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Perspectives from the Ground: Governing Informality of Water in Metro Manila

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ABSTRACT: Although privatisation in Metro Manila has resulted in increased access to piped connections and reduced pilferage, the urban poor pay more for low-quality water and access it through small-scale providers including cooperatives and syndicates. While forming cooperatives can represent efforts of urban poor communities to claim legality, the selling of water to neighbours or offering protections for pilfering by local providers illustrates everyday illegality. Governing logics of the postcolonial state and concessionaires shape these Janus-faced survival practices of urban poor communities. These unwritten shared understandings, or informal institutions, operate within porous spaces of legality and illegality and remain at the mercy of the state, which can criminalise them. Moreover, while living in an informal settlement precludes access to individual piped connections from concessionaires, living on a resettlement site does not ensure access either, indicating that city planning directly impacts water access and supply. These realities suggest a relational reading of informality, linking the state and concessionaires from the top down with negotiated access to water from the bottom up, which may explain persisting inequities.

KEYWORDS: Informality, water, urban poor, governance, Metro Manila, Philippines

INTRODUCTION

Ami, a community organiser working on acquiring legal status for her informal settlement, smiled sheepishly. "Last week, we heard that an official from the private concessionaire will visit the community. Me and others decided to cover up tapped mains in case he notices them on his visit. If he does, they may shut down Alan's business. But that (Alan's water business) is our only hope (pagasa) to get water". Ami was referring to Alan, an informal water provider in her community who taps legal piped connections to sell to other residents of the informal settlement. His trusted lieutenants collect weekly dues, keep an eye on those who skip payments, and maintain turf control.

Like Alan, Cathy could also be described as a syndicate. A diminutive woman in her 30s and the mother of two, she sells water and cookies to make ends meet. Having connected to the legal piped connection of another resident in the informal settlement, Cathy sells water to others. "Some may call me a syndicate, but I am only helping neighbours. I am not the only one doing so. Just look at every other street corner. We are all doing it. But the police can arrest us at any minute. They

arrested my brother, put him in jail, and fined him". She is referring to the National Water Crisis Act of 1995 – the law that stipulates imprisoning and fining people for selling water without consent from the authorities.

Edna runs a water cooperative along with other members of the community. "In our informal settlement, there was no water for the longest time. Then we got help from an NGO and organised a cooperative. We have water now. This is not easy work, but at least it allows us to form a registered organisation as per the rules [of the state and private concessionaires]. This [organisation] is legal".

Joy, on the other hand, must buy water from tanker trucks. "When we moved to this resettlement site, we were happy. Workplaces are far but at least we have no fear of being evicted. But there is no water. What trucks sell is expensive and dirty. So, we buy expensive bottled water. The government says it is not their problem, and the concessionaire says our area falls out of the coverage zone. Whom do we go to? Whose problem is it?"

The experiences of Ami, Cathy, Edna, and Joy¹ provide a peek into water realities for urban poor communities living in resettlement sites and informal settlements in Metro Manila. Either urban communities must organise into a cooperative to legally purchase water from the private concessionaire or depend on neighbours and vendors like Cathy and Alan. They illustrate not only the coping practices of the urban poor in their everyday lives but also the political nature of water management. They signify the unwritten 'rules of the game' that structure access to and supply of water, which entails either forming a cooperative (which could provide a legal means of water) or engaging in everyday illegality. At the same time, they reveal the power of the state, which can criminalise those who are pilfering water to sell to neighbours or others. Maynilad and Manila Water, responsible for water provision in Metro Manila since 1997, wield power in providing legal access to water for urban communities by encouraging the formation of cooperatives. On the one hand, such schemes have been characterised as pro-poor, but on the other, they illustrate the placing of responsibility for legal access on communities. This governmentality of sorts coincides with the legacies of colonial rule, during which the needs of underprivileged populations were never the concern of the state. These dynamics indicate that water access and supply take place in contexts shaped by the state and private concessionaires.

In policy discussions on informal water provision, especially in cities in the Global South, framings tend to simplify on-the-ground realities through an essentialised focus on small-scale providers, infrastructure, or indicators such as price, quality, availability, etc. Poor performance of governments and lack of adequate infrastructure, it is argued, necessitate entrepreneurial small-scale providers filling in the gaps. Reforms in such cases often include bringing these players into the formal realm. Such an approach risks overlooking power asymmetries that may sustain informal water provision. How urban communities seek access to water is also an invisible theme in these conversations. As a result, the ways in which interactions and relations among communities, water providers, states, and market actors are contributing to new patterns of governance or entrenching old legacies and unequal access to water are not factored in.

This paper focuses on these themes. It makes the case for identifying the politics of informal water provision by mapping informality, not only through top-down measures by the state and concessionaires, but also through the bottom-up, everyday practices of urban communities. How responsibilities for water distribution are divided up, the ways people get access to water, and the implications of these processes may all lend insights into state-market-society relations in Metro Manila. The data sources for this study include a household survey (n = 800), focus group discussions (n = 9), semi-structured interviews (n = 70),

¹ Names have been changed to maintain anonymity.

field site visits during 2019, 2020, and 2022, and secondary literature. The remaining paper is organised as follows: the following section presents a brief literature review, followed by case study findings, and finally discussion.

GOVERNANCE AND INFORMALITY

In policy framings on water, governance serves a central theme (OECD, 2011) and remains powerful. A 2019 UN World Water Report notes (WWAP, 2019: 76), for instance,

(...) it has become clear that the government alone is not able to take on the full responsibility and development challenge of 'providing' water supply and sanitation services to all citizens, especially in low-income settings (Franks and Cleaver, 2007; Jiménez and Pérez-Foguet, 2010). This relates closely to the general change of governments' role towards policy setting and regulation, with the actual provision being carried out by non-state actors or increasingly decentralised or independent departments (...). As a duty-bearer, states have the obligation to facilitate public participation and protect peoples' rights to participate in decisions that affect them (...). Effective participation needs to be free and meaningful, with genuine consultation processes: otherwise, participatory processes can turn into unjust and illegitimate exercises of power (Cooke and Kothari, 2001).

Similarly, a 2019 World Bank review of over 100 studies of informal water markets in the past forty years noted (p. 7),

In some cases, informal markets have proven to be competitive and complementary to formal water systems, serving as extensions to piped networks and forming part of public-private partnerships. In other cases, informal vending represents the only option when states fail.

