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# **Acronyms**

APC	All Progressives Congress			
FGD	Focus Group Discussion			
KII	Key Informant Interviews			
KSWB	Kano State Water Board			
LGA	Local Government Area			
PDP	Peoples Democratic Party			
RUWASA	Rural Water Supply and Sanitation Agency			
WRECA	Water Resources Engineering and Construction Agency			

# **Executive Summary**

The area selected for the study is Brigade-Tudun Wada in the northern part of the Nassarawa Local Government Area (LGA). This area is both one of the most densely populated areas and one of the most cosmopolitan, containing people from all parts of the country and beyond. The study reveals that the community stopped getting water from the public tap systems more than two decades ago. Due to a lack of provision of water infrastructure and sanitation, the community mostly relies on public borehole water and private informal water-vendors who also source their water from boreholes. Because of the porous basement-complex geology in the area, most of the aquifers are patchy and there is limited groundwater supply. The community faces serious challenges in times of water scarcity – the dry season in the area lasts for seven or eight months, reaching its peak in March or April – and whenever there is a power outage for a day or two. Water sanitation is poor; people take water without any additional treatment due to limited choice coupled with low income.

The groups most affected by the water problem in the community are women and children who rely on men in the family to supply water and are less powerful when it comes to decisions about this important resource. Although there are many community organizations in the area and women are well represented, they are very unlikely to hold any leadership positions presently or in the near future.

The traditional community leaders play an important role in managing water infrastructure in the study area. Although they have little direct influence on politicians' decisions as to when or where to provide water, as their role is merely advisory, they are indirectly influential as patrons of the community development associations that are important pressure groups. It is the community association that attracts projects to the community, whether by engaging the state and local government or soliciting help from individuals and philanthropists. These associations are mostly registered with local or state government and, in a few instances, with the national Corporate Affairs Commission. They are formed in most neighbourhoods to manage infrastructure, while the traditional leaders are responsible for forming and regulating the group. In most cases, the leaders hold their positions (either as acting or elected) for an unlimited period. Each resident contributes a small token for the management and maintenance of existing infrastructure. Decisions on the use of the money are largely made through the consensus of association members, but it is a highly informal and not very democratic system, and the community is not generally informed on how the money is spent. Since work in the associations is voluntary and members sacrifice their time to ensure the running of the infrastructure, the community rarely complains except when there is a serious allegation.

The power of the electorate was witnessed in the contested governorship election in 2019 when the government and opposition parties pursued the voters of Gama, part of the research community. Within just two weeks of the campaign period, in order to win the vote of this densely populated area, the government implemented a water project that the community never dreamt of. This project is helping to reduce the water problem in the locality.

The study finally recommends the empowerment of the local community association as a means to advocate communities' demands and to manage infrastructure. The participation of women as key stakeholders also needs to be emphasized.

# **Study Area**

Kano Metropolis is the second-largest city in Nigeria and the most important commercial centre in the northern part of the country. The city houses over five million people, and nearly half its area lacks planning (Mohammed et al., 2019). In these areas, residents are predominantly poor and without access to most infrastructure, including water. Service provision is generally lopsided, favouring the well-to-do neighbourhoods known as government reservation areas and, to a lesser extent, medium-density areas.

Kano State was created in 1967, and only one water-treatment plant, located at Challawa, provided water to Kano Metropolis. In 2008, as the overstretched plant proved unable to cater for the skyrocketing demand of unplanned urbanization, a new one was constructed in the suburb of Tamburawa. It is important to note that Kano Metropolis' annual population growth of 3.4% is one of the highest in the country (based on NPC, 2006). This unplanned growth poses challenges to its development.

The community chosen for this study is Brigade-Tudun Wada in Nassarawa Local Government Area (LGA), which is one of the eight local governments that constitute Kano Metropolis. In the 2006 census, Nassarawa recorded a population of 569,669, making it the most populous LGA in Kano State (NPC, 2006). Based on an inter-census annual growth rate of 3.6%, the current population figure is projected as 1,060,247. Considering its area of 37.5 km2, that would put the population density at 29,738 persons/km2 – also the highest in the state. The community, here often referred to as Brigade-Tudun Wada consists of six localities, a term used for smaller areas, which are traditionally recognised as independent entities: Gama, Gwagwarwa, Gawuna, Kaura Goje, Tudun Murtala, Tudun Wada and Dakata.

Brigade-Tudun Wada is not only one of the most densely populated (about 40,000 persons/km², with an area of about 8.1 km²) areas of Kano but certainly also the most culturally diverse. The only areas with similar population density in the city are Kurnar Asabe and the Old City, both of which are relatively more culturally homogeneous. The research area was initially used by the colonial authority as a settlement for migrants of northern origin (Tudun Wada in 1914) and for natives in the colonial force (Brigade in 1945) (Liman and Adamu, 2003). The area is situated at the fringes of the Old City and Bompai Quarters, which was the seat of power for the colonial government. With the establishment of Sabon Gari Market in 1913, the Bompai industrial estate in the 1950s, and later the Dakata industrial estate, all very close to this community, the population grew quickly and became more complex as people from other parts of the state and country continued to migrate to the area. It is the only area in Kano where one can see people of different cultures, languages and religions living in the same neighbourhood.

