



Clean and safe?

Kenyan citizens' experiences and opinions on water, sanitation and hygiene (WASH)

1. Introduction

Without water there can be no life. As such, every citizen of the country has access to some source of water. But this, of course, does not tell anything close to the full story. The water to which citizens have access can vary hugely – in quality, in price, in accessibility, and more. Having clean water piped to your home is very different to depending on a dirty pond located over an hour's walk away. Further, among those of us who are fortunate enough to have reliable access to piped water supplies, it is easy to take this for granted, and for the difficulties faced by others in accessing water to be forgotten.

This brief presents data on citizens' experience and opinions on water, sanitation and hygiene. Where do citizens access their drinking water from, and what challenges do

they face in doing so? How long does it take to collect this water, and which member of the household is responsible for collection? Do citizens treat their drinking water before consuming it? What latrine facilities do households have access to? And where do they dispose of household waste?

Data for the brief come from Twaweza's *Sauti za Wananchi* mobile-phone panel survey. The panel was created randomly sampling from an existing database of over 250,000 contacts to establish a nationally representative panel. We also boosted the panel in Nairobi and various other counties of interest¹, such that the panel is also representative in those areas. For this brief, data were collected from 3,603 respondents in the eleventh round of the special *Sauti za Wananchi* panel, conducted between January 23 and February 7, 2024.

1 Specifically, the sample is representative in the counties of Nairobi, Elgeyo Marakwet, Laikipia and Vihiga, and in two additional groups of counties: Tana River, Marsabit and Turkana (labelled "TR-Mar-Tur" in charts); and Garissa, Wajir and Mandera (labelled "Gar-Waj-Mand").



Key findings include:

- The biggest challenges facing citizens in accessing clean drinking water are irregular supplies and distance to water points
- 4 out of 10 households have access to piped water supplies, while 2 out of 10 depend on surface water
- 8 out of 10 households access their drinking water within 30-minutes travel time
- The main responsibility for fetching water is borne by women and children
- 6 out of 10 households treat their drinking water before consuming it
- Citizens are more likely to say their access to water is improving rather than getting worse
- 3 out of 4 households use an improved latrine facility
- Garbage collection is more formalized in Nairobi compared to the rest of the country

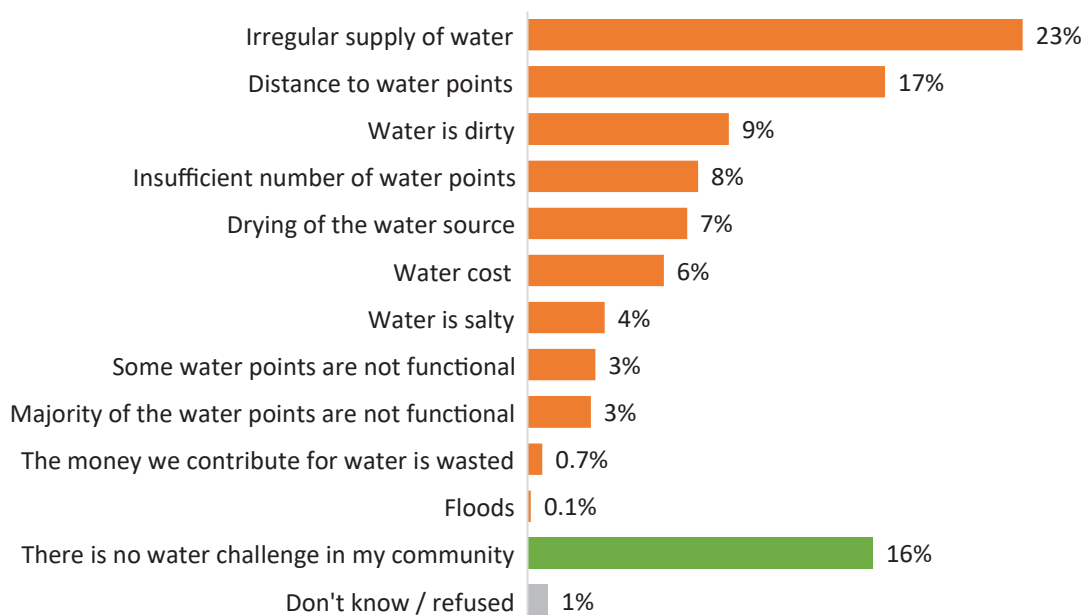
2. Eight insights on Kenyan citizens' opinions on water, sanitation and hygiene