These framings are important not only in understanding policy responses but the ideological underpinnings of ongoing discussions on water supply, especially in cities in the Global South, as they have to do with the role of the state, markets, and citizens. They reflect the ideological turn towards governance in Western countries. This meant limiting the role of governments to include the private sector and societal actors' participation (Matthews, 2012). The shift towards governance combined neoliberal agendas of deregulation and limited government role with the idea of empowering communities (Moulaert et al., 2007). In water reforms, it led to privatisation of public enterprises and encouragement of market competition (Swyngedouw, 2005; Bakker, 2010).

These normative ideas, birthed through the experiences of countries in the West, made their way to cities in the Global South. Where water provision in low-income settlements was once considered illegal, falling outside of government control and traditional development trajectories (Solo et al., 1993), now it began to be seen as an entrepreneurial effort (Eales, 2008). Solutions placed hopes on partnerships between governments and small-scale providers to serve low-income populations, since the latter are deemed better-placed to reach them (UN-Habitat and UNICEF, 2020; Njiru, 2004). In hopeful prospects, these players may be integrated into the formal sector by registering them as public service providers (Schaub-Jones, 2008) or encouraged to improve outcomes through policy interventions (World Bank, 2019).

Ground realities in many parts of the world, however, suggest gaps between the ideal and reality. For instance, healthy competition as envisioned among providers places blind faith in the workings of the market, overlooking complex local contexts (Ahlers, Schwartz, and Perez, 2013; Ahlers et al., 2013; Wutich et al., 2015). The ubiquity of piped infrastructures as a modern infrastructural ideal also does not reflect how ordinary people in many cities in the Global South access water and other services in multiple ways (Furlong, 2014; Furlong and Kooy, 2017; Lawhon et al., 2018).

The ideological assumptions shaping policy discussions are equally important. They place the experiences of state formation in the West at the core of these discussions. This understanding is

problematic, since it fails to consider other experiences of state rule, including colonial rule, in other parts of the world. In many countries in the Global South, especially in post-colonial contexts, the needs of low-income groups were often of low priority. Additionally, authority was delegated to middlemen such as local powerholders, who carried out functions associated with the state (de Herdt and Olivier de Sardan, 2015; Migdal, 1994; Hansen, 2005). Thus, state qualities of governance were not exclusively nested in government institutions (Lund, 2006), and have continued over time. For instance, tanker owners siphoning off water from official sources with the help of valve men (Ranganathan, 2014), or engineers of state-owned water departments negotiating with informal settlers about the ways in which official policies can be circumvented (Anand, 2011) present examples of the exercise of public authority by non-state players and everyday workings of the state, respectively.

A functional understanding of governance also depoliticises it, conceptualising key categories of legal/illegal and formal/informal as naturally occurring facts. Theories from the Global South, urban informality, and studies on water shaped by science and technologies studies (STS) problematise this reasoning. Anthropological accounts of the state, for instance, identify how the state is continually 'reconfigured' through "its own practices, documents, and words" (Das and Poole, 2004: 3-32). Informal settlements and low-income neighbourhoods are thus not only physical spaces but sites of meaning-making regarding relationships between citizens, the state, and the market. Building on this reasoning, selective application of the law questions boundaries between legality/illegality as facts of nature. In scholarship on urban informality, a key example is of legalising lucrative real estate projects while criminalising informal settlements through the power to impose a state of exception (Ghertner, 2008; Roy, 2005; Roy, 2009; Roy, 2011; Weinstein, 2008; Weinstein, 2013). From STS perspectives on water, informality discussions *are expanded beyond the* purview of the state to include social, political, economic, biophysical, and infrastructural ideals (Ahlers et al., 2014), or as a product of urbanisation including informal practices (Kooy, 2014). Informality permeates co-produced arrangements from this perspective, necessitating its importance in discussions (Rateau and Jaglin, 2022).

Lastly, governance related to water is political because where water flows, rules and norms on which such choices are made, and who contributes to decision-making are political choices (Zwarteveen et al., 2017). Governance is also political, as it is associated with the state (Schlichte, 2018). Even in debates on governance in Western contexts, scholars have pointed out that instead of conceptualising governance through a limited role of the state and an increased role of the private sector, one could pay attention to how governing operates through connecting multiple sites and players, thereby developing a more relational understanding (Boudreau and Davis, 2017; Davis, 2017). Moreover, keeping in view that market players wield enormous power in public-private partnerships with the co-steering of the state, some suggest that instead of the declining role of the state, these developments illustrate forms of governance that foster individual responsibility and privatised risk management (Lemke, 2007). Public-private partnerships empowering democratic processes have also not played out as idealised, pointing out the failings of markets (Moulaert et al., 2007).

These multiple approaches establish the importance of understanding governance informed by discussions on informality when mapping the dynamics of politics shaping access to and supply of water. Building on scholarship on informality, we adopt a relational approach that situates players and processes in relation to each other (Boudreau and Davis, 2017). We focus on a reading of state-society relations shaped by local historical contexts in the Philippines, and how market dynamics through privatisation interact with these currents. To trace responses from the ground up, we focus on informal practices, or unwritten shared expectations, related to the ways in which ordinary people seek access to and supply water. In the tradition of political science, these unwritten 'rules of the game', which need to be followed to avoid damages or sanctions of various kinds, could be considered informal institutions (Helmke and Levitsky, 2006).

In addition to paying attention to workings of power related to the state and market players, this bottom-up approach could present an understanding of the ways that state-society-market relations

(Boudreau and Davis, 2017) unfold in relation to urban water supply in places often associated with illegality. In doing so, our focus is more on what people do, instead of on the players.

Mapping these interactions could lend insights into how politics and power shape governance of water, including accountability, the responsibility to supply water, and persistent inequities of access to water (Zwarteveen et al., 2017).

The next section unpacks these themes in more detail.

CASE STUDY – METRO MANILA

Brief overview, methodology, and data

Since 1997, the water supply in Metro Manila has been privatised and is the responsibility of two private concessionaires, Manila Water and Maynilad. The government institution previously responsible for water provision, the Metropolitan Waterworks and Sewerage System (MWSS), was given the charge to serve as a regulatory office, leading to the formation of the Metropolitan Waterworks and Sewerage System-Regulatory Office (MWSS-RO).

In terms of reducing pilferage (non-revenue water) and increasing the number of piped connections, both concessionaires have reported significant progress.² The 2015 Philippines population census also counted at least 90 percent of households as having piped access in Metro Manila (Figure 1).

