



THEMED ESSAYS

# Water Entrepreneurs, Infrastructural Citizenship, and State Power in Nigeria

Daniel Jordan Smith

### **Abstract**

In today's world, entrepreneurialism is frequently promoted for its potential to address major global social problems. Entrepreneurs are often celebrated for their ability to achieve what governments and development programs commonly fail to do: deliver sustainable economic and social benefits to poor people in the Global South. Typically, entrepreneurship is seen as bypassing the state. This essay offers a different perspective, showing how, in Nigeria, entrepreneurial enterprises geared to provide access to potable water because the government fails to do so paradoxically serve the interests of those who control the state. Drawing on long-term ethnographic research in southeastern Nigeria, and using examples of private borehole vendors and "pure water" sachet manufacturers, I argue that ordinary people's infrastructural entrepreneurialism not only requires regular engagement with government officials. It also contributes significantly to the experience of citizenship and the exercise and consolidation of state power.

#### Page 1 of 19

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#### **Keywords**

Entrepreneurialism, Infrastructure, Citizenship, Water, State power, Nigeria.

#### Introduction

In the 21st century, the popularity and promises of entrepreneurialism as a solution to a wide range of global social problems have continued to grow (Chandra 2018; Irani 2019; Seelos and Mair 2005). It is not only proponents of neoliberal economic policies and political agendas who promote it as a pathway to a better world. Many advocates for the world's poor, including scholars in the Global South and grassroots leaders, disillusioned with the dependencies and repeated failures of traditional forms of donor aid, have called for less charity and more investment in local economic enterprises (Yunus 2007). Entrepreneurs are frequently seen as the linchpin in the success – real and hoped for – of these approaches to social change, though there are many skeptics as well (Hart 2018[1975]; Moorsom 2010). While the landscape of ideas and practices broadly construed as entrepreneurial is large and diverse, not infrequently, entrepreneurship is seen as an alternative to, or at least capable of sidestepping, various problems and perceived dysfunctions of the state (Gerpott and Kieser 2020; Lundmark and Westilius 2014). In this essay, drawing on research in Nigeria, I present a different situation. Instead of circumventing a weak government, entrepreneurial efforts to cope with infrastructural deficiencies end up strengthening the very state apparatus that is widely seen to be the problem.

To understand these seemingly contradictory dynamics, it is necessary to begin with the recognition that, for many people around the world, entrepreneurship is borne of necessity. In Nigeria, the extent to which citizens must innovate to survive is captured in the common refrain "every household is its own local government." What Nigerians mean is that politicians and state institutions have not delivered - and cannot be trusted to ensure - even the most basic infrastructure that citizens expect in Africa's most populous country. A whole unofficial system has been forged in response to these infrastructural deficiencies. Resourceful entrepreneurs and ordinary citizens struggling to survive create vibrant informal economies that provide fundamental infrastructure where the government does not. On the surface, it appears that Nigerians' self-reliance and sheer hustle render the state irrelevant. In reality, all of these ostensibly private efforts to address infrastructural shortcomings involve regular state-society interaction. These dealings have contributed to forms and practices of state power and entrepreneurial citizenship (Irani 2019) that ironically thrive on official dysfunction and tragically perpetuate the very inequalities and injustices that struggling Nigerians most lament.

A requirement for life itself, water and the infrastructure to deliver it constitute first-order priorities for any community or society. In this essay, I examine how individuals, households, and small businesses in Nigeria assemble and manage a patchwork of water infrastructure in the face of the state's shortcomings. I focus on two common entrepreneurial enterprises that people engage in to address – and take advantage of – the government's failure to provide a reliable water supply. These are: 1) privately constructed boreholes, from which vendors sell water daily to customers in their neighborhoods; and 2) "pure water" manufacturers who seal and sell ubiquitous .5-liter sachets whose plastic remnants litter Nigeria's urban landscape. In the larger project from which these examples are drawn, I describe in much greater detail the technologies, business models, social networks, political ties, cultural strategies, and everyday habits that enable these informal economic enterprises - and others like them (Smith 2022). Here, I emphasize especially the interactions that these entrepreneurial water providers inevitably engage in with the very state whose failures have created the need for their businesses.