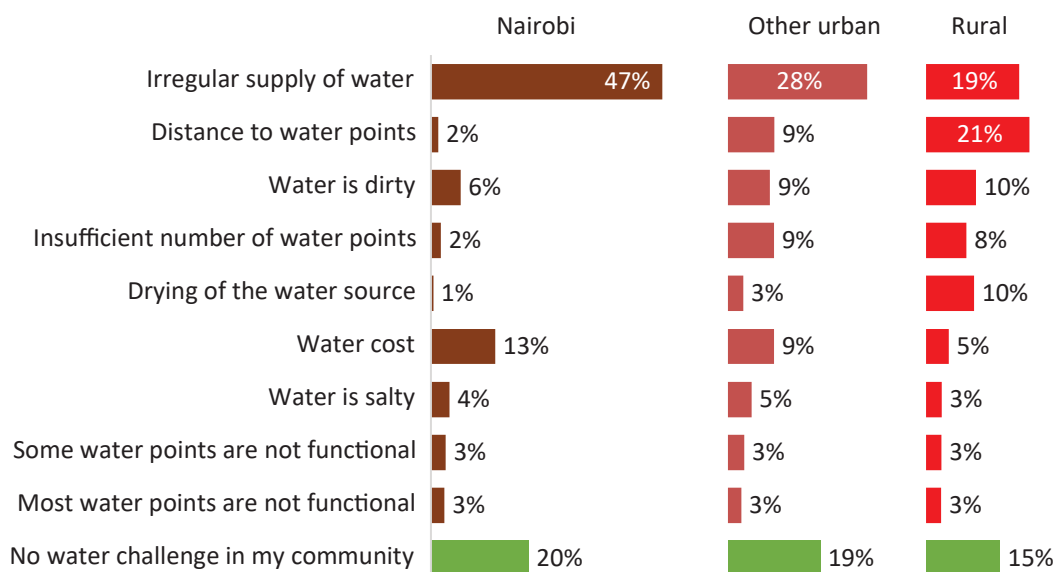
Insight 1: The biggest challenges facing citizens in accessing clean drinking water are irregular supplies and distance to water points

The two biggest challenges faced by citizens in accessing clean drinking water are irregular supplies (cited by two out of ten citizens (23%) and distance to water points (17%). Other significant challenges include that water is dirty (9%), an insufficient number of water points (8%), drying water sources (7%) and the cost of water (6%).

These challenges are markedly different in different parts of the country. In urban areas, especially Nairobi, irregular supplies are the leading challenge, while in rural areas, distance to water points is the most significant challenge. Cost is also more commonly cited in Nairobi and other urban areas than in rural areas.

Figure 1: What would you say is the main challenge your community is facing in accessing clean drinking water?





Source: *Sauti za Wananchi* mobile phone survey, special r11 (Jan-Feb 2024)
Base: all respondents (n=3,603)

In 2017, the main challenge reported in urban areas was also irregular supplies (16%), though at a level well below the current figure. In rural areas, the main challenge was distance to water points (27%). (Not shown in charts).

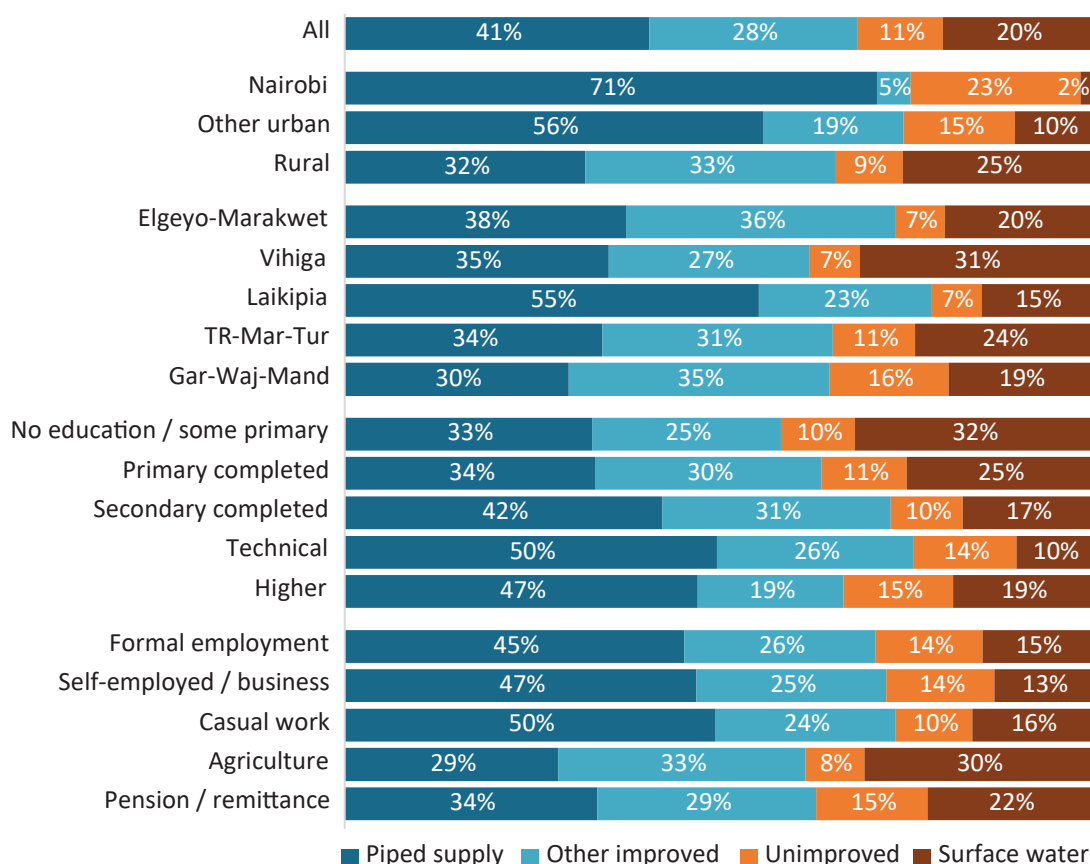
Insight 2: 4 out of 10 households have access to piped water supplies, while 2 out of 10 depend on surface water

Four out of 10 households (41%) access their drinking water from a piped supply, and a further three out of ten households (28%) have access to another form of “improved” water supply². Three out of ten (31%) access drinking water from either a surface source such as a river or lake (20%) or another type of “unimproved” source (11%).