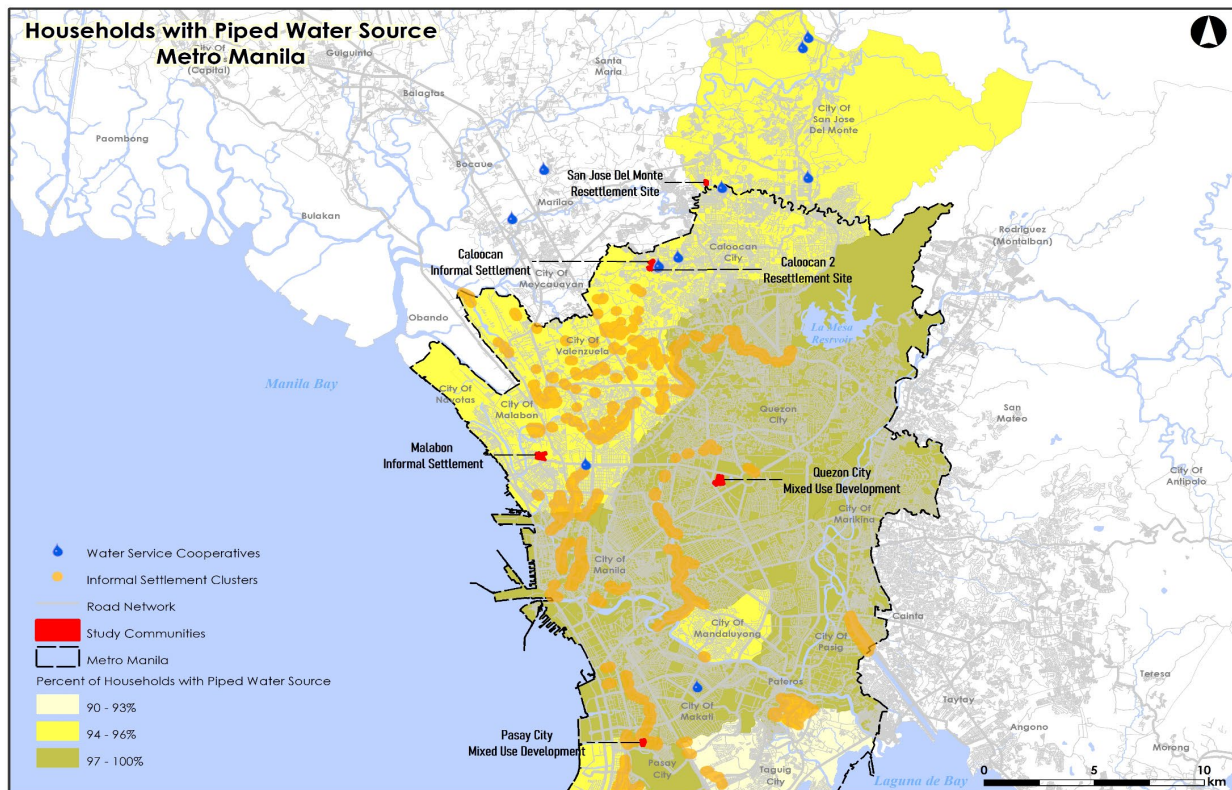
Unlike the rest of Metro Manila, urban poor households have not fared well. They pay more despite earning low wages, experience daily shortages, and combine multiple sources to fulfil their needs through cooperatives, neighbours, individuals, and groups. Some of these players have been characterised as syndicates, a term denoting illegality of operations.

To gain a better understanding of what people do to get access to water supplies, we draw on a household survey ($n = 800$) in informal settlements and resettlement sites, focus group discussions with urban poor groups ($n = 9$), field site visits during 2019-2022, and semi-structured interviews ($n = 70$) with community organisers, officials in various government departments (*barangay* chairman, the Metropolitan Waterworks and Sewerage System (MWSS), Quezon City government, and the Presidential Commission for the Urban Poor), employees of the two private concessionaires responsible for water provision – Manila Water and Maynilad – academics, and members of non-governmental organisations working on water issues.

Our methodology draws on the salience of facts-on-the-ground combined with an interpretivist approach (Fujii, 2018) to make sense of meaning-making by urban communities of their everyday conditions. Thus, conversations with urban poor communities helped to formulate the survey – an important research method (Saris and Gallhofer, 2014; Fowler, Jr.; 2014). Questions focused on the following themes:

² Maynilad, responsible for the western zone, reduced non-revenue water from 66.20% in 1997 to 38.67% in 2013 and increased the number of connections from 449,000 to 1,129,000 in the same span of years. Manila Water, responsible for the eastern zone, reduced non-revenue water from 45.43% in 1997 to 12.35% in 2013, and increased the number of connections from 311,000 to 922,000. Statistics available at the Metropolitan Waterworks and Sewerage System-Regulatory Office (MWSS-RO) website.

Figure 1. Households with piped water source.



Compiled by Carmeli Chaves, Kenneth Punay and Nazia Hussain (2021).³

1. How do households seek access to water?
2. What challenges do they face in accessing water?
3. Do households experience water shortages in their everyday lives?
4. What are some coping strategies used in times of water shortage?
5. Who or what influences the provision of and access to water?

The study population was comprised of six urban poor communities. These communities were either a part of Metro Manila (Pasay, Caloocan, Malabon, Quezon City) or adjacent to Metro Manila (San Jose del Monte). The criteria for selecting study sites included the following:

1. People self-identified themselves as a community. Each site had community leaders and community-based organisations, including homeowner associations and water cooperatives. In one community, two urban poor advocacy organisations were additional players. These communities were selected not only because they fit the study criteria but also because of access facilitated by community organisers and the Institute for Popular Democracy (IPD), a Metro Manila-based NGO that has been working on water issues for a long time.

³ Data sources: Households with piped water and informal settlements population (Philippines Census of Population and Housing, 2015); informal settler clusters as of 2015 (University of the Philippines Planning and Development Research Foundation); water cooperatives as of 2020 (Philippines Cooperative Development Authority); and study communities (Household Survey, 2021).

2. Communities were comprised of urban poor households and lived in and around Metro Manila.
3. For exploring whether challenges to water access were connected to housing, the survey population included people living in informal settlements, resettlement sites, and mixed-use settlements comprising renters, informal settlers, and those paying amortisation dues.
4. To capture as detailed a picture as possible, the survey included a variety of water providers, ranging from tanker trucks to water cooperatives to syndicates.

The sampling frame consisted of members of the water cooperatives and housing associations identified by community representatives working with IPD in five communities, and in the case of Quezon City, members of urban poor advocacy organisations identified by a community organiser. Systematic random sampling ensured unbiased representation of the study population. Enumerators were recruited from each community to encourage openness of responses.⁴ Key findings from the household survey were validated in open-ended responses and focus group discussions.⁵

Focus group discussions with community organisers and residents helped to gain a deeper understanding of unexplored themes (Krueger and Casey, 2009) and the larger context of survey responses. Analysis was carried out in both Tagalog and English.