Without these water entrepreneurs, huge segments of Nigeria's burgeoning urban population – especially the poor – would have little access to water. But to provide water to the people, private enterprises must navigate a maze of official and unofficial government requirements. These realities call into question the "private" nature of such entrepreneurial enterprises and complicate superficial understandings of their implications in relation to politics and governance. Looked at from the perspective of its failure to deliver clean water to the people, the Nigerian state appears weak. But if one assumes instead that the primary interest of the state is to preserve the power and privileges of those who control it, then the Nigerian state looks quite strong. Although Nigerians' entrepreneurial ingenuity and resilience in the face of extreme challenges can and should be admired, these (only apparently) state-absent solutions can come at great cost, including fueling corruption, perpetuating social disparities, and deflecting attention away from more sustainable paths forward.

# Water Infrastructure in Nigeria: Urbanization, History, Politics, and Inequality

The importance of reliable water infrastructure – and the challenges posed when that infrastructure is deficient or absent – is magnified in the context of urbanization. In cities, people cannot usually depend on natural water sources like streams, rivers, lakes, springs, and so on. Ellis Adams, Daniel Sambu, and Sarah Smiley (2019) note in a recent overview of urban water supply in sub-Saharan Africa that "water access is woefully inadequate, mainly because population growth and urbanization are

outstripping the already inadequate infrastructure" (2019: 240). Nigeria, Africa's most populous nation, is rapidly urbanizing. By 2020, about half of the country's 200 million people lived in cities or towns.

While there is no doubt that rapid urbanization and the accompanying population growth have exacerbated the challenges of providing sufficient and safe water, the demographic trends should not obscure the historical and present-day political underpinnings of Nigeria's deficient water infrastructure. Many of the country's current urban water woes have roots in infrastructural disparities bequeathed by colonialism. This history of unequal access to safe water spanned the continent, as Hilary Hungerford and Sarah Smiley (2016) document in their comparison of French and British colonial water provision in Africa. They demonstrate that during colonialism, "ultimately, what emerged were socio-spatially stratified water systems and exclusionary water policies that discriminated against indigenous residents and spaces" (2016: 75). They further conclude that "water, for colonial planners, was more than a resource to provide to different populations. Water was a tool of commerce, pacification, and a way to mediate urban boundaries" (2016:82).

As Matthew Gandy's (2005, 2006a, 2006b) work on Lagos demonstrates, water infrastructure was integral to colonial rule in Nigeria in these same ways, both adding to inequality and being emblematic of it. Indeed, Gandy (2006b) shows that the history of the city itself can be revealingly narrated and incisively analyzed through the history of its water systems. Charisma Acey (2012) has described comparable colonial legacies in her work on water infrastructure in Benin City, another major metropolis in southern Nigeria. Both Acey and Gandy trace these historical inequalities to the present and argue that, in postcolonial Nigeria, the state has been similarly implicated in the inequality resulting from its water policies and practices, albeit reflecting and reproducing disparities based on class rather than race (Gandy 2006a; Acey 2008, 2011, 2016).

One of the brutal ironies of Nigeria's water infrastructural deficiencies is that inequality is manifested not only in disparate access to public water systems, but also in dramatic differences in cost. The poor pay many times more for their water than those who are better off (Acey 2011: 21-22), in part because they typically rely on private vendors whereas the wealthy are more likely to be served by public infrastructure. This is true across Africa (Bontianti et al. 2014: 290; Adams, Sambu, and Smiley 2019). As Gandy (2006a) notes, while the rich and powerful in Lagos (and throughout Nigeria) generally benefit from the best infrastructure, for ordinary citizens "a self-service city has emerged in which little is expected from municipal government and much social and economic life is founded on the spontaneous outcome of local negotiations" (2006a: 383).

Gandy's description accurately portrays the practical consequences of the state's failure to provide and maintain adequate water supplies, leaving people to rely on their own ingenuity and entrepreneurialism. But as both Gandy and Acey also show, the government's apparent absence masks a more complex reality in which seemingly private and informal economic enterprises to address local water needs inevitably entail significant interaction with, and regulation by, the state. Elaborating on what she calls "hybrid infrastructure" ("where state and non-state services connect, overlap, and transform each other") (2016: 29), Acey argues that "categorizing service providers as state and non-state obscures the nature of how such systems operate" (2016: 32).