Access to piped water sources is much higher in Nairobi (71%) and other urban areas (56%) than in rural areas (32%), while dependence on surface water sources is higher in rural areas (25%) than Nairobi (2%) or other urban areas (10%). Further, access to piped water sources is higher among better-educated citizens and those in formal employment, self-employment (or business) or who depend on casual work for their income. These are likely linked to location, as these forms of income are all more common in Nairobi and other urban areas than in rural communities.

² Under World Health Organisation (WHO) definitions, “improved” water sources are piped water, boreholes, protected springs, protected wells and rainwater harvesting. Unprotected springs and wells, carts and tanker trucks, bottled water and surface sources are classed as “unimproved”.

Figure 2: What is the main source of drinking water for members of your household?



Source: Sauti za Wananchi mobile phone survey, special r11 (Jan-Feb 2024)

Base: all respondents (n=3,603)

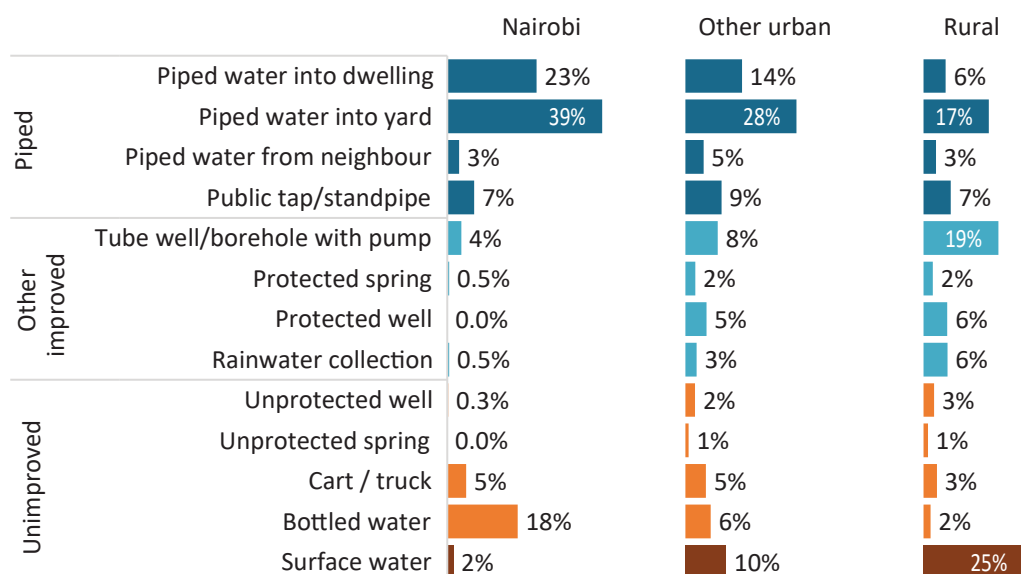
Breaking this down further, we find that even in Nairobi just one out of four households (23%) have water piped into their dwelling, while a further four out of ten (39%) have water piped into their yard³. Also in Nairobi, two out of ten households (18%) depend on bottled water as their main source of drinking water⁴. A similar pattern applies in other urban areas as well as Nairobi, though a much wider range of sources is used.

In rural areas, the most common type of water source is surface water, such as a river, stream, lake or dam (25%). These are considered by the WHO to be the least safe form of water source.

3 “Piped into yard” refers to water pipes that supply water to a tap just outside someone’s home, while “piped into dwelling” refers to water pipes that go directly into the building.

4 According to the World Health Organisation (WHO), this is not considered to be an “improved” source of drinking water, as it is seen as being limited in quantity (rather than quality) and a symptom of other problems in the water supply sector.

Figure 3: What is the main source of drinking-water for members of your household?



Source: *Sauti za Wananchi* mobile phone survey, special r11 (Jan-Feb 2024)

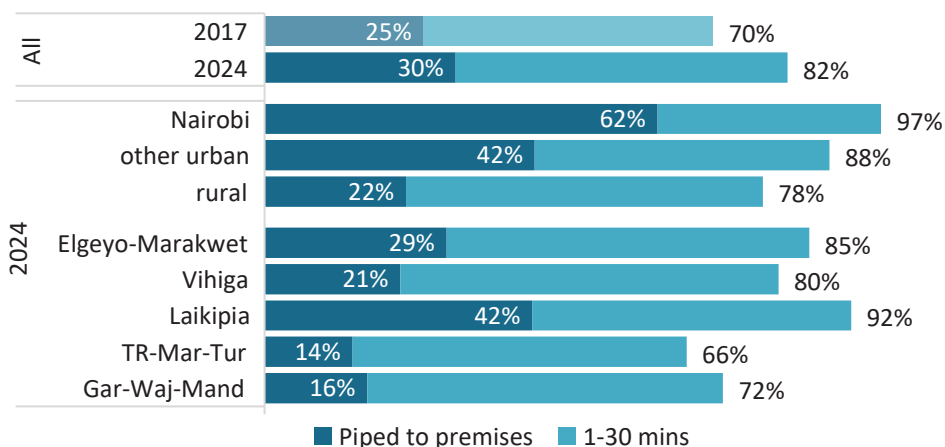
Base: all respondents (n=3,603)

Insight 3: 8 out of 10 households access their drinking water within 30 minutes

Eight out of ten households (82%) can access their drinking water within 30 minutes – time for travel to the source, waiting, collecting water and returning home. This includes three out of ten households with piped water supplied to their dwelling or yard. The number of households able to access water within 30 minutes has increased from seven out of ten (70%) in 2017.