Desperate water realities of urban poor communities

Study sites included two informal settlements (Caloocan 1, Malabon), two resettlement sites (Caloocan 2, San Jose del Monte), and two mixed-use settlements (Pasay, Quezon City) comprising renters, those amortising payments, and informal settlers. Highly dense settlements located in or near the city centre, these areas have high land value due to their central location and connectivity to urban services.

Having been migrating to Metro Manila since the 1970s, residents belong to poverty-stricken provinces in Visayas and Mindanao. They fall under the category of urban poor, as their incomes are unstable and fall below the national poverty line.⁶ More than half of the respondents reported having no occupation or livelihood source. Occupations included being vendors, construction workers, drivers, factory workers, and home-based entrepreneurs. Even within this wide variety of households, some considered themselves luckier than others, a strong benchmark being security of housing tenure. Those who lived in resettlement sites reported more strongly than those living in informal settlements.

⁴ To refine the questionnaire, pilot tests were carried out once in each community. The questionnaire was translated into Tagalog from English, and responses were translated from Tagalog to English. Since data collection was carried out during the time of COVID-19 (August 2020 – February 2021), the survey team ensured safety and health protocols set by the government of the Philippines. To encourage openness of responses and to protect the confidentiality of information and anonymity of respondents, names that could reveal identities of the study population were not used at any point during or after data collection.

⁵ With the help of SPSS, survey data generated descriptive statistics and profile analysis. Naturally occurring clusters were considered for the profile. This step generated clusters according to community, source of water, and experience of water shortages. Tests of significance helped to detect differences among groups. Further, logistic regression models helped to identify determinants of selected binary variables. The Chi-square goodness of fit test determined whether resulting models were a good fit for the data. NVivo helped to code open-ended responses and develop concept maps. For further calculations, survey data was compared with national level parameters of access to piped water (from the Philippines Census of Population) and poverty threshold (from the Family Income and Expenditure Survey). Water prices for survey communities were compared with prices set by the two water concessionaires in Metro Manila: Manila Water and Maynilad. Finally, study community statistics were evaluated using international standards (the United Nations and the World Health Organization) on optimum per capita water consumption and proportion of income spent on water.

⁶ The poverty threshold for Metro Manila in 2018 was 11,951 PHP (roughly US\$1.5 per capita/day).

Paying more and earning less

We need to save every peso. Sometimes, when there is no money for payment, we just endure it [hardship of using water minimally]. You need to pay to fetch water again (community member in a resettlement site).

Even though they earn little, significant percentages of the study population's incomes are spent on getting access to water (4-12%), with communities in Quezon City and San Jose del Monte spending the highest. For households living below the poverty threshold, spending even 3-5% of their incomes on water constitutes a substantial expense (Table 1). In open-ended responses and focus group discussions, findings revealed that families forego buying other budget items or limit their food consumption (e.g.; one – two meals a day) so that they can purchase water.

Table 1. Urban communities – A profile.

Community	Status of housing tenure	Typical occupations	Pre-pandemic average monthly household income	Below poverty threshold (%)	Income spent on water (%)	Amount paid for water/m ³
Caloocan 2 (resettlement site)	Amortising house and/or lot (94.2%)	Construction, factory work, driving	11,507 PHP	62%	4.24%	40.9 PHP
San Jose del Monte (resettlement site)	Amortising house and/or lot (86.1%)	Vending, operating market stall, factory work	12,896 PHP	39%	12.19%	155.7 PHP
Pasay (mixed-use development)	Rent house/room (41.8%)	Housekeeping/ domestic work, construction, personal care service	10,236 PHP	85%	10.78%	40.3 PHP
Caloocan 1 (informal settlement)	Own house, on rent-free lot without consent of owner (77.1%)	Selling/ vending, factory/ warehouse, home-based enterprise, construction	10,727 PHP	80%	6.19%	56.7 PHP
Malabon (informal settlement)	Own house, on rent-free lot without consent of owner (84.7%)	Operating market stall, factory work, home-based enterprise	8,103 PHP	91%	9.16%	55.2 PHP
Quezon City (mixed-use development)	Rent house/room (51.4%)	Selling/ vending, construction, home-based enterprise	10,800 PHP	90%	9.53%	71.2 PHP
Households served by Maynilad Water Services						36.2 PHP
Households served by Manila Water Services Inc.						28.5 PHP

On the other hand, the general population of Metro Manila with individual piped connections from the two private concessionaires, Maynilad and Manila Water, pay fixed rates, which are still less (Maynilad Water – 36.24 PHP/cubic meter) than the least amount paid by survey households (Pasay City – 40.34 PHP/cubic meter).

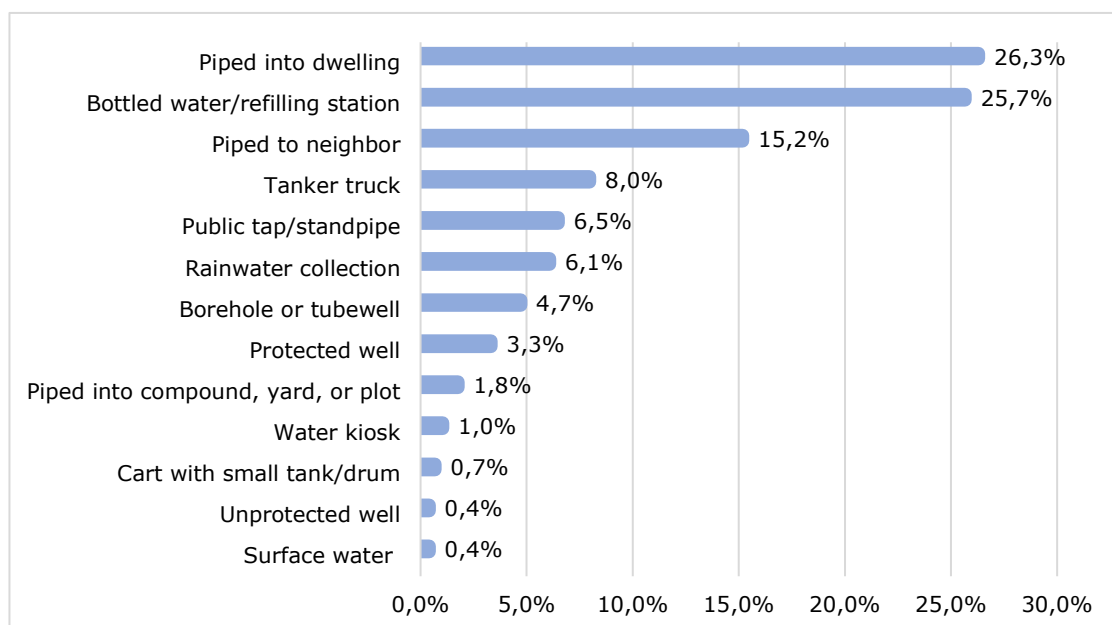
Multiple sources of water for drinking and non-drinking purposes

