



## Quality of Potable Water Throughout the Distribution Network in Kinshasa: Public Confidence Levels and Influencing Factors

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### Abstract

Access to safe drinking water remains a major public health challenge in Kinshasa, Democratic Republic of the Congo, due to rapid urbanization, aging infrastructure, and persistent concerns about water quality. This study aimed to assess consumers' perceptions of tap water quality, evaluate their level of confidence in water supplied by REGIDESO, and identify factors influencing trust. A cross-sectional survey combining online and face-to-face data collection was conducted among 378 REGIDESO subscribers. Descriptive statistics were used to examine perceptions and levels of confidence.

The results showed that 65.3% of respondents lacked confidence in tap water quality, whereas only 26.2% expressed complete confidence. Sensory concerns related to taste and odor (47.4%), negative personal experiences (41.0%), and insufficient communication from the water utility (13.8%) emerged as the principal drivers of distrust. Furthermore, 73% of participants reported greater confidence in bottled water supplied by private companies than in tap water distributed by REGIDESO. More than half of respondents (56%) were unaware of the origin of their drinking water, revealing a substantial information gap. These findings highlight the importance of transparent communication, regular dissemination of water quality information, and stronger consumer engagement to rebuild public trust. Despite limitations related to the non-probabilistic sampling approach and the overrepresentation of male and highly educated respondents, this study provides valuable empirical evidence on public perceptions of drinking water in a rapidly growing African metropolis. Strengthening communication strategies and stakeholder involvement may contribute to improving confidence in public water services and promoting sustainable access to safe drinking water in Kinshasa.

## 1. Introduction

Safe drinking water is essential for human health and well-being, making access to it a fundamental public health priority (Levallois, 2006). In many African cities, including Kinshasa, the capital of the Democratic Republic of the Congo (DRC), access to safe

drinking water remains a major public health challenge. With a population exceeding 17 million inhabitants, Kinshasa faces significant difficulties in ensuring the distribution of water that is safe and suitable for human consumption due to rapid urbanization, aging infrastructure, and occasionally inadequate management of

water resources (Kayembe et al., 2022; UNICEF, 2020).

Drinking water quality, defined by the absence of microbiological, chemical, and physical contaminants exceeding the standards established by the World Health Organization (WHO, 2017), is a determining factor in population health and well-being. Consequently, it remains a major concern for users of domestic water distribution systems (Zuhair et al., 2023). Several studies have reported the presence of pollutants in water distributed in Kinshasa, whether supplied through the public network or obtained from alternative sources such as boreholes and wells (Bisimwa et al., 2021; Kaba et al., 2019). Public confidence in drinking water services is therefore essential to ensure consumer well-being and encourage the use of safe water sources (Brouwer et al., 2020). Nevertheless, limited attention has been paid to users' perceptions of tap water quality and the factors influencing their confidence.

In this context, confidence in drinking water quality constitutes an important social indicator. It influences not only water consumption behaviors but also the adoption of domestic treatment methods and the use of alternative, and sometimes less safe, water sources (Gauthier et al., 2018). Confidence is shaped by a variety of factors, including personal experiences, institutional communication, previous health-related events, risk perception, economic accessibility, and the quality of service delivery (Doria, 2010; Kayembe et al., 2022).

In Kinshasa, water distribution is primarily provided by REGIDESO SA (Régie de Distribution d'Eau). Although physicochemical and microbiological analyses indicate that the distributed water generally complies with required standards (Regideso, 2023), public confidence in its quality remains limited. This situation has implications for the use of network-supplied water, public health, and the socio-economic development of the city. Several factors contribute to this negative

perception, including the deteriorated state of infrastructure inherited from the colonial period, which results in frequent leakages and pipe ruptures, thereby increasing the risk of contamination (Bisimwa et al., 2021); limited access to information regarding water quality and maintenance operations (Hatchuel & Ortalda, 2000; Katswangene et al., 2021); and the absence of a transparent communication system between REGIDESO and its subscribers (Hatchuel & Ortalda, 2000), which reinforces uncertainty and mistrust among consumers.