Using Umuahia, the capital of Abia State, as a case study that represents common contemporary practices in Nigeria – and across Africa - I examine below some of the entrepreneurial businesses created to address daily needs for water. In documenting the quotidian struggle to get water, in addition to describing the work of individual entrepreneurs and their small-scale, informal economic enterprises, I explore how ostensibly non-state efforts to address water insecurity in fact require regular interactions with the state. As Nikhil Anand (2017) has persuasively demonstrated in his book about water and the urban poor in Mumbai, India, everyday efforts to secure access to water can themselves be strategic and aspirational political acts. Focusing on Dar es Salaam, Tanzania, Sarah Smiley (2020) makes a similar observation: "For those living at the margins in informal areas, connecting to a network and paying for water is a way to gain recognition, respect, benefits from the state, and citizenship and belonging" (2020: 12). To understand these processes, it is necessary to trace how the politics of infrastructure straddles conventional divides such as formal/informal, public/private, and state/non-state – and in many ways challenges these very categories. Rather than signaling the demise of the state and the meaninglessness of citizenship, these blurry, hybrid, intersecting phenomena are in fact part of their substance. Analytically, the challenge is to determine what all this adds up to for Nigerians - politically, economically, and socially.

# **Research Setting and Methods**

My interest in infrastructure in Nigeria started as soon as I began work there in 1989 as the advisor to a public health project run jointly by an American non-governmental organization and the Imo State Ministry of Health. Based in the state capital, Owerri, then a relatively sleepy town of less than half-a-million people, I experienced Nigeria's infrastructural woes firsthand. For example, periodic power outages affected both my home and office and water ran unpredictably. I lived in Owerri for three years. At the time, I would have characterized Nigeria's infrastructural

situation as difficult and challenging. I could not have predicted that, over the next 30 years, it would only get worse – much worse. Electricity is off far more than it is on. Many neighborhoods that once had running water daily now have none at all – ever.

I began a PhD program in anthropology in 1992. Over these last decades, I have spent many research stints – both long and relatively short – based in southeastern Nigeria, including two years (1995-97) for my dissertation research, extended stays during several subsequent sabbatical years, and many shorter visits in the summers in-between. All totaled, I have been physically present in southeastern Nigeria for about eight years. During most of that time, of course, I was not studying infrastructure. But as is the case for Nigerians, the country's infrastructural deficiencies were always the nagging backdrop to my everyday life, affecting everything from minor tasks to major plans. In addition to my own daily efforts to cope with infrastructural failures, I constantly observed and heard Nigerians talk about their own frustrations and experiences.

In 2017, I decided to study infrastructure explicitly. Reflecting my career-long preferences as an ethnographer, I relied mostly on a combination of participant observation and relatively informal interviews to amass my data. I also reviewed fieldnotes and interview transcriptions from previous projects about other topics and was able to find considerable material related to infrastructure. Most of my research about infrastructure was undertaken in Umuahia, the capital of Abia State. I conducted dozens of interviews, several months of participant observation, and tracked nearly 50 households and specific informal economic enterprises as case studies. Water was one of six infrastructural domains that I investigated.

Because the scope of the project was ambitious, examining six distinct infrastructural domains, I needed, depended on, and was greatly aided by the excellent work of six Nigerian research assistants. In order to facilitate a degree of individual specialization and a level of team expertise, each research assistant was assigned permanently to a particular infrastructural domain, including one for water. In addition to building cumulative individual expertise, this also contributed to developing familiarity, trust, and rapport with the entrepreneurs and workers in the various enterprises that we studied. While the empirical material in this essay draws from the case studies of the entrepreneurial provision of water, the larger argument about how entrepreneurial efforts to cope with infrastructural deficiencies produce forms of citizenship and state power that are central to governance practices in Nigeria applies to (and draws on) evidence from other infrastructural domains.

## The Borehole Water Vending Business

Many Nigerians purchase some or all of their daily water from neighborhood borehole businesses. In Umuahia, a metro area with approximately three-quarters of a million people, and a population growing by about five or six percent every year (Macrotrends 2020), many neighborhoods have boreholes that are run as private businesses. Thousands of the city's households rely on these enterprises for their most reliable – and often primary – source of water. This is true even in neighborhoods and households that are connected to the municipal water supply. While the public water system in Umuahia has not collapsed completely, water runs unpredictably and infrequently. As a result, on most days, at dawn and dusk, children (and sometimes women, but rarely men) can be seen fetching water from a nearby borehole.

