rendered to PoC or efforts expended for the PoC. See Alejandro and Katharina (2021)<sup>15</sup> on how the provision of public goods plays a key role in the survival of leaders in democracies. A case in point was the Pro-PoC delivery mechanism launched during Uganda’s 2006 presidential election campaigns called the Presidential Pledge Taps and painted in yellow, which is the incumbent party’s color. The Presidential Pledge Taps are similar to PSPs or water kiosks in all respects, though dispensed from the service (meter rental) charge, not the basic water charge. More so, countries have also ratified international conventions on water for all, in addition to signing the United Nations Sustainable Development Goals (UN SDG), including UN SDG 6. The estimable Dr. Gro Harlem Brundtland (2003)<sup>16</sup>, former director general of the World Health Organization (WHO), evocatively submitted that *the right to the highest attainable standard of health was enshrined in the WHO’s constitution over 50 years ago and recognized as a human right in article 12.1 of the International Covenant on Economic, Social, and Cultural Rights.*

The aforementioned right extends to the underlying determinants of health; and central among these are safe water and adequate sanitation, and as such, the onus is upon the acceding countries, to report on evidence-based progress registered for PoC. See Figure 4: Uganda’s President Yoweri Kaguta Museveni launching the communal Yellow Taps in 2020 prior to the 2021 Presidential Elections.

**Figure 4:**  
Uganda’s Pro-Poor Presidential Pledge Water Taps, 2020



President Yoweri Museveni of Uganda launching the Yellow Presidential Pledge Water Tap under the Service Coverage Acceleration Program (SCAP) 100 Program to deliver potable water to all without exclusion.

Source: <http://www.tuko.co.ke>

Most importantly though, there is indisputable value to water utilities from serving PoC, so much that it qualifies the import of data for the PoC VoI. *The PoC in the water sector are not just consumers; they are also water value qualifiers, custodians of the distribution network integrity, guardians of water quality, and source protectors whose enjoyment of potable water is a salutary benefit to water utilities.* Actually, the urban poor pay more for water than their rich counterparts through intermediary suppliers whose rates are higher than the utilities’, hence affirming the capacity of the poor to pay for water. In Uganda, water vendors sell a 20-liter jerrycan of water at 200 UGX, while Table 1 shows that the NWSC charges a nominal fee of 25 UGX. In addition, unlike in the western world, where water utilities have adopted and integrated SCADA (Supervisory Control and Data Acquisition) into the distribution infrastructure, the NWSC and the vast majority of water utilities in Africa still heavily rely

15 Alejandro Quiroz Flores, Katharina Pfaff, “Private provision of public goods and political survival: Rail transport in four European democracies in the 20th century,” *Research in Transportation Economics*, 2021, 101046, ISSN 0739-8859, <https://doi.org/10.1016/j.retrec.2021.101046>. (<https://www.sciencedirect.com/science/article/pii/S0739885921000184>)

16 <http://www.who.int> (The Right to Water)

on feedback from concerned citizens for awareness of field anomalies. However, many a time when a water pipe passing through an underserved or excluded community bursts or leaks, the water wastes away and at times is used without reporting the anomaly to the utility out of an abundance of indifference. It is the well served with the incentive to report, while the excluded will scream *schadenfreude*.

It is also served individuals or communities used to normal potable water who can identify compromised water quality and report it to the utility. A cursory assessment of the dirty water cases, bursts, and leakages reported to the NWSC call centre indicates that the vast majority of reporters are oftentimes NWSC customers. The encroachment on raw water sources is also plausibly due to a sustained lack of interaction with treated water, engendering benightedness amongst the unserved and most vulnerable, while sapping their sentient minds of guilt. More so, when I collaborated with Uganda's Ministry of Health and Kampala City Council Authority officials in November 201, to install free metered water connections at Namuwongo Slum in Kampala, during cholera and typhoid outbreaks, it occurred to me that effectively serving the poor can help tame public health issues. It suffices to underscore that in serving PoC, a water utility enlists the support of key partners in its pursuit of sustainable water resources and services. It works out for the good for water utilities to ensure that everyone sans exclusion can access and enjoy potable water, akin to the privileged few in our communities.