As a consequence, many residents prefer bottled water, often sold in plastic containers, despite the additional financial costs and potential health risks associated with its use (Kanjinga et al., 2024; Shotyky and Krachler, 2007). Others adopt household practices such as boiling water, which may result in losses of time, convenience, and minerals, while also creating a risk of recontamination during storage (Tangou, 2023; Ibebeke, 2024). Despite the public health importance of these issues, empirical evidence regarding consumer perceptions, confidence levels, and determinants of trust in REGIDESO-supplied water remains scarce in Kinshasa.

This study aimed to assess residents' perceptions of tap water quality, evaluate their level of confidence in water supplied by REGIDESO, and identify the main factors influencing trust in drinking water services in Kinshasa.

## 2. Materials and Methods

### 2.1. Study area

Kinshasa, the capital City of the Democratic Republic of Congo (DRC), is located on the south bank of the Congo River, across from Brazzaville, the capital of Congo (Fig. 1). With a population of over 17 million, Kinshasa is one of Africa's largest cities and an important political, economic and cultural center. Its rapid population growth, fueled by urbanization and rural-urban migration, poses numerous

challenges in terms of infrastructure and public services. It has an area of 9965 km<sup>2</sup>, of which only 2500 km<sup>2</sup> are inhabited. It has a hot and humid tropical climate, an average annual rainfall of about 1400 mm and an average annual temperature of 24°C. The city is crossed by about twenty rivers of different flow rates, generally south-north and more or less parallel, flowing in deep valleys. The N'djili and N'sélé

rivers are allogenes (their sources are in Kongo-Central); on the other hand, all the others are said to be local, the most important of which is the Lukunga River (Lelo, 2008).

The geographical location of the study area and the spatial distribution of the surveyed municipalities within the city of Kinshasa are presented in Figure 1.

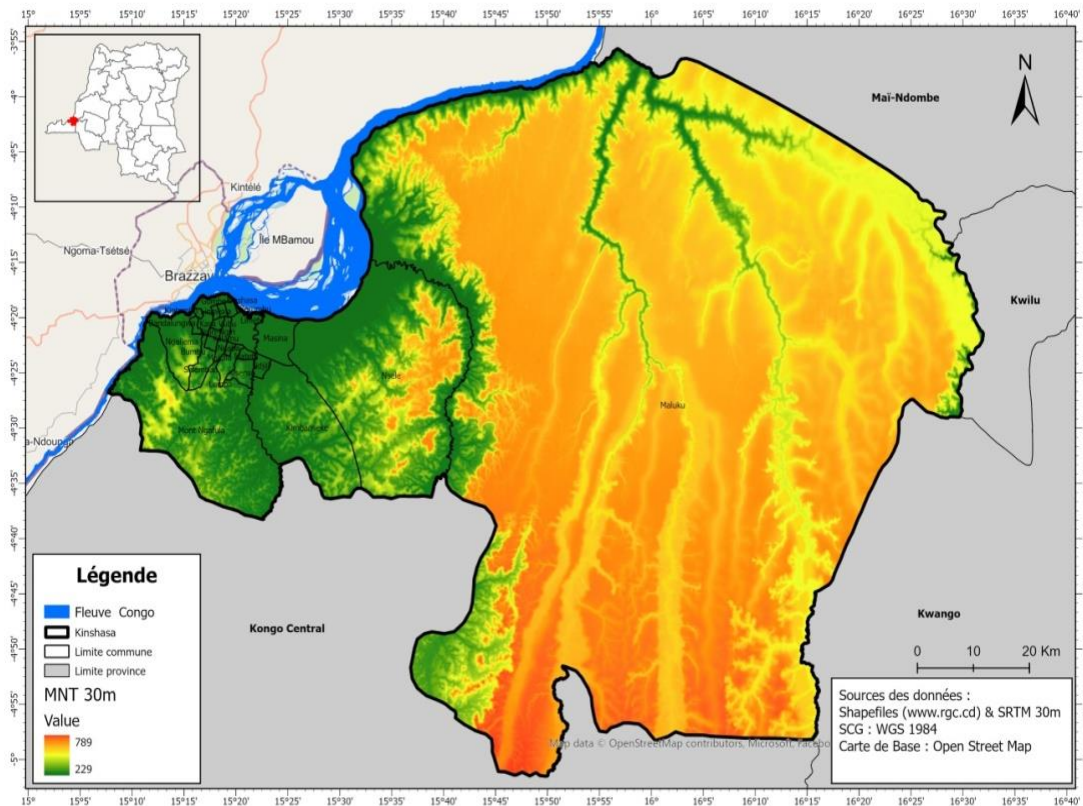


Figure 1. Administrative map of Kinshasa

## 2.2. Data Collection Methods

This study employed a cross-sectional survey based on an observational approach. Data were collected through both online and face-to-face surveys. Participants were voluntarily invited to take part in the study through a survey link disseminated via social media and community forums. This approach facilitated data collection from a broad range of REGIDESO

water users while ensuring accessibility and voluntary participation.