As part of my research, I interviewed several borehole entrepreneurs in Umuahia. While each case was slightly different, most borehole businesses shared many similarities. To illustrate the organization of these entrepreneurial ventures, and particularly their relationship to the state, I use the case of one water-vending enterprise established by a man I call Chima (a pseudonym). His borehole operates on a street in one of the oldest residential areas of Umuahia. It is a densely populated neighborhood. Most structures have several flats that are home to multiple large families. In this part of town, the majority of dwellings are connected to the city's piped water supply. As a result, when taps flow there are few customers at Chima's borehole. But because the piped water supply fails to function more often than it succeeds, demand for Chima's water is generally high.

Starting a borehole business requires a significant amount of capital – something in the range of five thousand dollars, a large amount of money in Nigeria for all but the rich. The main expense is contracting a borehole-drilling rig to dig the well. Once the borehole is constructed, before opening for business a vendor also needs an electric water pump, a couple of large overhead tanks and the scaffolding to support them, as well as a generator, because, as already noted, the national power grid distributes electricity as unreliably and infrequently as the municipality provides water.

By and large, Nigerian banks do not provide significant credit to small-business entrepreneurs, especially those without substantial collateral (Uzonwanne 2015). Indeed, Nigerian banks are notorious for lending huge sums to political elites, often with little chance of repayment. Nigeria's recent banking history includes many scandals and bank failures (Abiola 2009; Okereke and Kurotamunobaraomi 2016). In these circumstances, aspiring small-scale entrepreneurs must acquire capital for start-up costs in some other way. Typically, Nigerian small-business entrepreneurs obtain capital from family, friends, or patrons.

Credit can take the form of an investment, such that the person(s) providing the capital will own an agreed-upon portion of the business and take a prearranged share of the profits; a loan, sometimes with interest, sometimes not, depending on the relationship of the lender and the recipient; or a gift, most commonly among kin. In Chima's case, the capital came in the form of a hybrid investment/gift from his eldest brother, who lived in London.

Constructing a borehole requires not only capital, but also a wise choice (and a bit of good luck) with regard to which contractor one hires. Chima (like the other water vendors I interviewed) said that many boreholes failed because some drilling rig operators did not know their work: "If you are not careful, an incompetent contractor will make off with your entire investment without delivering even one drop of water." Negotiations over when and under what circumstances a person contracting a rig would pay for the job were always intense. Rig owners typically demanded a significant deposit before commencing work. Conversely, customers often wanted to wait until a good water supply was assured before paying. For their part, the rig owners I interviewed said that customers did not understand the fickle nature of well drilling. Not every hole would be viable. The rig operators insisted to me that they explained this to every customer. But disputes were common when drilling attempts failed to yield water.

Everyone acknowledged that some well-drilling firms were more expert than others. Chima was fortunate enough to have friends familiar with the business. His contractor came highly recommended. His borehole succeeded on the first drilling and never collapsed. Whether this was luck or the result of his good choice of a rig operator is impossible to know, but Chima chalked it up to having the right connections – something Nigerians insist is necessary for success in just about every arena of life (Berry 1989; Guyer 1995; Smith 2007).

When Chima established his borehole business in 2012, Nigeria had no national drilling permit policy. In response to the perception that countless poor-quality wells were proliferating across the country's urban landscape, in 2016, the federal government created a policy through the Nigerian Integrated Water Resources Management Commission. Like so many regulations in Nigeria, implementation was left to local government authorities. Nigeria's governmental structure includes three levels: federal, state, and local – the latter known as local government areas (LGAs), of which there are 774. Although Chima had not needed a permit to dig a private borehole, he was legally required to obtain a license from the local government authorities to operate it as a commercial enterprise.

Before new borehole entrepreneurs pay a visit to their local government to apply for the license (in my sample, all the borehole

entrepreneurs were men, reflecting what appeared to be a wider pattern), they typically try to identify any social ties that they have with the official in charge so that those connections might ease the process of approval. In this instance, it turned out that Chima's cousin had been the official's classmate in secondary school. When Chima went to meet the man at the LGA headquarters, he brought a bottle of good brandy and a note from his cousin. The official ordered his assistant to provide Chima with the necessary document that same day.