Again, access to water in reasonable times is better in Nairobi and other urban areas than in rural communities.

Figure 4: % households that require 30 mins or less to collect water:

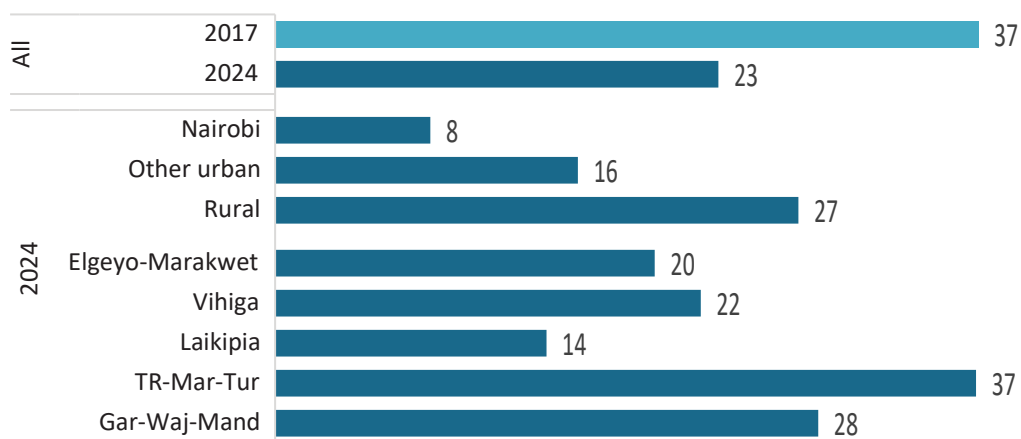


Source: Sauti za Wananchi mobile phone survey, special r11 (Jan-Feb 2024)
Base: all respondents (n=3,603)

Similarly, the average time required to collect water is much lower in Nairobi (8 minutes) than in rural areas (27 minutes). In rural areas, the average is affected by the number of households (6%) that require two hours or more to collect drinking water.

Average collection times in 2024 (23 minutes) were markedly lower than in 2017 (37 minutes). It is unclear why this is the case, but it may be related to rainfall patterns in those years and/or seasonal differences in data collection, or may be due to investment in new water supply infrastructure in recent years.

Figure 5: Average water collection time (minutes):



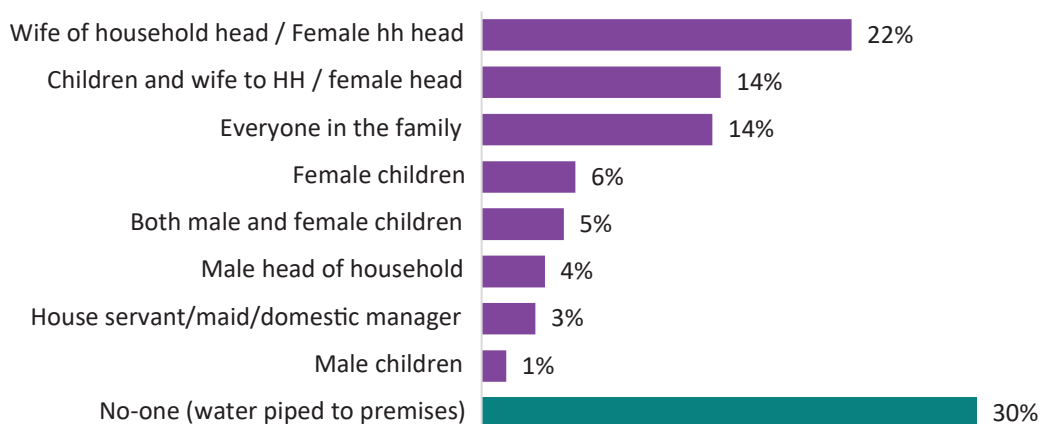
Source: Sauti za Wananchi mobile phone survey, special r11 (Jan-Feb 2024)
Base: all respondents (n=3,603)

Insight 4: The main responsibility for fetching water is borne by women and children

In half of households (48%), responsibility for fetching water is borne either by adult women (22%), children (12%) or both (14%). In a relatively small number of households, the responsibility is borne by adult men (4%) or shared among all household members (14%). One out of three households (30%) do not need anyone to bear this responsibility as they have piped water to their home or yard.

Across the semi-arid counties of Garissa, Wajir and Mandera, it is more common for this responsibility to be borne by female children in the household, while across Tana River, Marsabit and Turkana counties, it is more commonly borne by children and the senior female household member. (Not shown in charts.) It should also be remembered that average water collection times are higher in these counties.