The NWSC has legions of its service defenders in the form of water user committees (WUCs) in communities. It was customary for me to interact with them at water barazas about our registered branch performance and our targeted service levels for PoC. *Keeping the branch water defenders in the loop, also served to reinforce their resolve to collaborate with us, because, while they hankered after evidence-based feedback, I placed pro-poor data and related initiatives at a premium.* WUCs precisely represent end users and

are responsible for the day-to-day running of a given water point. The communities elect the WUCs and at times the NWSC also selects them based on criteria other than benefiting self, such as the proximity to a water point and a demonstrable household water interaction. Personally, when it comes to mainstreaming gender into water service provision, I get impenitent with my preference for the African woman to lead a WUC, for she treks long distances to fetch water and domestically interacts the most with water to cook food and wash clothes. *In fact, the latter experience on gender inclusion into water services provision qualifies gender parity as a reportable index by water utilities.* Consider also a 2018 World Bank Utility Survey<sup>17</sup>, which revealed that female employees leave water companies at a higher rate than men. The data showed that on average, women leave water utilities at a rate of 8 percent throughout the year, compared with 5 percent for men. *The latter scenario also accentuates the significance of female employee turnover as a reportable indicator by water utilities.* See Allen and Muturi's (2020) "a transition for all," expatiating on equity and community engagement in the transition of water supply management to utilities in refugee settlements in Uganda. See Figure 5 showing African women trekking for water

**Figure 5:**  
**African Women Trekking for Water**



Source: <http://www.montanaonamission.org>

To generate value for the DoI, which are specific to PoC, accountability is enforceable via reporting on registered performance and piloted initiatives.

<sup>17</sup> <https://openknowledge.worldbank.org> (Titled Women in Water Utilities: Breaking Barriers)

Answerability, especially to a higher stakeholder, by default constitutes an incentive to comply with the potential to demand for a lot more. *This is the part where either the recipients or users of submitted reports on the quality and quantity of service levels to PoC should also get water utilities to attach value to the DoI for PoC.* It starts with individual staff reporting to their branch or area office managers; afterwards, heads of the strategic business units give documented feedback to the top leadership at the water utility headquarters. *Nurturing value for DoI occurs via the agency of reporting from the bottom to the very top of the utility, since the penal risks are so high that dereliction and indolence are intolerable.* In addition to water utilities, other parties interested in the PoC DoI abound, such as line ministries (LIs), national planning authorities (NPAs) on behalf of incumbent governments, eleemosynary organizations (EOs), FIs, advocacy groups (AGs), and the United Nations System (UNS). When it comes to the latter, the centrality of data for PoC to the water utility assumes a higher level, placing on it the responsibility of disaggregating data according to PoC, such as the urban poor, women, and refugees or IDP in their host communities. *The practice of adorning the utility façade with the general picture loses appeal, as the list of parties interested in the specificity of service levels grows.*

The key lessons on inclusive reporting for water utilities, hence the must-haves of social equity integration into water service provision, include a unit or department dedicated to PoC within a water utility's structure and a concomitant set of appropriate pro-PoC indicators. The latter alone facilitate the collation of DoI to track and assess the utility's progress on its service commitments to PoC. The adoption and implementation of thematic (e.g., access, consumption, and patronage) approaches, in the form of pro-PoC PIPs and initiatives, serve to not only consolidate registered gains, but also to extend the frontier of PoC service success. The NWSC, under its inclusive IMPACT Program, has also underscored the import of the number of PSPs, and the consumption registered at PSPs, as KPIs for PoC, such as the urban poor. Targetizing