Instability of supply forces households to draw on various sources of water for drinking and non-drinking purposes (Figure 2). If the water smells, it is unfit for drinking unless boiled. In some cases, water from a particular source may only be fit for non-drinking tasks such as washing, etc. Water for washing, laundry, bathing, etc. is accessed from multiple sources including trucks, wells, kiosks, carts, and refilling stations. Water for drinking is sourced from piped water connections (piped into dwelling or piped to a neighbour’s unit).

Compared to non-piped households, households with piped water connections consume more water. For those who do not have individual piped connections, water from other sources is not only expensive, but the quality is unreliable. Individual piped connections remain the golden benchmark: those with piped dwellings find water less expensive than their less fortunate counterparts.

A breakdown of numbers across communities shows that each community presents a different narrative. In San Jose del Monte (a resettlement site), while the source of drinking water is comprised of bottled water and refilling stations, tanker trucks provide water for non-drinking purposes (washing, bathing, etc). In Malabon City (an informal settlement), while the source of drinking water is comprised of bottled water and refilling stations, piped water from neighbours provides water for non-drinking purposes (cooking, washing, bathing etc). Were it not for digging beneath the metrics, the struggles of the informal settlement in Malabon might have remained invisible in nationally aggregated statistics. The informal settlement is counted among those populations with piped access, even though it is a handful of residents selling water to neighbours on their own or allowing syndicates to tap into water mains so that they can sell water to others.

Figure 2. Source of water in study communities (n = 2502).



Water shortages are a fixture in everyday life

Because it is just us who find ways on how we can have water. If you are not frugal, you will have no water. We've been here for a long time, but we still do not have proper supply. They don't care about the poor. (community member in an informal settlement)

Although they spend significant percentages of their incomes and combine multiple water sources, nearly 87% of households experience daily water shortages. Even within this majority, there is variation in shortages depending on the source of water. Households depending on piped-to-neighbour connections and water delivery from alternative sources such as kiosks, small-time vendors, etc. suffer the most (Table 2).

Table 2. Households experiencing water shortages, by source of water.

Source of water	Percentage of households reporting water shortages in daily life	P-value
Piped into dwelling	87.34	0.8145
Piped-to-neighbour	93.58*	0.0369
Well (borehole, tubewell, protected well)	80.95*	0.0287
Delivered water (tanker truck, cart with drum or small container)	100.00	0.3605
Water kiosk, bottled water/ refilling station, rainwater	100.00*	0.0409
Overall	86.94	

***p < 0.001, **p < 0.01, *p < 0.05, †p < 0.10

Respondents attributed these shortages to lack of money to buy water and pay bills. Households need to pay bills to water providers; inability to do so gets access disconnected. Buying water from other sources, including kiosks, refilling stations, or small-scale vendors is the next best option. Regardless of the source of water, however, households may not have enough money to buy it (Table 3).

Table 3. Water shortages in everyday life due to lack of money to pay bills or buy water, by community.

Community	Lack of money to pay bills: percentage of households	P-value	Lack of money to buy water: percentage of households	P-value
San Jose del Monte	12.16***	0.0000	63.51***	0.0000
Pasay	60.44***	0.0000	49.45***	0.0004
Malabon	34.41	0.3204	36.02	0.2949
Caloocan1	14.67***	0.0004	13.33***	0.0000
Caloocan2	21.71*	0.0178	7.75***	0.0000
Quezon City	37.36	0.1443	34.07	0.7190
Overall	31.11		32.51	

***p < 0.001, **p < 0.01, *p < 0.05, †p < 0.10

Open-ended responses and focus group discussions revealed stories of struggle and deep concern about the availability of water for daily needs. Coping strategies include measures such as storing rainwater, reducing consumption, recycling water for multiple uses, and figuring out various ways that households may afford water.

While these broad categories highlight the range of available options, open-ended responses provide a window into experiences of deep insecurity. For instance, residents end up visiting extended families living elsewhere in the city to use their water, go without water when they cannot pay, wake up in the middle of the night (when water flow may be strong) to do laundry, etc. The quality of water may be poor, leading people to boil it or smell it before use. In semi-structured interviews, community members recounted how their lives are conditioned around access to water. For instance, some housewives explained how their bathing needs are served only around the times that they meet with their husbands (who are itinerant workers). Others talked about getting up in the early hours of the morning or standing in queues during late hours of the night to collect water, foregoing time with their families to follow the schedule set by the provider.

These desperate realities are rendered invisible under indicators such as increased coverage by concessionaires or reduced water pilferage.

Governance and informality of water provision in Metro Manila

It is not only that privatisation has failed to ensure access to clean, regular, affordable supply, but a historical reading of the state suggests that successive governments left the urban poor to find ways to survive, including getting access to water. This dynamic is also reflected in the planning of space in Metro Manila, an important factor in limiting access to individual piped connections for residents of informal communities.

Situating water needs within the broader state-society relationships during the colonial and post-colonial period highlights that while those considered elite or who were otherwise favoured by the ruling authorities had access to basic rights, including water, the needs of poor were never quite the priority of the state. This division of society into classes is traced back to Spanish and American rule, and arguably is also reflected in spatial divisions in Metro Manila. The net result is that the needs of urban poor communities are overlooked, including access to water.

During the Spanish rule, a classless society was divided into upper (chieftains inducted into the administration) and lower classes. These divisions were strengthened during the American period, during which only those who demonstrated loyalty to American laws, education, and rule were given rights (Magno and Parnell, 2015). These distinctions left an imprint on Metro Manila, where the city was protected not only by walls but by laws that divided the educated from the illiterate, colonisers from 'savages' (Magno, 2014). A reminder of the continuation of these legacies was the criminalisation of squatting by President Marcos in 1975, likely affecting a third of the urban population at the time (Magno and Parnell, 2015). Within the context of the planning of space, the needs of the urban poor have been neglected in pursuit of world class visions of Metro Manila (Shatkin, 2005; Mouton and Shatkin, 2020). These spatial transformations are contributing to economic and political divides between the urban poor and the rest (Garrido, 2019) and reflect the idea that their needs are "unworthy of recognition and consideration by the state" (Hutchison 2007: 854).