Residents are generally poor, suffering from the usual challenges of informal and unplanned urban areas, including poor access to water, poor road conditions and a shortage of other essential infrastructure. Despite the windfall projects that came from the state in the 2019 election, as discussed below, this is one of the most neglected neighbourhoods, possibly because the residents are mostly poor and politically passive. Based on observation and interviews with residents, the community survives in conditions of serious water shortages. The area is not much different from peri-urban Kano, except for its high population and housing density and serious erosion problems. Large open drainages run through Brigade-Tudun Wada collecting effluents from the neighbouring industrial areas before they are finally emptied into Wase Dam.

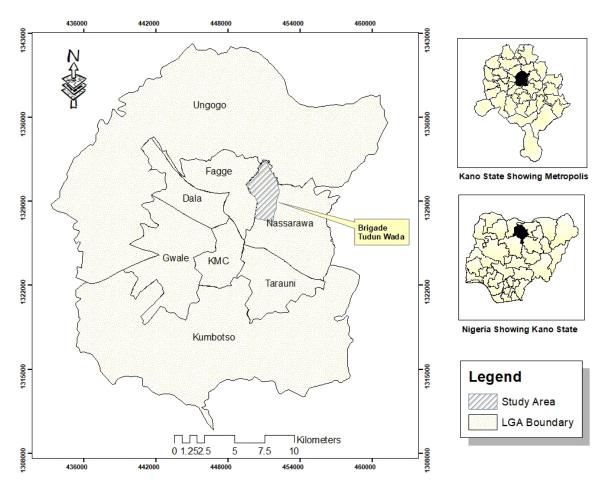


Figure 1: Map of Kano Metropolis showing the study area

Source: Author's Compilation

# **Methodology in Field Research**

Data for the study were collected through focus group discussions (FGDs) conducted with the residents in the community, and key informant interviews (KIIs) conducted with local administrators, traditional institutions (ward heads), community leaders and leaders of religious/faith-based groups.

The stratified random sampling technique was used to select three localities in the research community – Gama, Dakata and Tudun Murtala – representing 60% of the population. Two FGDs were conducted in each locality, one with male participants and one with females, with group sizes that ranged between 6 and 12 persons. Thus, a total of six FGDs were conducted. Each discussion lasted 40 to 50 minutes. A total of nine KIIs were conducted with three traditional leaders, three leaders of youth associations, two religious leaders and a water vendor. In addition, one unstructured interview was conducted with the councillor of Gama Ward, who has been in the private water business for many years, and one interview was conducted with an official of the Kano State Water Board, the agency responsible for water distribution in the state. The data obtained were analysed qualitatively, and coding and triangulation were used to present the findings. The study also used existing literature to support some of its findings.

Informed consent was obtained from the participants prior to the commencement of discussions and interviews. The participants were informed about the purpose of the study and their

permission was received before taking their pictures and recording their voices and for the use of those pictures and recordings. COVID-19 safety protocols for social distancing and the use of face masks were duly observed in the course of the data collection.

# The case of the Brigade-Tudun Wada community

#### State and traditional governance structures

Nigeria's 1999 Constitution, under Section 7, guarantees the system of local government by democratically elected councils, with oversight and support from the state government. Chairpersons and councillors are elected to local government councils for up to two tenures of four years. Kano Metropolis is made up of eight local government areas (LGAs), of which Nassarawa is one. The study community, Brigate-Tudun Wada, which is in the northern part of Nassarawa LGA, comprises six localities. These localities contain diverse groups that have come from within and outside Kano City and metamorphosed into a community.

Under the traditional system of government, the area is subject to the Kano Emirate, a monarchy that has existed for more than ten centuries, first under Hausa leaders (999–1805 CE) and later under Fulani leadership (1805–) in the Sokoto Caliphate (Shea, 2005). After British colonial forces captured Kano in 1903, they judiciously used the emirates in Northern Nigeria to rule the region through what was called the "indirect" system of administration. Until December 2019, Kano Emirate remained the only emirate in Kano State and one of the largest in terms of landmass. Since 2019, the emirate has been divided by the state government into five with Kano Emirate responsible mainly for the Metropolitan area.

With the 1979 and 1999 federal Constitutions, traditional institutions lost much of their political influence in decision-making processes. The 1999 Constitution recognizes the existence of traditional leadership but does not assign it any role in government. However, its well-established hierarchy is still utilized in the modern state and local government systems of Nigeria, as shown by traditional leaders' financial dependence on monthly allowances from the local governments. Kano State law gives traditional leaders a limited advisory and consultative function.