Figure 6: Who in your household is the main person responsible for fetching water?⁵



Source: *Sauti za Wananchi* mobile phone survey, special r11 (Jan-Feb 2024)

Base: all respondents (n=3,603)

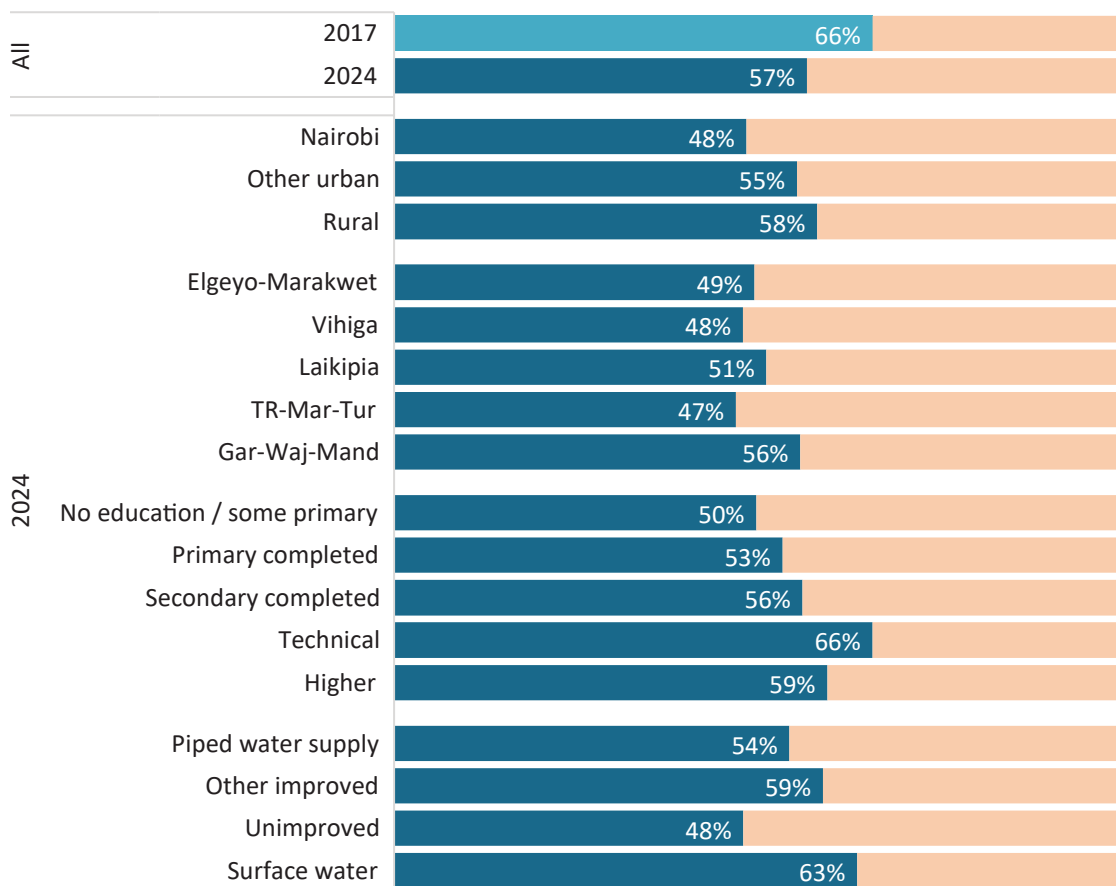
Insight 5: 6 out of 10 households treat their drinking water before consuming it

Six out of ten households (57%) treat their drinking water in some way before consuming it. This is higher in rural areas (58%) than in Nairobi (48%) or other urban areas (55%) – likely due to factors such as the relatively high use of bottled water in Nairobi (see previous insights).

Water treatment is also higher among better-educated households and those that depend on surface water sources. It is lower, however, among households that depend on other unimproved sources.

5 Percentages in charts may not add up to 100% due to rounding

Figure 7: Do you do anything to your water to make it safer to drink?
(Percentage answering “yes”)



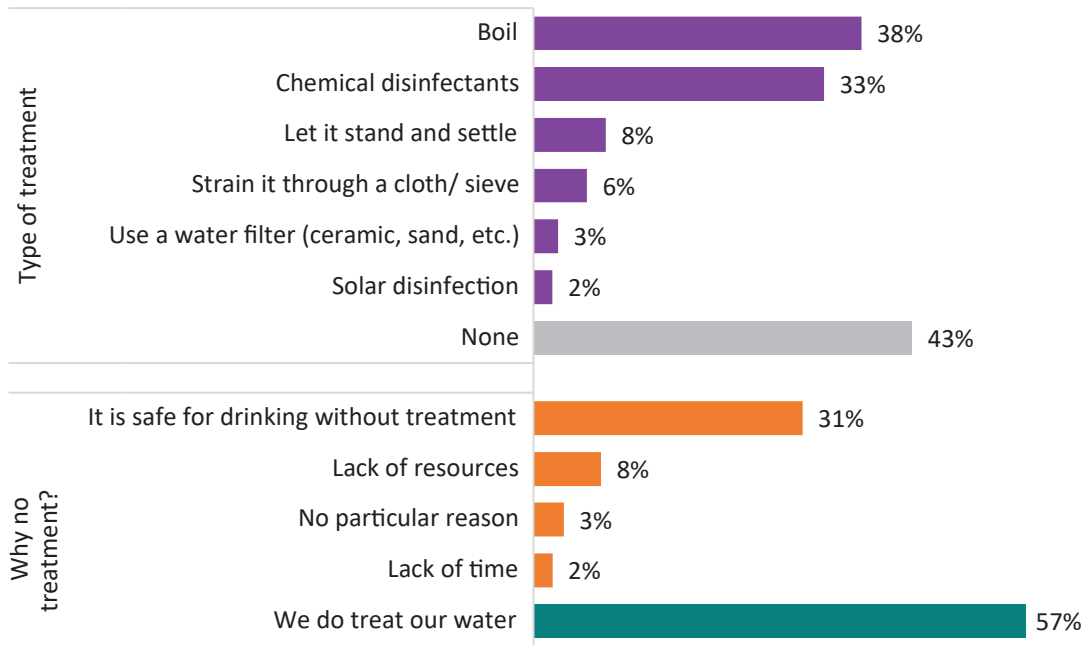
Source: *Sauti za Wananchi* mobile phone survey, special r11 (Jan-Feb 2024)
Base: all respondents (n=3,603)