The water challenges of urban communities, then, are not only related to the role of private concessionaires but the planning of urban space and state-society relations. This lens helps to understand why, before the construction of the water supply infrastructure in 1882, ditches (*esteros*) filled with stagnant water surrounding the fortified city (*intramuros*) as well as the Pasig River were sources of water for underprivileged populations (Maus, 1911; Huetz de Lemps, 2001). Other sources included shallow

water wells that were often contaminated by used water and seasonal rainwater collected in poorly constructed water tanks.⁷

Governing logics: Land tenure, pro-poor schemes, and access to water

The fate of the urban poor did not change substantially after independence. Those living in low-income settlements along garbage dumps, waterways, and similar types of land were poorly served (Cheng, 2014) and depended on vendors and neighbours for poor-quality water (Maniquis, 1996). By 1994, the MWSS supplied water to only two-thirds of the population of Metro Manila; supply was intermittent at an average of 16 hours each day (Dumol, 2000). In 1995, the government passed the National Water Crisis Act to adopt effective measures to manage water. By 1997, privatisation had shifted the responsibility for water provision to the two concessionaires, Maynilad and Manila Water. While major service improvements have taken place since then, urban poor communities continue their struggle to access affordable water (Torio, 2018).

This is the case even though both concessionaires have instituted pro-poor programs (*Tubig para sa Barangay* – 'Water for the Village') by collaborating with local government units (LGUs) and community-based organisations to manage water supply even in informal settlements. These schemes led to the creation of water service cooperatives registered with the Cooperative Development Authority (CDA). The arrangement entails providing bulk water supply (Figure 3) to communities through pipelines installed with bulk meters. The water cooperative undertakes the responsibility to connect individual households to these connections and collects water dues. Installing water pipelines, repairing them, and any other management issues are entirely handled by the cooperative.

Figure 3. Bulk water supply for an informal community.



⁷ Dated 1875 or 1876, a letter by a Spanish physician to the Governor General noted: "the cisterns have been exhausted, the estuaries dry up or rot and the Pasig River, the only resource at all times of the proletarian class, drags in its current thick layers of vermin that are admittedly harmful to health. And that is why in the months of April, May, June and July, every year the increase in burials in public cemeteries draws attention" (translation by authors) (Huetz de Lempis, 2001).

Water and planning of space are deeply intertwined. A certificate of land title or a copy of the lease contract is the standard requirement for applying for a water service connection. For informal settlers, accessing legal piped connections from the concessionaires is not possible since the latter do not have 'right-of-way'. If the concessionaires were to lay infrastructure in areas with ongoing land ownership disputes, it might tacitly legitimise the case of the informal settlers.

If residents can form a cooperative (e.g. Caloocan 1), these challenges to living in an informal settlement can be bypassed. Concessionaires provide bulk supply, allowing households to connect indirectly to a legal, piped water supply. Not only is this considered a novel intervention to intractable housing tenure problems, but it is also an effort to make urban communities self-reliant and productive members of society (interviews with local government officials).

Yet those living in resettlement sites, despite having security of tenure, are not ensured water access either (e.g.; San Jose del Monte), unless they form a cooperative (e.g. Caloocan 2). The National Housing Authority (NHA) and host LGUs are responsible for coordinating with other government agencies to enable water service for the resettled population as part of site development activities. The Urban Development and Housing Act (Republic Act 7279)⁸ requires the government to install a water distribution system in resettlement sites. However, as far as government action on-the-ground is concerned, its obligation is to provide a water distribution system *accessible* to resettlement sites. Individual water connections are considered the responsibility of the homeowner. Overwhelmed state organisations often render minimum compliance to the law, leaving it up to resettled communities to fend for themselves, especially in delivering water to households. On the other hand, the requirement to install a public water distribution system does not apply to informal settlements. It is assumed that they need to be transformed into formal communities with secure housing tenure before the government connects them to the public water distribution system.

It is within these contexts that urban communities find ways to access water. Although there are a variety of small-scale vendors, this study focuses on the two defining categories of cooperatives and syndicates. While the former are considered legal informal providers, the latter are deemed illegal. Both represent self-help ways to access water.

Claiming legality and access to water – Cooperatives

Although cooperatives serve as a legal means of getting access to water for urban communities, their significance extends beyond service provision. Fears of eviction and physical harm shape perceptions of insecurity for residents of informal settlements (Table 4). Forming a cooperative allows them to gain a sense of legality and security through the agreement with the concessionaire, as well as to be provided with water. This unwritten 'rule of the game' encourages individuals to come together to form a cooperative.

However, it is difficult to form one (Figure 4). Gathering support from other residents, resisting opposition from local political players, and raising start-up funds for the installation of piped infrastructures are uphill tasks for people barely making ends meet. Unless they receive outside help, often through non-governmental organisations, it is difficult to form a cooperative. Both cooperatives in Caloocan 1, an informal settlement, and Caloocan 2, a resettlement site, recounted disputes within communities, struggles over management, and obstacles posed by local politicians during the formation of the organisations.

⁸ Sec. 21. Basic Services. – Socialised housing or resettlement areas shall be provided by the local government unit or the National Housing Authority in cooperation with the private developers and concerned agencies with the following basic services and facilities: (a) Potable water; (b) Power and electricity and an adequate power distribution system; (c) Sewerage facilities and an efficient and adequate solid waste disposal system; and (d) Access to primary roads and transportation facilities (UDHA 1992).

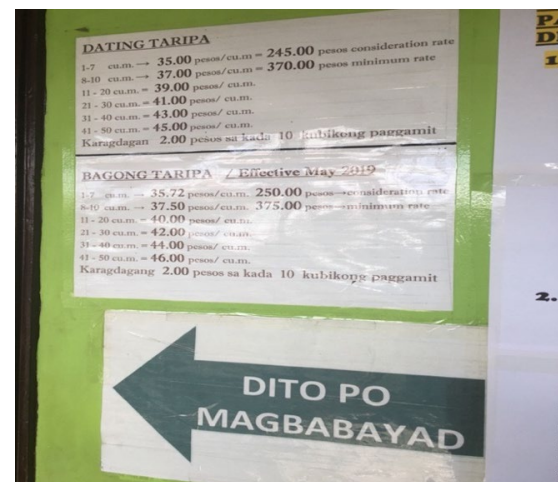
Table 4. Perceptions of insecurity (open-ended responses).