In the emirate system, the sarki ("emir" in Hausa) is the highest authority. The title is patriarchal, passed through inheritance to a son or male relative. To discharge his responsibilities, the emir is assisted by hakimai who oversee the local governments. Below the rank of hakimi is the district head (dagaci or maigari) who supervises smaller units called unguwanni or quarters. The study community is divided into three districts – Gama, Dakata and Tudun Wada – with a number of ward heads (masu unguwanni). It is the duty of the emir to appoint the hakimai and dagatai. Although ward heads are appointed by the dagatai, they have to be blessed by the emir.

The traditional institutions are still today the link between the government and the governed. During political rallies, the homes of traditional leaders are seen as the gate to the communities, and most politicians will first visit the traditional leaders for their blessings and support as well as the support of their subjects.

Any association or organization operating in the community must also have the approval of these traditional leaders. For this reason, all the FGDs for this report were conducted in the houses of the traditional leaders of each of the wards; it would have been difficult to gather the people needed without their help.

Although the people have so much confidence in them, the traditional institutions know their political limits and usually act within their jurisdiction. One middle-aged ward head, interviewed by the study, sorrowfully said:

We as an institution are just followers, we take orders from the higher authority [state or local government]. We cannot do otherwise, nor can we have an opinion. If any of us dares to say something that annoyed the government, the next day he will be called to the palace to face the consequences of his action.

From this statement, it is obvious that things are not done the right way and the traditional institution is too powerless to influence any change in its society except in some few instances. Their powerlessness may well be connected to their financial dependence on the local government, which makes them more subservient. Citizens, therefore, have to rely on community development associations and civil society organizations in which the traditional leaders serve as patrons and advisers.

Many community development associations exist in the community. They may function for the



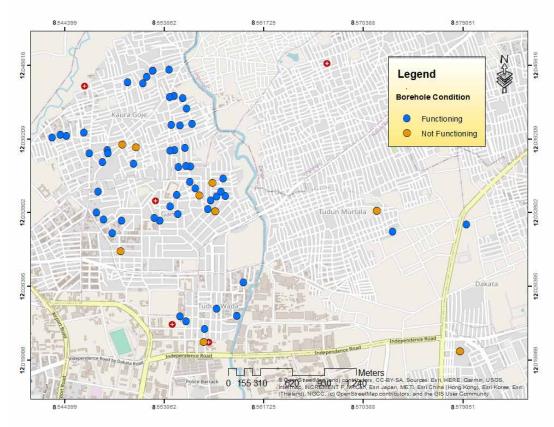
development of a specific locality, interest group (e.g. students or youth) or even ethnic group (e.g. Babur or Nupe). Most associations register with the local government. A few larger ones are registered with the national Corporate Affairs Commission, like Tudun Wada Foundation and Gama First, trying to provide infrastructural development, or the Grassroot Care and Aid Foundation, which is mainly concerned with humanitarian services like water provision for orphans and the needy. The Wadata Youth Foundation champions the cause of the youth in the community. Some associations are more democratic, choosing their leaders through elections. In most cases, however, leaders are not elected and can hold their positions for many years. This is because the community generally believes that leadership is a responsibility and that a capable leader can hold the position for life unless there are complaints.

#### **Changes in community water sources**

Thirty-five years ago, the community's main source of potable water was public tap water. The area was connected to the main municipal tap supply during the first civilian rule in the country (1979–1984). However, this important water source began to decline from the late 1980s and subsequently came to an end in 1992. In 2003, the new administration of Governor Ibrahim Shekarau made an effort to provide water to some communities. As a result, the research community enjoyed limited supply for a few months around the mid-2000s. With the decline in tap-water supply, residents relied more and more on open hand-dug wells. The population was relatively smaller then and the water table was less than 20 metres below ground.

With the increase in urbanization and modernization, hand-dug wells could not provide the amount of water required and people began to sink boreholes. An elderly FGD participant recalled that the first borehole in Gama was dug in 1991 by a private individual. This resulted in a conflict in the community as people believed that the borehole would likely drain the water from their shallow wells. A 49-year-old participant narrated that, as a youth, he actively participated in mobilizing residents against the construction of boreholes in their community and that he was among those arrested by police. As the residents had predicted with the sinking of this first borehole, all neighbouring wells began to dry out. At first, the aquifer was rich, but, with the continuous sinking of boreholes, one soon had to dig as deep as 50 metres to get to the water. Today, it is as much as 70 metres down.

Presently, the major sources of water for the community are boreholes (public and private) and water vendors. The private boreholes are mostly commercial and constructed by individuals with profit motives, who make a good income and pay little taxes. The public boreholes are constructed by the government and other organizations for public use, with a token of 5 to10 naira paid per jerry can of water. In very few cases, well-to-do individuals sink private boreholes in their houses for their family needs and provide a single or double tap outside for neighbours to fetch water if there is electric power. This practice is most prominent in the Gama area where the groundwater is relatively more abundant. In contrast, it is very difficult to sink boreholes in Tudun Murtala and Dakata where the underground water level is very deep. The process to reach it is beyond any individual's capacity, especially given that the residents are generally poor.