and incentivizing pro-PoC PIPs affirm the utility management's commitment to scaling up PoC services and accentuate the bottom-up approach of inclusive reporting. The potency of incentives is in their versatile advantages, especially in revving up staff lateral thinking, and doing their utmost to rein in losses and salvaging billed monies. Expending considerable effort to address a utility's NRW can avail adequate water to serve the vast majority of PoC. *Recent studies suggest NRW in sub-Saharan Africa stands at around 14mm<sup>3</sup>/day, which is approximately 64 liters a day for each person supplied — an amount far higher than the water readily available for individuals in many parts of the continent*<sup>18</sup>. It is also plausible that just like Uganda's NWSC, it is the financially buoyant water utilities that have the wherewithal to reach and serve PoC, hence accentuating the rationale of incentivizing collection efficiency improvements.

With practical definitions of who constitute the poor, facilitation of geographical mapping and targeting of the urban poor is achievable. Amenability to PoC incremental bill payment by utilities, besides employing cross-class subsidies in utility rate schedules, can help maintain PoC enjoyment of potable water. *Most importantly, mandating water utilities to reach and serve PoC, and incentivizing utilities to optimize policy power and mobilize internal efforts constitute the most plausible routes to utilities valuing DoI and inclusive reporting.* Besides the number of PSPs and consumption registered at PSPs, female employee turnover and gender parity in water utilities also come across as plausible PoC indicators adoptable by other water agencies. More so, the existence and implementation of a pro-PoC policy in a water utility, coupled with the flexible payment of new connection fees and cross-class subsidies in utility rate schedules, indicate the utility's commitment to serving PoC. The NWSC is already entering into APAs with highly indebted PoC, affording them up to eight months to settle their arrears, while dispensing them from service disconnections as long as current bills are paid. *The WUCs can help provide water utilities vital feedback on areas of service improvement and non-*

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18 <https://www.thesourcemagazine.org/african-prospects-for-performance-based-non-revenue-water-contracts>

*conformities*. They help in both gender mainstreaming into water services provision and in fostering inclusive economic development. It is important that national governments should consider expressly mandating water utilities to report on their service levels to PoC, for the mandate is legitimized by the mitigation of public health risks and the unlockable economic benefits derived from access to potable water by all. The latter would include, inter alia, heightened female labor participation due to reduced girls' class absenteeism. Most importantly, the poor are a voting group, which can determine and sustain political survival.

*Overall, inclusive reporting constitutes data-driven accountability, which accentuates the import of disaggregating data, to not only support and facilitate the pursuit of society's objectives, but also to show cause for sustained utility preferential treatment in the form of tax breaks, subsidies, and concessional finance. Indeed, value abounds amid utility concerns in expending efforts and time to serve the most vulnerable in society, given that the PoC are amplifiers of water value at the household level, guardians of the distribution network, custodians of water quality and, raw-water source protectors; and that water companies are basic qualifiers of social equity. Actionable commitment on the part of water utilities begins with embracing pro-PoC indicators and standards for inclusive performance reporting, and invoking a broad gamut of incentives to scale up targeted improvements. To guarantee the achievement of*

targeted outcomes, at the time when the scope to meet and surpass the UN SDG 6 is petering out for most countries in the developing world, full optimization of a broad gamut of incentives is consequential, if society's most vulnerable are to be considered, reached, and served. *Incremental improvements associable with command and control do not cut it, because these are times for innovation and creativity to hit the skies for the excluded — and incentives fit the bill.* The very sustainability of global water resources and services rests on leaving no one behind, because when all humans interact with potable water, society-wide responsibility is achievable. Maintaining pursuit of inclusive development sans inclusive reporting betrays the lack of commitment to reaching and serving all humans, regardless of their circumstances.

Stanford's Program on Water, Health and Development is working to improve the health and well-being of communities by creating the knowledge, skills and solutions needed to support effective management of water and wastes, and to ensure sustained, equitable access to water supply and sanitation services.

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