A structured questionnaire comprising closed-ended and semi-open-ended questions was developed and deployed using KoboToolbox. The questionnaire was designed to assess consumers' confidence in the quality of water supplied by REGIDESO, identify perceptions and concerns related to drinking water quality, and explore the main factors influencing trust in the public water service. Responses included multiple-choice, open-ended, and semi-open-

ended questions, allowing the collection of both quantitative and qualitative information. Online data collection was complemented by face-to-face interviews conducted in the field.

### 2.2.1. Sampling

A non-probability convenience sampling method was adopted, mainly through online dissemination. Although the sample size ( $n = 378$ ) was calculated using the standard formula for a 95% confidence level and 5% margin of error, this served only to ensure a minimum analytical threshold rather than statistical representativeness of the entire Kinshasa population. The calculation assumed an estimated proportion ( $p = 0.65$ ), based on an expected proportion of distrust reported in previous studies, and applied the formula:

$$n = \frac{Z^2 \cdot p \cdot (1-p)}{E^2} \quad (1)$$

Where  $Z = 1.96$  for a 95% confidence level and  $E = 0.05$ . This approach ensured internal consistency and interpretive reliability despite the non-probabilistic nature of the sample.

Although this study provides valuable insights, the predominance of male (81.2%) and highly educated (72.7%) respondents reflects the profile of internet users rather than that of the general population. Consequently, the findings should be interpreted as representative of literate and digitally connected REGIDESO

subscribers rather than all residents of Kinshasa.

Inclusion criteria were: (i) residence in Kinshasa during the survey period; (ii) age of 18 years or older; and (iii) provision of informed consent prior to participation.

### 2.2.2. Data analysis

The collected data were analyzed using R software and Microsoft Excel. Prior to analysis, responses were cleaned, checked for consistency, and organized in a structured database. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize respondents' characteristics and perceptions regarding drinking water quality. Responses to open-ended questions were coded and examined to identify recurring themes related to consumer concerns and expectations. Graphs and figures were generated using Microsoft Excel to facilitate the presentation and interpretation of the results.

## 3. Results and Discussion

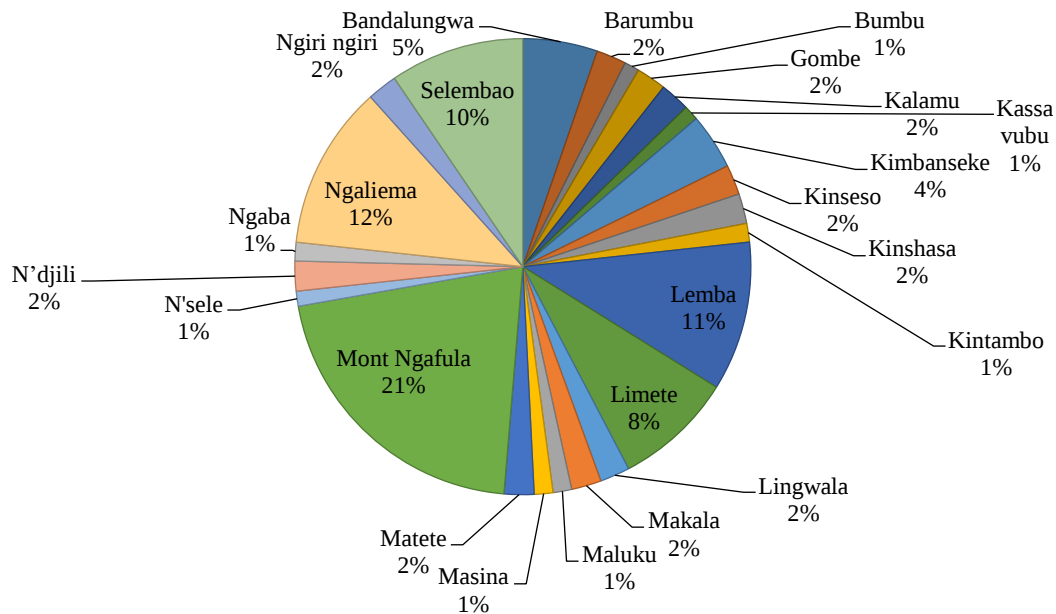
### 3.1. Sociodemographic profile

The sociodemographic characteristics of respondents and their distribution across the municipalities of Kinshasa are summarized in Table 1 and Figure 2, respectively.