Borehole locations in the study area

Source: Fieldwork (2020)

The public boreholes set up by the government and philanthropic organizations, are the major suppliers of water for domestic use. While boreholes can be seen in many locations in Gama, there are only two functioning public boreholes in Tudun Murtala while the one in Dakata was constructed by a private individual to make a profit.

In Gama, public boreholes are constructed in neighbourhoods and serve residential clusters. Ten to twenty taps spread across the clusters may be connected to a single borehole. Each borehole has a community-appointed committee that oversees its activities. A token N5–10 per jerry can or bucket is paid to the borehole committee to be used for maintenance or repair. Although this arrangement is not official or backed by any law, the community sees it as customary and authorized by a consensus or agreement among the members. The community is generally comfortable with the payment system and the people managing the infrastructure are regarded as making a sacrifice. The committee is usually made up of five to ten people from the neighbourhood. They usually take decisions together, but – just like typical Hausa community leadership – their decisions are rarely questioned.

The community's second source of water is water vendors, who mostly bring water from outside of Nassarawa LGA. According to the participants, the vendors' main source is Gayawa in the neighbouring Ungogo LGA, which is known for abundant and good-tasting groundwater. This finding corroborates Hajarat's (2015) report that nearly half of the water sold in Nassarawa LGA is sourced from outside the local government area.

Many people venture into the water-vending business by sinking wells and boreholes. They do so without any permission. Interviews with a director of the Kano State Rural Water Supply and Sanitation Agency (RUWASA) and a professor of water resource management revealed that it should be RUWASA's responsibility to grant permission for the sinking of a borehole. However,

a water reform bill that would regulate the sinking of boreholes by the state ministry and its agents, which was introduced two years ago, has yet to be passed into law by the state assembly.

Private and informal water-vending is undoubtedly the most reliable source of water to this community, especially in Tudun Wada and Dakata. At any hour of the day, one can see the cart-pushers popularly known as mairuwa or an-ga-ruwa. In the mairuwa system, a local cart made from iron rods is used to collect water in 25-litre plastic jerry cans. A normal cart carries 16 or 20 jerry cans. In rare instances, the water vendors fill their carts from tankers of water that are brought in by rich members of the community or retailers. The cost of water sold by the water vendors depends on three factors: the availability of the water, which varies with the season; electric power; and the hardness/sweetness of the water. During the rainy season, a jerry can of sweet-tasting water (obtained from either municipal supplies or boreholes) is sold for N30 per jerry can while the hard water obtained from boreholes within the neighbourhood costs N20 per jerry can. However, the cost can increase by N10 when the power fails. A participant in the FGD in Tudun Murtala Ward pointed out that water "is only reliable when there is electricity, but once the power is out for 24 hours, water becomes a scarce resource with a higher price than before".

A KII participant said that "water causes conflict and dispute between members during peak dry seasons". He described how a person goes out very early to call on a water vendor a very far distance away, about 6 kilometres, and on their way back other residents who also need water will rush and try to pick as many jerry cans as they can from the cart. This happens mostly when children and women call the water vendor and later it turns into conflict. Therefore, in the dry season, they chain all the jerry cans together.



Another important, but less common, water source in the community is tankers of water donated by philanthropists and organizations and brought to the community for residents to collect water free of charge. Such notable organizations include the Aliko Dangote Foundation, the Shehu Aliyu Hadejia Foundation and the Grassroot Care and Aid Foundation.

Sachet water is another source of water to the community, just like in all urban communities in the country. This type of water is supplied by small to medium scale companies that collect water from the ground or public supplies, treat and package it. This water is mainly used for drinking as it costs 10 naira per sachet. In fact many of the community members complained that they could not afford it, as such they have to use other, less clean, sources.

Rank (by usage)	Source	Price (Naira) per jerry can	Distance from residence to water source	Reliability	Use
1	Public boreholes	N5-10	Up to 2 km	Mostly available only when electricity is on	All domestic purposes
2	Private boreholes	N10-20	1–2 km	More reliable than public boreholes	All domestic purposes
3	Water vendors	N25-50	4–6 km	Most reliable	All domestic purposes
4	Water tankers	Free	varies	Not reliable	All domestic purposes
5	Sachet water	N10 per 50 cl sachet	Very close	Reliable	Drinking

 $\label{thm:control_summary} \textbf{Summary of Water Sources in the Study Area}$ 

Source: Field Research in the Community (2020)

## High costs, low quality and water scarcity

Most residents in the community live in their own house, which is typical of low-income communities in Kano. However, community members in the study area commonly remarked that "every resident of this community is living as a tenant in his own house": the amount they must pay for water is enough to pay rent elsewhere; an average family of five can spend N300–400 daily to obtain water. With the average weekly income of individuals in the community between N10,000 and 15,000, this indicates that about 20% of their income is spent on water.