The most common forms of water treatment are boiling the water (38%) and use of chemical treatments (33%)⁶.

The most common reason given for not treating water is a belief that it is already safe for drinking without need for treatment (31%).

⁶ Other forms of treatment mentioned include some that are largely ineffective at making water safe for drinking, such as allowing it to stand and settle.

**Figure 8: What do you do to the water to make it safer to drink?
Why don't you treat your water to make it safer to drink?**
(multiple responses permitted)



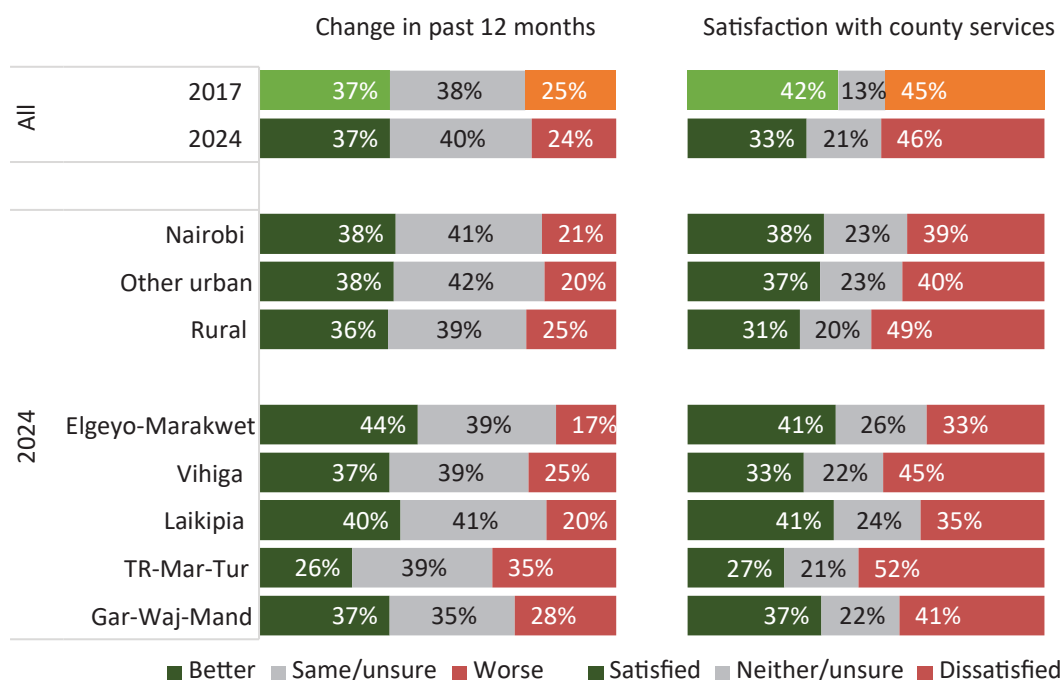
Source: Sauti za Wananchi mobile phone survey, special r11 (Jan-Feb 2024)
Base: all respondents (n=3,603)

Insight 6: Citizens are more likely to say their access to water is improving rather than getting worse

Citizens are a little more likely to say that their access to clean and safe water has improved in the past 12 months (37%) rather than gotten worse (24%). This is consistent across both urban and rural areas, and all focus areas of this survey with the exception of the semi-arid areas of Tana River, Marsabit and Turkana. At national level the figures are effectively unchanged since 2017.

However, more citizens are dissatisfied (46%) than satisfied (33%) with their county government's provision of water services. This represents a change since 2017, when citizens were evenly split on this point.

**Figure 9: How has your access to clean and safe water changed in the past 12 months?
How do you rate your county government in terms of providing water services?**



Source: *Sauti za Wananchi* mobile phone survey, special r11 (Jan-Feb 2024)
Base: all respondents (n=3,603)

Insight 7: 3 out of 4 households use an improved latrine facility

Three out of four households (76%) have access to an “improved” latrine facility⁷. This includes two out of ten (22%) that use a flush or pour-flush toilet and half (54%) that use a different form of “improved facility” such as a pit latrine with washable slab or a ventilated pit latrine.