Selling the water from a borehole as a commercial enterprise also required a relationship with the tax office, and this had to be negotiated each year. By law, Chima and other water vendors needed to charge a value-added tax (VAT) to the water they sold and then forward that money to the government. As with many small businesses, the paperwork required to keep track of these taxes would have been cumbersome to say the least. After all, many of the customers' purchases amounted to no more than 10 or 20 cents per day. Nonetheless, each year, if they wanted to avoid official harassment, vendors had to report their revenue and, in theory, pay the VAT.

In practice, this involved coming to an agreement with the government officials in charge. The interests of each party were as follows: The government officials aimed to collect just enough VAT such that they could appear to be carrying out their official duty (and assure that their department collected some revenue), while simultaneously pocketing the biggest bribe that they could for allowing vendors to underreport their income from the borehole and therefore pay less VAT than they really owed. Chima and other vendors wanted to minimize both the amount of VAT and the size of the bribe they paid (and, of course, to some extent there was an inverse relationship between the size of the bribe and the amount of VAT they paid), while maximizing their profits from the business. A major source of annoyance for Chima and other infrastructural entrepreneurs (not just water vendors) was that the person in charge changed frequently, so almost every year negotiations began from scratch, with each official seemingly greedier than the last. What vendors actually paid each year as a bribe and as VAT depended in part on the strength of any social connections that they might have had to the state official.

I was interested in interviewing the local officials with whom Chima and other vendors had to interact to establish and run their borehole businesses. In general, government bureaucrats were disinclined to talk candidly with me about their everyday practices, particularly those that might be construed as corruption. Frequently, when I did manage to secure interviews with such officials, they stuck to somewhat predictable (and self-protective) scripts that emphasized their role in adhering to and enforcing the formal rules. Often, they also alluded to the propensity of Nigerian businesspeople to flout the law in the

pursuit of profit, obliquely suggesting that whatever corruption that did occur was at the behest of the citizens seeking service.

But Chima had developed a good relationship with one of the LGA officials to whom he was supposed to report and pay his VAT revenue. As a favor to me, he used that rapport to assure the official that speaking to me posed no threat. By invoking his personal connection, Chima not only convinced the official to meet with me, but also created a context in which the VAT collector conversed with me informally, in the same manner that he and Chima came to an understanding regarding their mutual interests. In our conversation, the VAT official emphasized his role in enabling vendors' businesses to succeed, suggesting that the informal arrangements that they established helped entrepreneurs to get around state-imposed obstacles inhibiting their progress. Similar to what I heard from entrepreneurs, the official portrayed these informal, unofficial arrangements as necessary in light of the state's formal failures. To the extent that he acknowledged (at least implicitly) the specter of corruption, the VAT collector also alluded to his own many obligations, which he could not possibly fulfill solely from his meager civil servant's salary. This official's narrative not only struck me as sincere, but it also mirrored numerous other explanations of low-level corruption that I have heard in Nigeria over the last three decades (Smith 2007). What it omitted, however, was the fact that the same official could privilege the formal rules when it better served his interests. Although citizens seeking state services had many tactics to try to shape the register in which government bureaucrats interacted with them, it was usually state officials who had more power to determine which set of rules were in play.

Chima's experience as a water entrepreneur mirrors that of many small businesspeople whose enterprises are geared to fill gaps in infrastructure and social services created by the government's failure to deliver. But the great irony of these efforts to compensate for an apparently absent state is that, at every turn, entrepreneurs are confronted by state officials, regulations, and procedures that require extensive interactions with the very institutions that have failed them. For a significant fraction of Nigerians, these interactions constitute their primary experience of the state. Further, whether they be licensing officers, regulators, tax collectors, or even the police, the officials who represent the government in these interactions assert and consolidate their own power, as well as that of the state itself. Even in its seeming absence, the state can be powerful for those who control it.