As explained above, informal vendors are the major suppliers of water to the community, but residents complain that their sanitary conditions are nothing to write home about. The quality of this water is affected by the hygiene of both the water vendors and their jerry cans. One of the community leaders described the vendors as "often the dirtiest set of humans over here". Most dress roughly and sweat heavily from the hard work of pushing their carts. They hardly care about their hygiene, let alone the condition of the jerry cans, most of which contain visible water-silk algae or spirogyra. An FGD participant in Gama stated, "At times you see spirogyra clearly in the water, but the highest we do is to allow it to settle down before usage." The water is not fit for drinking but, except for the few privileged ones who could afford to buy sachet water for drinking, they have no other option.

As Fate et al. (2018) explain in their study of the Dala LGA, groundwater constitutes 78% of the water used in Kano Metropolis but is generally consumed without any treatment. Residents measure the quality of water by its cleanness and taste. Most times it is muddy in colour, but

even when it looks clean, the quality cannot be inferred from the appearance. A youth leader in Tudun Murtala said that only those with higher education know about modern techniques for purifying water before consumption, such as the use of Water Guard. The majority do not have formal education and are neither aware of nor have access to these. The residents believe that their water quality is poor, yet they take it without any treatment since they have no alternative. The use of untreated water is a key factor in rising incidences of water-related diseases such as diarrhoea, sleeping sickness and Guinea-worm disease (Alhassan and Ujoh, 2012).

A proportion of the residents practice water segregation, using hard water for domestic activities and reserving the soft (sweet) water for drinking and sometimes cooking. However, this practice is possible only when water is readily available during the rainy season. "During peak water-scarcity period," one resident explained, "no one cares about segregation. Availability becomes desirability, as we only use what is available and affordable." According to the Gama Ward councillor, "Residents normally ask vendors, 'Which type of water are you selling? Is it hard or soft?' The question is being asked with the intention of getting the cheaper one, no matter how bad it tastes." According to him, this corroborates the popular adage that "a beggar has no choice. He that has not much cannot spend much [to purchase an alternative]".

#### **Severity of water shortages**

Within the study community, water shortage is particularly severe in the most interior areas, like Tudun Murtala with its two functioning public boreholes. Searching for and fetching water is the first and most important daily activity in a family. A female FGD participant narrated her experience: "Each morning, the very first thing you think of is how to get water for the day. Sometimes we fight each other because of water. Once there is scarcity of water, especially in the dry season, when almost everything turns upside down, even our source of income is affected."

The number of water vendors is also insufficient. Residents have to walk a few kilometres to neighbouring communities, to buy water for the family. In this part of the country, it is usually the man's duty to provide water for the family. However, both women and children are involved in the search, especially during times of water scarcity. The situation has proven to be a challenge to schooling and all other aspects of the residents' lives. Teachers at the FGD in Tudun Murtala spoke of children coming late to school and missing some of the morning classes, all in the name of searching for water for their families. Schools close earlier than the scheduled time because they cannot provide water for the students to perform ablutions and prayer. The cleanliness of schools is also seen as poor due to inadequate water supply.

This scarcity of water sometimes reaches an extent where "nothing can be cooked in a house for a whole day – not because one doesn't have the raw food in his house, but because he couldn't find water for the family to use," according to an FGD participant in Dakata.

## Managing the infrastructure

Infrastructure not only needs to be provided, but its maintenance must also be ensured. One of the traditional leaders explained in an interview how important water projects are to the people and the measures they take to sustain any water project brought to their community. This is done by appointing a committee (different from the community development association)

to be responsible for managing each borehole. The committee is usually made up of residents living in close proximity to the water sites, in order to ensure adequate monitoring. Membership is seen as a sacrifice. The committee's responsibility includes maintenance and repairs, and it generates funds by charging residents a token fee of N5–10 per bucket or jerry can of water. Some committees have purchased electric or solar-powered generators for their boreholes from these funds, or fence off the borehole site with an iron fence to ensure maximum protection. Many committees schedule times for water to be released to the community in batches.

Although most of the members responsible for borehole maintenance are male, female members are included in a few cases. The community generally assigns most physical and outdoor responsibilities to men. However, women members are quite important when it comes to issues of hygiene and sanitation.

## Role of local government

While the state government, through its agencies, is responsible for providing pipe-borne water, local government has the role of building infrastructure like tube wells or boreholes to deliver water to residents. It is meant to be the branch of government that is closest to the public, to which the community can easily address their complaints. In the past, according to participants, the local administration provided some boreholes in the community. But, presently, it has little impact beyond engaging primary school teachers and other servicing works. The Constitution sets out the responsibilities of local government and how it is to be funded by federal and state revenue. However, the local councillor interviewed complained of serious underfunding by the state government. Communities and leaders believe that, with financial independence, local governments could have a much greater impact on infrastructure provision. The only thing they do now is maintenance and repair in response to community requests.

Local government trains the communities on water sanitation and hygiene in Gama, a borehole committee member confirmed that he had attended the training the previous month. Female FGD participants in Tudun Murtala had also attended a workshop on water sanitation.