Theme	Informal settlement		Resettlement site		Mixed-Use settlement	
	Caloocan 1 (co-operative)	Malabon (other providers)	Caloocan 2 (co-operative)	San Jose del Monte (trucks)	Pasay (other providers)	Quezon City (other providers)
Perceptions of insecurity	Fear of eviction, of harm (fires, brawls), uncertainty of future (24)	Fear of eviction, of harm (fires, brawls), uncertainty of future (71)	Share toilet with neighbours (37)	Share toilet with neighbours (19)	Fear of eviction, of harm (fires, brawls) (30)	Fear of eviction, of harm (fires, brawls), uncertainty of future (53)
	I do not own the house (79)	Share toilet with neighbours (63) I do not own the house (117)			Share toilet with neighbours (28)	I do not own the house (41) Fear of red tagging (4)

Difficulties do not end at the inception stage. The responsibility to collect water bills from residents is also solely the jurisdiction of the cooperative. Upon lack of payment, water service is disconnected or penalties are charged, eliciting complaints from users (Figure 5).

Figure 4. Members of a water cooperative.

Figure 5. Cooperative-set water prices.



The pressure to perform well pushes members to think of ways to ensure timely collection of water dues. Moreover, decision-making processes entail consultation amongst the board members of the cooperative and may run up against intergroup conflicts.

Despite these challenges, a cooperative allows a community to get access to legal sources of water through water connections from concessionaires. Especially for people living in an informal settlement, it allows them to be seen by the state as legitimate players working towards their own well-being. It also imparts a sense of service to members of cooperatives, even if the work may seem thankless and stressful (focus group discussions).

Everyday illegality to secure access to water – Syndicates

At the other end of the spectrum are practices that can be easily criminalised by the state under the National Water Crisis Act of 1995. The law stipulates that selling pilfered water is a punishable crime that can result in imposition of fines and imprisonment.⁹ Thus, anyone selling water without permission from the concessionaires or the state can be deemed to be engaging in an illegal activity.

This places ordinary people selling water to neighbours, small-scale vendors tapping mains, or organised groups into the category of water syndicates. The term denotes culpability by law but is used loosely within communities as well as employed by competitors to discredit each other. In one community, for instance, a woman selling water to her neighbours was described as a 'syndicate'. In an interview with a community organiser-cum-water vendor serving multiple communities, despite the fact that he described his operation as 'not illegal', a local competitor painted him as a syndicate. His operations involved laying down pipelines on riverbeds (Figure 6), bribing local government officials, and forging relationships with local community organisers.

In another community, a water provider selling water to more than a hundred households talked about his competitors as powerful syndicates who threatened to kill him if he did not share a cut of his revenue with them. Yet this provider was described as a syndicate himself by community leaders in separate conversations. His business was run with the help of residents who had legal water connections to the concessionaire from earlier times. These individuals allowed their water supply to be pilfered and sold to other residents of the community lacking individual connections (Figure 7).

Although his activities could be perceived as illegal, residents may also end up engaging in everyday illegality by concealing these activities from local government officials, tacitly accepting the activities, or actively becoming a part of the operation. In this case, water arrangements were as follows:

48 households with individual piped connections allow the provider to pilfer water in exchange for payment. They also connect secondary pipes with the neighbouring houses, who pay directly to the household entrepreneur. In 124 households with sub-meters, (i) households provide water to neighbours with illegal submeters and collect payment from them, serving 44 households. (ii) Providers may also 'jump' (tap) main pipes illegally to supply water to customers and collect payment from at least 80 households. An estimated 65 percent of households in the submeter category are sharing water illegally either through sub-meters or through 'jumper' connections. (*community leader in an informal settlement*)

Some providers are more secure than others, based on their relationships with local government officials and politicians. The water providers threatening their competition with violence, for instance, had good relations with the vice mayor, which gave them a layer of immunity. In this informal settlement, residents feared disputes between providers, as competition could deprive them of affordable water. It could subject them to unpredictable workings as well, including the use of violence by the other provider.

⁹ Section 8 of the law states on 'anti-pilferage': "It is hereby declared unlawful for any person to: (a) Destroy, damage or interfere with any canal, raceway, ditch, lock, pier, inlet, crib, bulkhead, dam, gate, service, reservoir, aqueduct, water mains, water distribution pipes, conduit, pipes, wire benchmark, monument, or other works, appliance, machinery, buildings, or property of any water utility entity, whether public or private; (f) Use or receive the direct benefit of water service with knowledge that diversion, tampering, or illegal connection existed at the time of that use, or that the use or receipt was otherwise without the authorisation of the water utility; (g) Steal or pilfer water meters, main lines, pipes and related or ancillary facilities; (h) Steal water for profit or resale; (i) Knowingly possess stolen or tampered water meters; and (j) Knowingly or wilfully allow the occurrence of any of the above".

Figure 6. Laying down pipelines on public land.



Figure 7. Tapping legal water connections.



The variability of players and actions that could be deemed legal or illegal reflect the fact that the term 'syndicate' is representative of a discursive terrain, reflecting relationships between the state and its subjects. With its ability to criminalise people, places, and practices despite its seeming absence, the imprint of the state is powerful in these spaces and instances. The housewife selling water, for example, worried about getting arrested like her brother. (Rampant pilfering of water mains in an informal settlement led to the arrest of her brother in 2015. The private concessionaire officials complained to the *barangay* officials, who made the arrests of some individuals with the help of the police.) Yet, neighbours selling water to each other are not anomalies but a pervasive occurrence. Of the five survey sites, households reported the piped-to-neighbour category as the third most important source of water. Similarly, criminalisation masks the political backgrounds of some providers. For instance, one community organiser once belonged to the 'Sparrow Unit', the hit squad of the Communist Party that became known for killing government officials and suspected spies in the 1980s during the dictatorship of President Marcos (Van de Kroef, 1988).

Similarly, the community organiser-cum-water provider continues to advocate for housing rights on behalf of informal settlers with other community leaders and NGOs. "I provide water to people living under bridges. If I did not sell them water, no one would! No one else cares", he explained. The statement holds true: many of his customers are people living in informal settlements, barely surviving with little income and the ever-present threat of eviction.

Urban poor communities are aware that either they must form a cooperative or engage in everyday illegality. In the case of the latter, they become vulnerable to the coercive arm of the state, which can crack down at will. They also pay higher amounts of money and face significant shortages (survey households). Yet getting access to water trumps these threats, forcing adherence to the 'rules of the game'.