# **Pure Water: Popular Packaging for the Privatization of Poverty**

In every market, at every lorry park, and seemingly on every street corner in urban Nigeria, one can purchase clear plastic sachets of drinking water

known as "pure water." Indeed, this water and the hundreds of millions of empty plastic bags that litter Nigeria's streets are so common that it is hard to imagine that any Nigerian is unfamiliar with the product. As if pure water's physical presence were not ubiquitous enough, the men, women, and children who hawk it on the streets, carrying trays or coolers on their heads, offer a lyrical reminder of its availability and appeal. "I get pure water – cold, cold one." "Buy pure water, five, five naira." At just pennies per unit, pure water is almost irresistible under the blazing sun and in Nigeria's stifling heat, especially when the clear sachets glisten from condensation if the water is cold.

Pure water first emerged in Nigeria in the 1990s. Justin Stoler – who has conducted extensive research on pure water in Ghana and has written the most comprehensive review of the phenomenon across the region – ties the emergence of the industry and its product to "new Chinese machinery that heat-sealed water in a plastic sleeve [which] effectively created the modern sachet that is currently sold on the streets of several West African nations" (Stoler, Weeks, and Fink 2012: 225). In less than 20 years, Stoler observes, "sachet water has become a multibillion-dollar industry – a veritable consumer phenomenon – throughout West Africa" (Stoler 2017: 1). While the Chinese may have invented the low-cost sealing technology, the pure-water business is almost exclusively in the hands of African entrepreneurs.

In Nigeria, more than 10,000 pure water producers are registered with the National Agency for Food and Drug Administration and Control (NAFDAC). An unknown number of unregistered producers (but surely in the thousands) also operate. No firm data is available about the number of sachets purchased in the country each day. The most widely published estimate is 60 million (Omole, Ndambuki, and Balogun 2015). Nigeria's 2013 Demographic and Health Survey found that 12 percent of urban households reported pure water as their primary source of drinking water (National Population Commission 2013). But community-based surveys suggest that, in urban areas, nearly 100 percent of respondents report that they "ever drank" sachet water (Stoler 2017), and other estimates suggest that up to 70 percent of Nigerian adults drink at least a sachet of pure water per day (Edoga, Onyeji, and Oguntosin 2008).

Using the case of Enyinna (again, a pseudonym), a successful pure water entrepreneur, I show how – similar to Chima and other borehole operators – pure water enterprises require regular interactions with the state. Given that these businesses emerge to address shortcomings in government-provided infrastructure and services, both the extent and the imperative nature of entrepreneurs' relationship with state officials appear, at first glance, to be paradoxical. But similar to the borehole business – and many other entrepreneurial efforts to provide infrastructure where the government has failed (Smith 2022) –

manufacturing and selling pure water offers a revealing window into the experience of citizenship and the exercise of state power in Nigeria.

Enyinna started his business "manufacturing" pure water in Umuahia in 2008. By the time I first interviewed him in 2012, his enterprise was well established, profitable, and considerably larger than others that I also visited and observed. In our conversation, he described 10 steps that he undertook to set up his successful pure water business. Most of the steps involved acquiring the necessary resources and equipment. In addition, most pure water enterprises registered a name for their product. All of the pure water entrepreneurs I interviewed agreed that coming up with a catchy name was highly desirable. The other step that involves interaction with government officials is registering the business with NAFDAC. In theory, every pure water producer requires NAFDAC licensing and approval to certify that the water being sold meets quality standards. In reality, some businesses do not seek or receive NAFDAC certification and others get it without proper inspection or testing. But skirting NAFDAC approval is risky and many illicit pure water enterprises have been shut down by the state.

Pure water is the single most popular commodity to emerge from a larger set of circumstances whereby the Nigerian state is able to neglect its obligation to provide basic infrastructure. Ordinary citizens and entrepreneurs like Enyinna fill the void, contributing to the privatization and perpetuation of poverty. While the state's failure to supply sufficient water gave rise to the pure water business, here again an apparently absent state is, in fact, significantly present in the very enterprises designed to deal with its shortcomings.

As suggested above, for pure water entrepreneurs, the government entity that looms largest is NAFDAC. At the national level, for many years NAFDAC enjoyed a reputation as relatively corruption-free in a larger government system that many Nigerians experienced as being mired in malfeasance. Dora Akunyili, the Director General of NAFDAC from 2001 until 2008, often made the news for confiscating counterfeit drugs and prosecuting their distributors. As noted already, the certification of pure water products came under NAFDAC's purview. I frequently heard Nigerians say that, in buying pure water, one should be careful to only buy sachets with a NAFDAC registration number clearly printed on the cover. Stories regularly circulated suggesting that unscrupulous entrepreneurs were packaging all kinds of low-quality water and selling them as pure water just to make a profit. While Akunyili's reputation helped reassure a public that was anxious about fake or substandard products, my interlocutors in the pure water business had troubling experiences with local state-level NAFDAC officials, who were the ones they routinely dealt with for various certifications, registrations, and inspections.