## State water agencies

In Kano State, responsibility for water provision lies with the Kano State Ministry of Water Resources and Rural Development and its three agencies: the Water Resources Engineering and Construction Agency (WRECA), the Rural Water Supply and Sanitation Agency (RUWASA) and the Kano State Water Board (KSWB). WRECA handles the engineering aspects like sourcing, storage and treatment. It maintains treatment plants and supplies water to the major tanks for onward delivery by the KSWB within Greater Kano, which includes the Metropolis and its surrounding environs. RUWASA is responsible for ensuring water supply in rural areas, with more emphasis on sinking wells and boreholes. However, the government can choose to use any agency for its work. For example, all the boreholes dug in Gama during the election period were done by RUWASA. Table 2 shows the state funding to the water agencies for the past five years. The jump in 2019 is related to the state election, as discussed in the next section.

Agency	2016	2017	2018	2019	2020
KSWB	1,464	1,437	5,829	16,291	5,994
WRECA	229	214	214	6,789	5,656
RUWASA	1,111	1,124	1,042	1,669	2,157

Budget of Water Agencies in Kano State, 2016-2020 (Naira in millions)

Source: Kano State Ministry of Planning and Budget

The primary role of the KSWB is "To practice an effective and efficient water supply management and to provide the Urban and Semi-Urban areas (small towns) in Kano State with the required potable water for both domestic and industrial purposes in order to reduce waterborne diseases, poverty and increase productivity of the citizens." (http://knswb.org/contact.php), which includes the maintenance of pipelines and connections. According to the interviewed KSWB official, "There have been pipes laid and connected to Gama, Dakata, Tudun Murtala, Kaura Goje and all the wards in the northern part of Nassarawa Local Government for a long time, and they had tap water until some few years back." This supply existed during the term of Governor Ibrahim Shekarau (2003–2011). It was cut off when there was not enough water to supply all areas due to the increased population in the state. Gama and Dakata were particularly affected because they are on higher ground than other parts of the Metropolis. For the water to have the necessary pressure there, it has to pass through an overhead tank at Goron Dutse Hill.

The major reasons why some places couldn't get water from KSWB were high demand and the inability of residents in some areas to pay the water tax. The water tax is a flat rate of N1,500 paid monthly by the household to the KSWB in order to enjoy water service. Recently, the agency introduced a diversion system that will send water to different areas in turn, at intervals of two to three days. Each group of areas receives water for two days before it is diverted to the next group for two days so that the water can go round to all. According to the informant, "The system has already started working and the people of Gama, Dakata and Tudun Murtala have started receiving tap water on their designated days." This was confirmed in a phone call with a community leader.

The total water production of Kano's four waterworks (Challawa, Tamburawa, Joda and Watari) at full capacity was given as 200 million litres per day, but the actual production was not disclosed. It is important to note that Joda and Watari were meant to service areas outside the metropolis and when operating at full capacity, to provide water to the metropolitan fringes; this is yet to be realised. However, Abdulhamid (2018) puts average daily production at 20% below capacity. This shortfall causes communities to over-rely on private and groundwater suppliers, water vendors and sachet water. Given the geology of the area, the continued sinking of boreholes will likely result in water shortages and crises. Although the water vendors' water is more palatable than borehole water, its sanitary quality is an issue. Sachets have better quality water, but their polythene bags litter the environment.

# Water governance and gender participation

Although women and children carry the main responsibility for domestic water use and management, they tend to be disadvantaged at the decision-making level. They are also the most affected when access to safe drinking water is unreliable.

In Hausa culture, which is dominant in the community, women are responsible for most domestic chores. Even though a man, as the "head" of the household, provides water for the family, the wife is the main user of the water. This was confirmed in all the FGDs. However, due to water scarcity, women are left with no other option than to join the search for water. Asked who provides the water in the family, their response is always, "Men – but most times, we have to go out ourselves to get the water vendor." In the study community, it is very common to search for water for two or more hours, especially in the peak dry season or when there is a power outage. A middle-aged female FGD participant opined that women primarily face the water problem, "because we go helter-skelter to source the little we have to give our crying children."

The prevalence of purdah practices – a cultural way of keeping wives at home and providing everything for them there – also leaves women and children vulnerable to water scarcity and delay: "Women suffer most when there is a water problem. It is possible for a man to get water outside or even beg for little to drink while we, the women, have to wait for the water to arrive at home. At times, the children keep crying and yearning for water."

Women are generally involved in the day-to-day running of community development associations. Most of the associations confirmed that the office of vice-chairperson is generally reserved for female members in order to balance gender representation and ensure female participation. However, women rarely occupy leadership or decision-making positions. This may be attributed to the culture, which is largely patriarchal. It is also important to note that women in the community are key actors in grassroots mobilization, as affirmed by the community leaders. The women themselves are not satisfied with the way they are sidelined from making critical decisions that affect them directly. They believe that their voices need to be heard and that more chances should be given to them.

## Political power and the paradox of votes

In a democratic system, which is often seen as a game of numbers, a large population of voters is an important asset. A big community stands to benefit more in the system, attracting development projects through the power of their votes. This is not usually the case with the study community. Participants in the FGD in Tudun Murtala almost unanimously believed that their votes barely count when it comes to the provision of projects and infrastructure. According to one, "We [people] are only relevant to them [politicians] when they are looking for our votes." He concluded, "Once they get the power, we are no more relevant."