**Table 1.** Sociodemographic characteristics of respondents (N = 378)

| Variable    | Category | N   | %    |
|-------------|----------|-----|------|
| Sex         | Male     | 307 | 81.2 |
|             | Female   | 71  | 18.8 |
|             | Total    | 378 | 100  |
| Age (years) | 18 - 29  | 119 | 31.5 |
|             | 30 - 39  | 159 | 42.1 |
|             | 40 - 49  | 76  | 20.1 |
|             | 50 - 59  | 16  | 4.2  |
|             | > 60     | 8   | 2.1  |
|             | Total    | 378 | 100  |

|                 |                   |     |      |
|-----------------|-------------------|-----|------|
| Education level | None              | 3   | 0.8  |
|                 | Primary           | 83  | 21.9 |
|                 | Secondary         | 95  | 25.1 |
|                 | Higher/university | 197 | 52.1 |
|                 | Total             | 378 | 100  |



**Figure 2.** Distribution of respondents according to the municipalities of Kinshasa

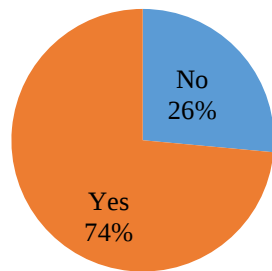
A total of 378 respondents participated in the survey. Men represented 81.2% ( $n = 307$ ) of participants, whereas women accounted for 18.8% ( $n = 71$ ) (Table 1). The most represented age group was 30–39 years (42.1%,  $n = 159$ ), followed by the 18–29 years group (31.5%,  $n = 119$ ). Regarding educational attainment, more than half of the respondents (52.1%,  $n = 197$ ) had a higher or university-level education, while 25.1% ( $n = 95$ ) had completed secondary education and 21.9% ( $n = 83$ ) had completed primary education.

Respondents were distributed across several municipalities of Kinshasa (Fig. 2). The highest proportions were recorded in Mont

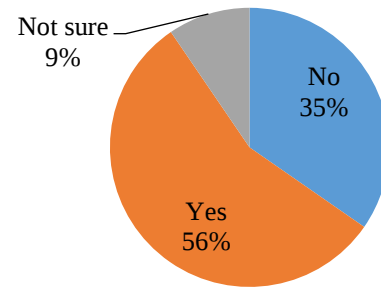
Ngafula (21%), followed by Ngaliema (12%), Lemba (11%), and Selembao (10%). The remaining respondents were distributed among the other municipalities, each representing less than 10% of the sample.

### 3.2. Perceptions of distributed water quality and degree of assurance regarding water quality

Respondents' access to REGIDESO services, knowledge of water origin, perceptions of tap water quality, level of confidence in distributed water, and main concerns regarding drinking water quality are presented in Figures 3 to 8.



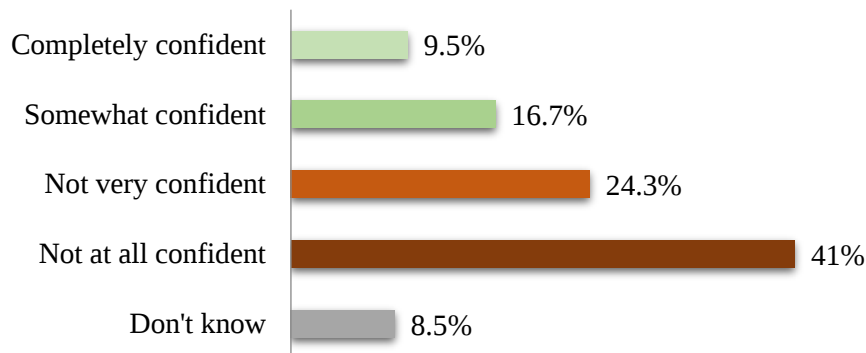
**Figure 3:** Presence of the tap in the respondents' plots (N=328)