Enyinna and other pure water entrepreneurs I interviewed expressed frustration that some of their competitors who produced inferior products were able to skirt NAFDAC standards by paying bribes to local officials. But what annoyed them just as much, if not more, were the constant demands for dashes – an often-used Nigerian euphemism for bribes (Smith 2018) – simply to receive the approvals, licenses, and inspections needed to run their businesses legally, even when they had complied with every rule, submitted every document, passed every test, and paid every official fee. In other words, what really bothered pure water producers – and many other entrepreneurs who make a living providing basic infrastructure and services that the state fails to deliver – was that government officials sought bribes not only to bend or overlook the rules, but also to carry out their role in enabling the rules to function properly.

During the period of research when I was focused most intensely on studying the pure water phenomenon, I sought an appointment with the NAFDAC official in Umuahia in charge of the registration process. The entrepreneurs uniformly portrayed this particular NAFDAC bureaucrat as venal and difficult. After numerous attempts, the official finally agreed to see me. Our meeting did not go well. Despite my assurances of anonymity and confidentiality, he clearly suspected that my motive was to expose corruption. His responses to my questions were entirely in the "officialspeak" in which most state bureaucrats are fluent. By his account, he upheld NAFDAC's reputation for having zero tolerance of corruption. In contrast, my pure water entrepreneur friends maintained that this man used his formal authority solely for his own benefit and was apparently never willing to reposition the relationship with citizen service-seekers in the sometimes mutually beneficial, more informal idiom. To the extent that he ever invoked the unofficial moral economy, it was to assert his power and force entrepreneurs to pay bribes for approvals, even when they had followed all the rules.

In addition to pure water entrepreneurs' dealings with corrupt NAFDAC bureaucrats, I also heard stories that officials in charge of the municipal water authority, known locally as the Water Board, siphoned water that they should have been pumping through the city's pipelines to Umuahia's residents to use for their own tanker trucks and pure water businesses. Rumors of state officials redirecting resources meant to be public goods to enable their private gain are the stuff of daily discourse in Nigeria (Smith 2007). Whether Water Board officials actually ran side businesses selling pure water or filling tanker trucks proved impossible for me to verify. But such stories rang true to the ears of many Nigerians because they attested to the way that state officials not only failed to provide basic infrastructure and services, but also profited from that fact.

It is important to emphasize that officials like the much-despised, apparently especially venal NAFDAC bureaucrat in Umuahia cannot be

properly understood simply as individual actors behaving in their own interests. Many certainly do so. But more significantly, their practices constitute and consolidate state power. The fact that they do so even in arenas where citizen-entrepreneurs are creating enterprises – indeed, whole pieces of so-called informal economies – that are designed precisely to address apparent state failures is evidence of the paradoxical means by which states (and state officials) can reproduce and wield their power.

#### Conclusion

To sell water, ostensibly private enterprises such as neighborhood borehole water vendors and small-scale pure water manufacturers must navigate a maze of government regulations, including the need for various licenses and permits, and the payment of required taxes and fees. In their encounters with state officials, Nigerian citizens are reminded that both formal and informal rules are frequently deployed to benefit bureaucrats and political elites. By invoking either the veneer of legal regulation and the threat of official enforcement or the unchecked authority of unofficial power, those who control the government extract payments (often outright bribes) so that citizen-entrepreneurs can establish businesses and undertake activities that are, ironically, only necessary because of the state's failure to provide basic infrastructure in the first place.

As the examples of the LGA VAT collector and the NAFDAC official illustrate, when Nigerian citizens have to deal with the government in their efforts to create and maintain privately organized solutions to the country's infrastructural woes, they experience firsthand the advantages that this situation provides to state officials. While infrastructural entrepreneurs and other citizens seeking government action or approval learn to strategically navigate the tacitly demarcated boundaries between the formal and informal rules and official and unofficial moral economies that frame these interactions, it is typically those who control the state apparatus that decide which register is in play. Not surprisingly, they benefit disproportionately as well.