However, something important happened during the last election that shows the relevance of residents' votes and that they can be used wisely to attract development to a community. According to Alhaji Babangida, the elected local government councillor for Gama, the inconclusive Kano State gubernatorial election in 2019 was a blessing to his constituency. In March 2019, Nigeria's Independent National Electoral Commission was legally required to declare the election inconclusive when the number of cancelled votes (141,694) exceeded the difference between the votes received by the two leading candidates (26,655). Gama Ward, with its 40,281 registered voters, suddenly became a kingpin in the supplementary election that followed (Tukur, 2019; Premium Times, 2019). A popular slogan then was "daga Gama an gama", which loosely translates as "Gama decides".

The ruling All Progressives Congress (APC) and the opposition Peoples Democratic Party (PDP)

concentrated on wooing the Gama voters. Within two weeks, the ruling party presented Gama with the kind of infrastructure projects it had not seen since the return of civilian administration in 1999. More than four kilometres of road was constructed; large abandoned healthcare facilities were revitalized and made fully functional; and 14 boreholes were dug in less than a week. According to Gama's district head and the chairperson of the Gama First Association, the boreholes are still functioning, except for two that were dug in sites with scant water. The community gained access to RUWASA, which is now playing an important role in providing water to the community. Through RUWASA, UNICEF constructed a solar-powered borehole in Gama C.

## Role of associations in community development

Community development associations are important catalysts for attracting development projects to the community. This is also the case in the study community. According to participants in the discussions and interviews with association representatives, many organizations in the community participate in reducing the area's infrastructure deficit and poor economy. The chairpersons of the Dakata Youth Association and Wadata shared how their associations helped people during the recent COVID-19 crisis by getting aid from the Dangote Foundation. The Baburawa or Bura Association – which represents people from southern Borno State, who have a large presence in Kano – recently constructed a classroom block in Tudun Wada Primary School. The Gama First Forum, which is probably the largest association in the entire community, plays an important role in ensuring that community members attend school and receive an education. According to its chairperson, the association has also secured the construction of many boreholes in the community:

Through our community effort, we were able to secure an additional seven water boreholes from one particular organization. We also obtained support from UNICEF, who brought additional boreholes with three tanks, [which was] commissioned about two months ago through an intervention by RUWASA/UNICEF. Again, we also benefitted from a water borehole project, which is the biggest in the community, that provides water free to a nearby mosque and almost ten houses in close proximity to the site.

The study also learned that Gama First Forum is collaborating with other wards' associations to see an end to this water problem through a northern Nassarawa coalition. The coalition leadership, who gained their positions through consensus, represents all major associations in the area, including Dakata Youth, Tudun Wada Foundation and others. Although the community is highly cosmopolitan, they act together when it comes to demanding their rights. A female FGD participant said, "We act as a common force to solve our pressing problems and we never have a dispute over access to water. Even during other crises, Dakata has proven to be the safest hiding place for all ethnic groups."

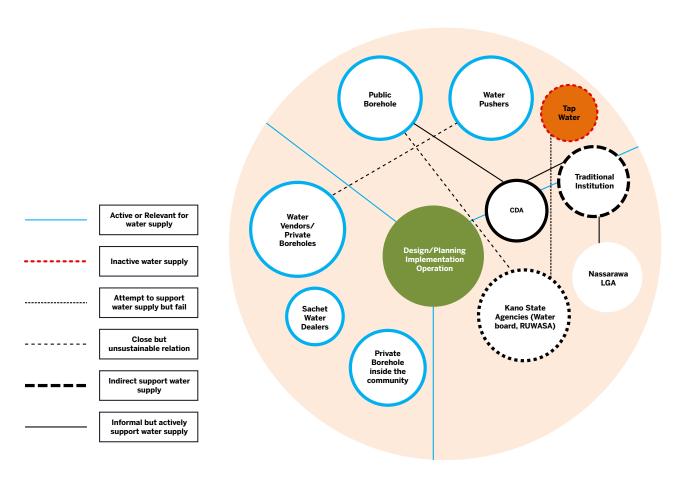
The associations revealed that the government does not involve them prior to making water-related decisions that affect their lives. But the powerful Gama First Forum takes their problems to higher authorities at both local government and state levels, including submitting their needs to the State Assembly during budget deliberation. The association members are very aware of their needs and rights and are relentless in telling the authorities to do what is needed. The Gama First chairperson stated, "Each year we present a list of projects we want the government to do for us, including water projects, to our representatives at the state and national level. Sometimes we

get some, but the problem of water is still not solved." Similarly, the chairperson of Dakata Youth confirmed forwarding their water complains to the state government by saying that, "yes, on several occasions, we channelled our water needs to the state government through our state assembly representative."