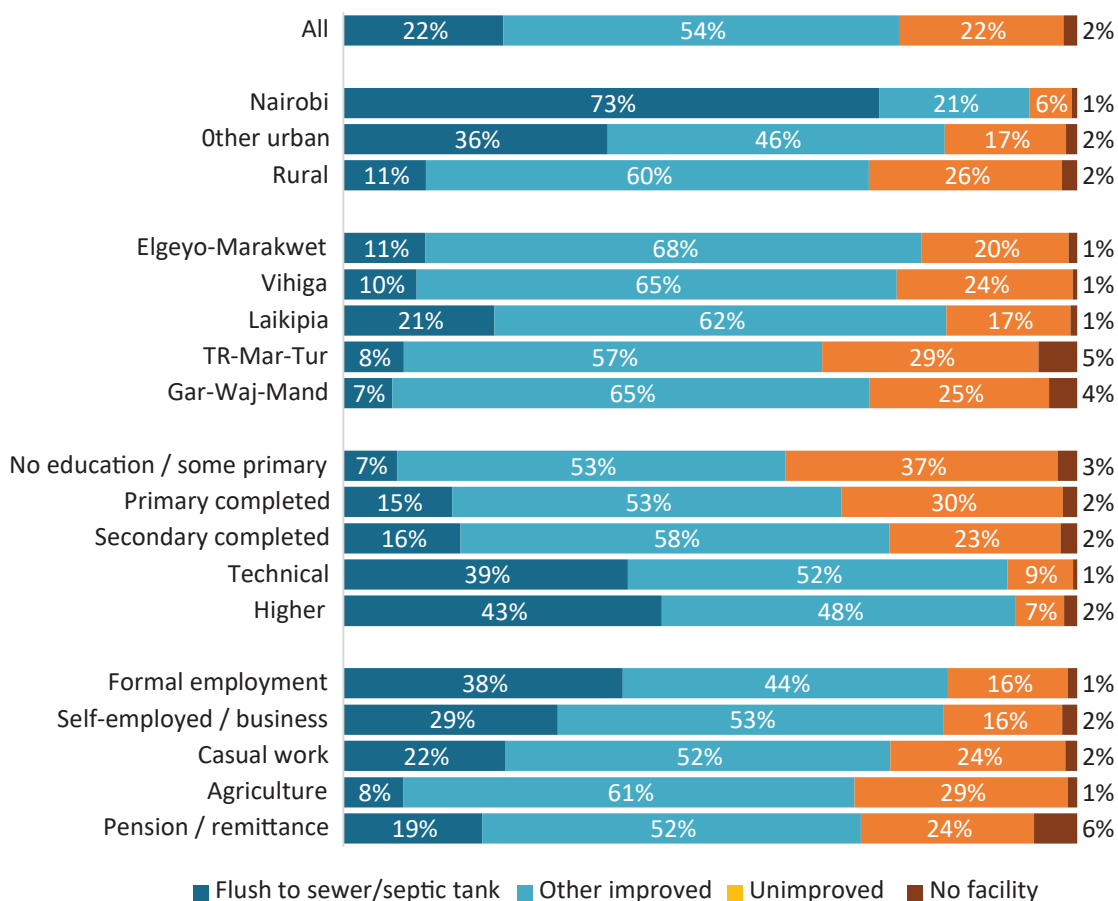
This leaves one out of four households (24%) that depend either on an unimproved latrine facility (22%) or that have no access to any form of latrine (2%).

Access to flush toilets is highly dependent on location – much higher in Nairobi – and education status (considered a proxy for wealth).

Having no access to any latrine facility is a little more common in arid and semi-arid parts of the country (Tana River, Marsabit, Turkana, Garissa, Wajir and Mandera; 4-5%) and among households that depend primarily on pensions or remittances as their income (6%).

⁷ The WHO classification of “improved” latrines includes flush and pour-flush latrines that empty to a sewer, septic tank or enclosed pit, ventilated pit latrines and pit latrines with a washable slab.

Figure 10: What main type of toilet facility do members of your household use?

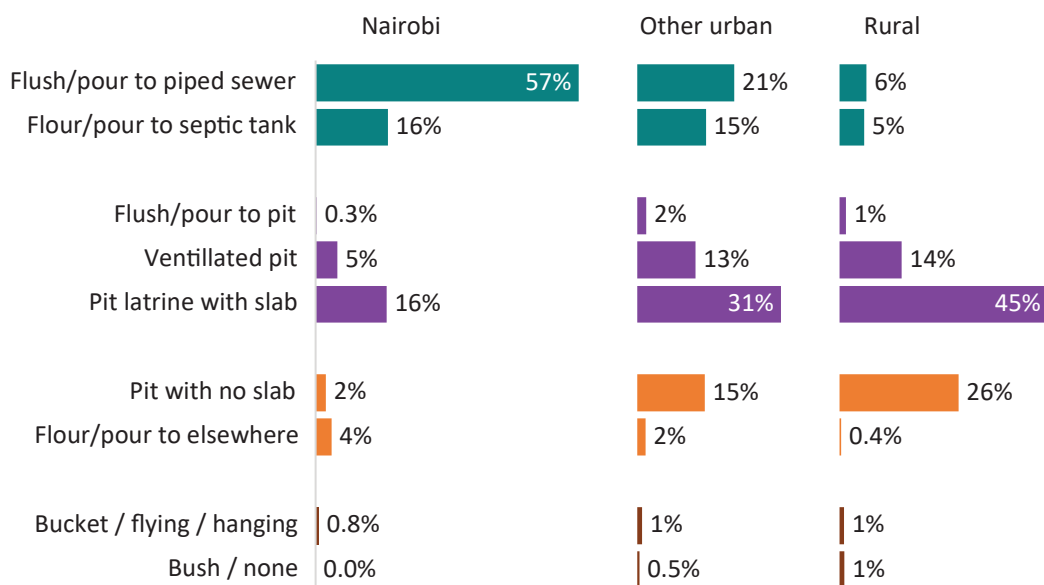


Source: *Sauti za Wananchi* mobile phone survey, special r11 (Jan-Feb 2024)

Base: all respondents (n=3,603)

Breaking this down further, we find that the most common form of latrine in Nairobi is a flush toilet connected to a piped sewer system (57%). In other urban areas and in rural areas the most common form of latrine is a pit latrine with a washable slab.