GOVERNANCE AND INFORMALITY – FROM THE TOP DOWN AND THE BOTTOM UP

The everyday survival practices of urban communities, based on unwritten 'rules of the game', or shared expectations, in relation to contexts shaped by the state and concessionaires, lend insights into state-society-market relations in Metro Manila.

This reading demonstrates that lack of access to legal, affordable, clean, and regular water for urban poor communities cannot be solely credited to a crisis of state governance. Instead, it reflects the continuing colonial legacy of the ruling elite disregarding the needs of underprivileged populations. In post-colonial Metro Manila, an obvious manifestation is the planning of space that has resulted in marginalising the urban poor, a "morally inferior impoverished class" (Kusaka, 2017: 11), and limiting their political participation as equal citizens (Hutchison, 2007). Since getting access to water from concessionaires is made difficult by their insecurity of housing tenure, choices for residents are limited. Yet living in a resettlement site instead of an informal settlement does not guarantee water either, highlighting priorities in resettlement policies when it comes to the urban poor.

In addition, like many countries around the world, neoliberal reforms have further limited the role of the state in the Philippines. Governance resulting from an increased role of the private sector and societal actors was supposed to contribute to 'good governance' (Moulaert et al., 2007) and create employable welfare subjects (Swyngedouw, 2005). And yet, in much of the Global South including the Philippines, formal welfare states had not existed previously, and people traditionally relied on familial and community networks (Seki, 2020: 2). This dependence is also reflected in survey responses in all communities, where residents consider familial networks as representing their interests and sources of financial support in times of need.

These structural contexts shaped by the state and concessionaires bear on responses by the communities. Either they must form a cooperative to get access to water from Manila Water or Maynilad, or they must engage in everyday illegality to make ends meet. Forming a cooperative has not led to community cohesion, illustrating not only the difficulty of bringing people together under one platform, but also the complicated microdynamics related to leadership within communities (Arcilla, 2020). At the same time, it allows informal settlers to find a foothold in legitimacy through belonging to a government-registered entity. From being considered informal (and illegal) within the political economy of Metro Manila on account of their residence and occupations, to being perceived as legitimate through association, the political nature of accessing water is illustrated by the range of available options. In both the informal settlements and the resettlement sites, members of cooperatives were perceived by respondents as wielding enough influence to secure continued access to water, even if they were dependent on concessionaires for supply. On the other hand, the people engaging in illegality highlighted the understanding that unless they bought water from neighbours or protected the workings of the provider, they could not secure water. While the threat of punishment under the law is potent, it is overshadowed by the dire prospect of not seeing their water needs met.

These practices of the urban poor do not represent overt acts of resistance so much as efforts to acquire water for everyday use, or what Bayat terms the "quiet encroachment of the ordinary" (2000). They are individualised until they come together through mobilisation by NGOs and community-based organisations. In the two case studies of water cooperatives, members expressed a sense of collective agency, and how they learnt from experiences of other cooperatives in dealing with government agencies or operating within the constraints of local power dynamics. Especially in informal settlements, these everyday practices necessary to sustain their lives despite opposition from state agencies to letting them remain on the land could be deemed actions that in some way "derail, or subvert state agendas" (Holston 1999: 167).

On their own, these informal institutions may not be able to contribute to improved access to water. The urban poor barely make ends meet and live in perpetual fear of eviction or of being forced to move away from the city where basic needs, including water, may not be met. Thus, any meaningful conversations about water need to take the planning of space into account. Residents of informal settlements are encouraged to 'formalise' and move to resettlement sites, since their residences are increasingly perceived to be obstructing development in the city. Moreover, housing tenure remains a prerequisite for water provision. Yet moving to a resettlement site is neither a guarantee of water access, nor is it often helpful, due to the sites being located away from the city and its employment opportunities.

In pursuit of "global and profitable developments" (Ortega, 2016), the needs of the urban poor are seldom taken in account, highlighting the divide between the 'productive space' of global businesses and the 'unproductive space' of urban slum occupants (Seki 2020: 17). Ongoing disputes over land privilege private landowners and developers over the urban poor. For instance, Malabon, once declared public land under a Presidential proclamation in 1967, was handed over to a big landholder family by the Supreme Court in 2005. The community in Malabon has resisted demolition and continues to negotiate with the landowner to purchase part of the land. Inability to get access to water in Malabon is not due to failure in forming a cooperative, but to the fact that neither will the landholder give 'right-of-way' to the concessionaire, nor will the Urban Poor Affairs Office of the LGU issue clearance for water connections, based on the reasoning that the land is disputed.

Interactions between these dynamics from the top down and the bottom up may explain why inequity in water persists for the urban poor. Constrained by the implication of water in land tenure complexities, the responsibility to seek access and then distribute water to fellow residents falls on urban communities. Not only do they pay more for less, but they also carry the burden of raising revenue for the installation of infrastructure and collection of dues. Unless they organise into a cooperative, legal means of water are inaccessible.

Lastly, the restructuring of the postcolonial state through privatisation of water reflects a principle of governing through shaping attitudes (Lemke, 2007), where people must prove their worth to be able to qualify for access to services. As interviews with government officials at varying levels illustrated, the urban poor had to be taught to become 'self-reliant' and 'responsible'. This approach dovetails with state efforts towards socialised housing projects and slum clearance through the 'People's Plan', which encourage the 'participation' and 'empowerment' of residents (Seki 2020: 17). However, in that process, the accountability of the state (or of concessionaires) is also shifted to the urban poor – yet concessionaires are responsible when it comes to the rest of the city, a fact that was highlighted during the 2019 water shortages in Metro Manila, which led to public hearings.

CONCLUSION

This paper makes the case that an essentialised focus on providers, infrastructure, or other metrics, informed by apolitical and ahistorical discussions of state and governance, misses the myriad ways people get access to water in Metro Manila. Situating these processes (what people do) in their social, political, and historical contexts, to name a few, may provide a reading of power and politics.

A discussion of informality shaped by the legibility or illegibility of the state (Das and Poole, 2004), and the terms on which public-private partnerships are predicated by market actors, suggests that it is not a 'crisis of governance' (OECD, 2011) that afflicts water as much as governing preferences informing policy interventions. On the other hand, the practices of people from the bottom up illustrate informal 'rules of the game' that need to be observed for survival. Together, these interactions provide a window into the dynamic state-society-market relationships shaping water supply and access.

Such an approach shifts focus from dichotomies (legal/illegal, formal/informal) as given facts and directs attention to how these categories are made and remade and may privilege some sections of society over others. In doing so, it may also lend insights into inequities in water supply that persist in Metro Manila.

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