In many instances, the associations do get feedback from the government, but the problem lies with implementation. A participant in the male FGD in Dakata said:

We write to the government at all levels through our representatives at the state and national level, but nothing has been done to date. There was a year we agreed and decided that we're not going to vote for anyone until our water issues were addressed, but, in the end, we were persuaded to vote with promises which are yet to be met, even after so many years.

In the Gama FGD, an elderly man complained bitterly of marginalization by some of the state administration officials, when a water project meant for the community was diverted to the Old City just to please some influential people. This was later refuted by the KSWB official, who said that the plan, since inception, did not include the community.



Stakeholder mapping of water provision in Brigade-Tudun Wada

#### **Education and training on water sanitation**

The FGDs confirmed that the level of community education on water sanitation and environmental health issues is generally low. As mentioned in Section 4.6, a very few participants, mainly from Gama and Dakata, had received training from UNICEF at the local government Water, Sanitation and Hygiene (WASH) office.

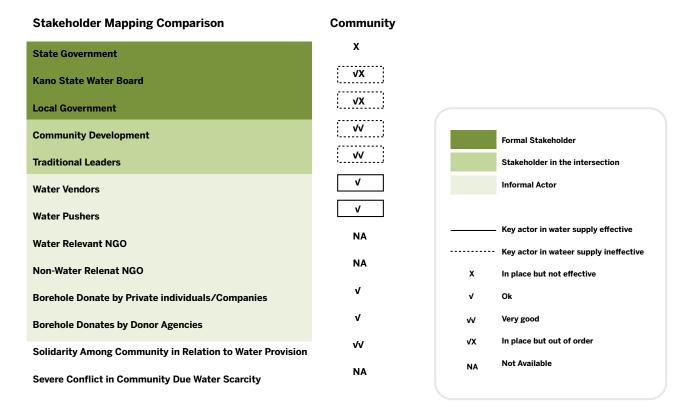
As for water vendors, it is difficult to say whether they have received any training at all. The majority of them are migrants from the northern states and the Niger Republic (Barau, 2009) and do not mix much with the host community.

#### **Proposed solutions to water problems**

Members of the community proposed various solutions, which generally revolved around constructing more boreholes and providing tap water to the locality. While more boreholes could be the quickest and easiest fix for now, there is widespread awareness that it may not be sustainable. A male FGD participant in Gama stated, "All these boreholes are not sustainable water projects because the underground water level keeps declining and going deeper. That is one of the reasons why some boreholes stopped functioning."

Hence, the principal goal of the associations is to ensure that the government connects and supplies the community with tap water. The community is very willing to manage the infrastructure when it is provided. In the words of the Gama First chairperson, the best solution is for the government to channel pipe-borne water to sensitive areas with huge populations like ours, instead of other areas that need it less. As it is now, boreholes are not sustainable water projects. They are only short-term solutions with a limited life span, yet they are still not sufficient to cater for the water demand in Gama. As such, tap water is the only solution.





Comparison of formal and informal actors in water supply and their effectiveness

# **Conclusion: Lessons and Recommendations**

Using water as a case study for local governance, it can be inferred that low-income communities in Nigeria face challenges of low access to basic urban infrastructure and services. This study reveals that residents of Kano Metropolis lack access to good quality water. Those most affected are low-income and vulnerable groups, including women and children. Yet, even though their stake is as important as any members of society, their voices are seldom taken into account when decisions are made. The most important force in the community seems to be the local associations: through them, rights can be demanded and infrastructure that is provided can be managed and sustained.

The following lessons and recommendations can be deduced from the study:

- 1. In a democratic setting, the popular vote is the most important power. Because political leaders are very much aware of this, they will do anything possible to get the votes. When the public is sensitized to this, they use their voting power to get projects through a give-and-take trade-off. What happened during the 2019 rerun election may be applied in any election when citizens know the value of their votes.
- 2. Community associations are important drivers of development. The traditional leadership structure, although it commands a lot of respect, no longer enjoys the political power it once held. However, traditional leaders can encourage the formation of development associations in their localities. This will help to engender development in the communities.
- 3. People already pay too much to get water for domestic use. The private water-providers

make huge incomes without remitting any significant amount of tax to the government. Yet, they find it difficult to address water quality, sanitation and hygiene issues. It would be easier and more productive for public tap water to be supplied and residents pay their utility bills to the government. This could provide the government with revenue while at the same time improving the lives of its citizens.

- 4. Improving access to good quality water in densely populated areas would go a long way to addressing development challenges like poverty, health and education. People spend too much time and money to get water. Once this problem is solved, they can engage in other beneficial activities. The most common outbreaks of disease in the area, such as typhoid and malaria, are related to water and sanitation and could be alleviated with better access to clean water. Children would have more time learning in schools if the need to spend their hours searching and fetching water were eliminated.
- 5. Empowering women should be made a priority as it will help address problems like the issue of water sanitation. There is a need to advocate for women's participation in decision making.
- 6. People expect more from local governments. To attain development at the local level, local governance needs to be strengthened. LGAs should be given full financial autonomy to execute projects based on the needs of their people.



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