Figure 11: What main type of toilet facility do members of your household use?



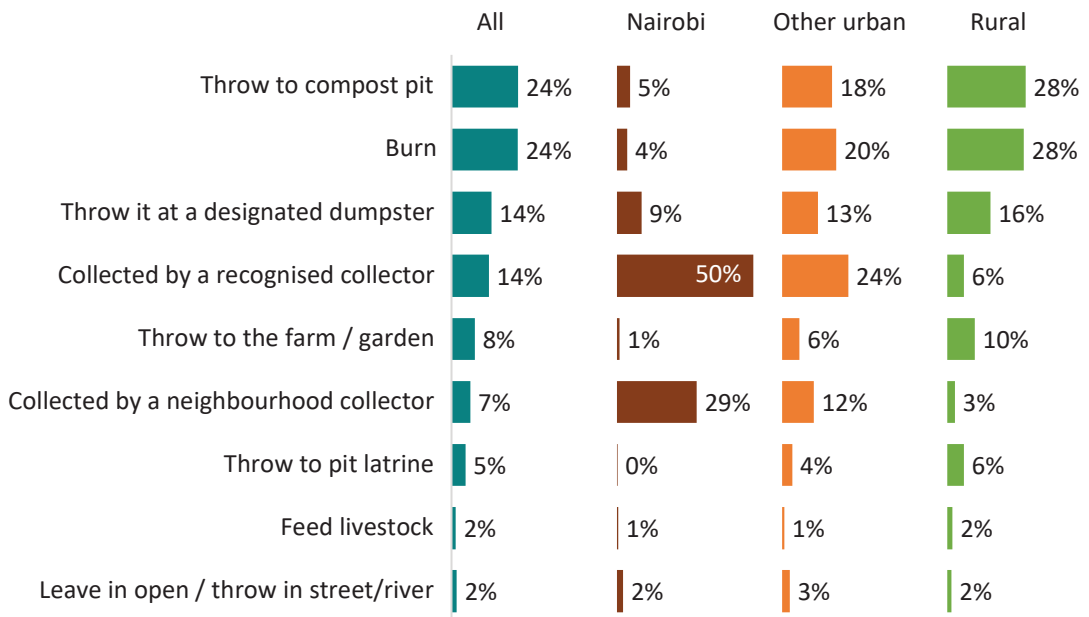
Source: *Sauti za Wananchi* mobile phone survey, special r11 (Jan-Feb 2024)

Base: all respondents (n=3,603)

Insight 8: Garbage collection is more formalized in Nairobi compared to the rest of the country

In Nairobi, half of households (50%) have their garbage collected by a recognised collector, and a further three out of ten (29%) have it taken away by a neighbourhood collector. These methods of disposal are relatively uncommon in other urban areas and in rural areas, however, where throwing it in a pit and/or burning the waste is much more common than in Nairobi.

Figure 12: What is the main way of disposing garbage generated from your household?



Source: *Sauti za Wananchi* mobile phone survey, special r11 (Jan-Feb 2024)

Base: all respondents (n=3,603)

3. Conclusions

This brief presents data on citizens' access to water, sanitation and hygiene services across the country. It makes it clear how different are the experience of citizens in different parts of the country. Sharp disparities can be seen in access to different sources of drinking water, challenges faced by citizens in accessing water, average water collection times, access to latrine facilities and disposal of garbage.

Of course, the differences between Nairobi and rural areas are many. On the one hand, the crowded populations of many urban areas mean that some forms of water sources and waste disposal are impractical in such settings. And at the same time, having citizens living closer together also makes it cheaper and easier to provide piped services – both water supply and sewerage – that would be very expensive in rural areas where the distances between households are much greater. These factors go a long way to explaining the differences between Nairobi and rural Kenya in access to water and sanitation services.

However, these factors should not allow us to avoid facing up to the challenges of providing safe and effective water and sanitation services in rural areas and poorer urban communities. In particular, a quarter of households in rural areas depend on surface water sources that are vulnerable to contamination and unlikely to provide safe drinking water. Similarly, while three quarters of Nairobi households have access to a flush or pour-flush toilet facility, mostly connected to a piped sewer system, this is rare in other parts of the country – especially in semi-arid areas, which already face additional challenges.

The challenge for the water, sanitation and hygiene sector is how to tackle these inequalities. While few would argue that these services are perfect in Nairobi, they remain significantly better than in other parts of the country. As water supply is a devolved function, under the remit of county governments, there is scope for counties to play a major role in addressing these gaps.

As a starting point, both counties and the national government could work to ensure that all citizens have access to an improved source of drinking water and an improved latrine facility. This is already the goal of the global sustainable development goals (SDGs). We have a fair way to go, but the goals are achievable. With political will and appropriate funding, it can be done.