These realities call into question superficial labels such as weak and strong states. Looked at from the perspective of its apparent inability to deliver clean water (and other basic services) to the people, the Nigerian state does indeed appear weak. But if one assumes instead that the primary interest of the state is to perpetuate inequalities that benefit elites, then the Nigerian state appears very effective. Passing on the burden of providing fundamental infrastructure to ordinary citizenentrepreneurs, while at the same time profiting from official power over them, seems more like the work of a cunning state apparatus than a weak and failing one.

One of the tricks that Nigerian statecraft depends on is the fiction of the so-called informal economy. A wide literature in the social sciences has called into question the distinction between formal and informal, suggesting that the boundaries are blurry at best (Guha-Khasnobis and Kanbur 2006; Meagher 2013). On the one hand, "informal economies" share many characteristics and intersections with formal economies, whether those are scale, business practices, or engagement with the state. On the other hand, "formal economies" include many features in common with informal economies, not least a reliance on cultural knowledge, personal relationships, and unspoken traditions. Certainly, the water infrastructural enterprises described in this essay offer evidence of these blurred boundaries. But as Kate Meagher (2012) has argued in her work on informal economies in Nigeria, dismissing the distinction between formal and informal too quickly risks discarding a crucial analytical (and ethnographic) insight. She reminds us that state power is partly constituted and enforced by insisting on the authority of the legal-formal apparatus, even as elites profit precisely by their ability to break the rules - and offer others the chance to do so for the right price.

Citizens in countries all over the world evaluate their governments, at least in part, based on the quality and reliability of the fundamental infrastructure and basic social services that the state provides to its people. Nigerians have good reason to be disappointed, frustrated, and angry when it comes to the performance of their political elites and the government that they steer. As I have shown in this essay, everyday life in Africa's most populous nation is marked by the struggle to access water – not to mention other essential infrastructure and services that I have written about elsewhere (Smith 2022). Not surprisingly, Nigeria's people are deeply cynical about a nation that achieved independence 60 years ago, and about its current democratic trajectory, which began with the return to civilian rule in 1999.

But the story of infrastructure, citizenship, and state power in Nigeria is much more complicated than a straightforward narrative of a failing state and a disappointed citizenry. The country's people may be frustrated with their government, but they are also busy working hard to provide the very infrastructure that the state fails to deliver. Through furious entrepreneurialism, widespread informal economic enterprise, and daily hustles, Nigerians manage to survive and, in some cases, even thrive. They do so not simply in spite of the state's failures, but often by taking advantage of the inadequacies of government services to find economic opportunities and forge their livelihoods. Large segments of the population are perversely dependent on a corrupt state they detest.

Over the last 30 years, I have heard countless Nigerians express a keen awareness of elite corruption and ordinary citizens' resulting struggles and suffering, but also their abiding desires and expectations for something better. Most striking in these hopeful proclamations is the

belief that a better government and better leaders will make the difference. How is such hope sustained? Political elites manipulate the formal and informal rules of governance to serve their interests and consolidate their power. Ordinary citizens play along to survive. Everyone in Nigeria knows the game. Yet, when it comes to citizens' aspirations for the future, Nigerians share a belief that the government could – and should – do better. While Nigerians have become entrepreneurial citizens, creating and maintaining essential services where the state has deliberately failed, they realize that they would be better off if every household did not have to be its own local government.

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Daniel Jordan Smith is Charles C. Tillinghast, Jr. '32 Professor of International Studies, Professor of Anthropology, and Director of the Africa Initiative at Brown University. He is the author of four books about Nigeria, including A Culture of Corruption: Everyday Deception and Popular Discontent in Nigeria (2007, Princeton University Press), AIDS Doesn't Show Its Face: Inequality, Morality, and Social Change in Nigeria (2014, University of Chicago Press), To Be a Man Is Not a One-Day Job: Masculinity, Money, and Intimacy in Nigeria (2017, University of Chicago Press), and, most recently, Every Household Its Own Government: Improvised Infrastructure, Entrepreneurial Citizens, and the State in Nigeria (2022, Princeton University Press).

Daniel Jordan Smith can be reached at <a href="mailto:daniel.j.smith@brown.edu">daniel.j.smith@brown.edu</a>