**Figure 4 :** Proportions of respondents who know the source of their water (N=334)

Most respondents (74%) reported having a REGIDESO tap connection within their household plot and were therefore direct subscribers to the public water service (Figure 3). Regarding knowledge of water origin, 56%

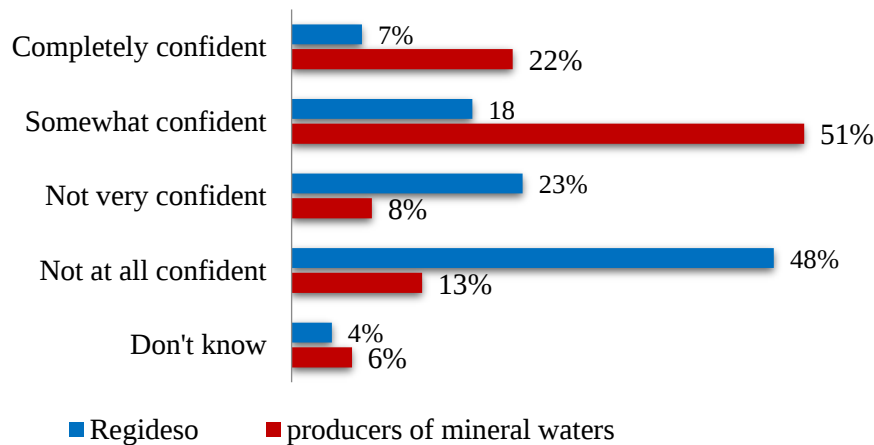
of respondents indicated that they did not know the source of the water they consumed, whereas 35% reported being aware of it and 10% were uncertain (Figure 4).



**Figure 5:** Respondents' opinions on confidence in the quality of water supplied by Regideso

Figure 5 presents respondents' confidence in the quality of tap water supplied by REGIDESO. For interpretation purposes, the categories "*not at all confident*" and "*not very confident*" were combined to represent respondents lacking confidence in tap water quality, whereas "*somewhat confident*" and "*completely confident*" were combined to represent respondents expressing confidence.

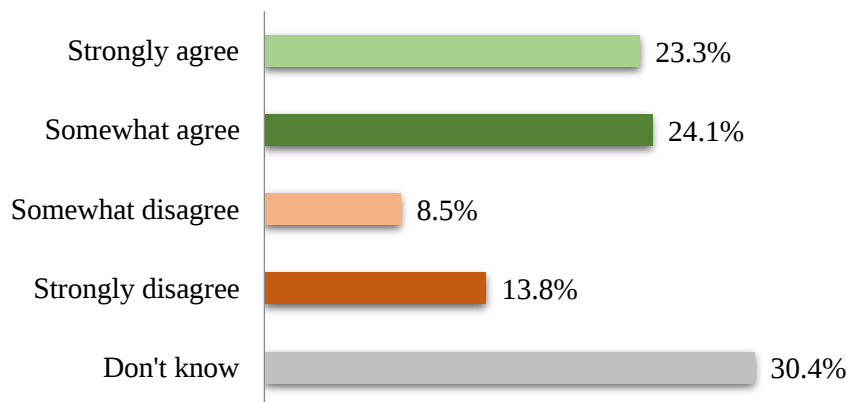
Based on this classification, 65.3% of respondents reported lacking confidence in tap water quality (41.0% not at all confident and 24.3% not very confident), whereas 26.2% expressed confidence (16.7% somewhat confident and 9.5% completely confident). The remaining 8.5% reported being uncertain.



**Figure 6:** Respondents' opinions on trust in public/private water services

Figure 6 presents respondents' confidence in water supplied by REGIDESO and bottled water produced by private companies. For interpretation purposes, the categories "somewhat confident" and "completely confident" were combined to represent respondents expressing confidence in each water source. Based on this classification, 73% of respondents expressed confidence in bottled water supplied by private companies,

including 51% who were somewhat confident and 22% who were completely confident. In contrast, only 25% expressed confidence in water supplied by REGIDESO, including 18% who were somewhat confident and 7% who were completely confident. The remaining respondents reported low confidence or uncertainty regarding these water sources.

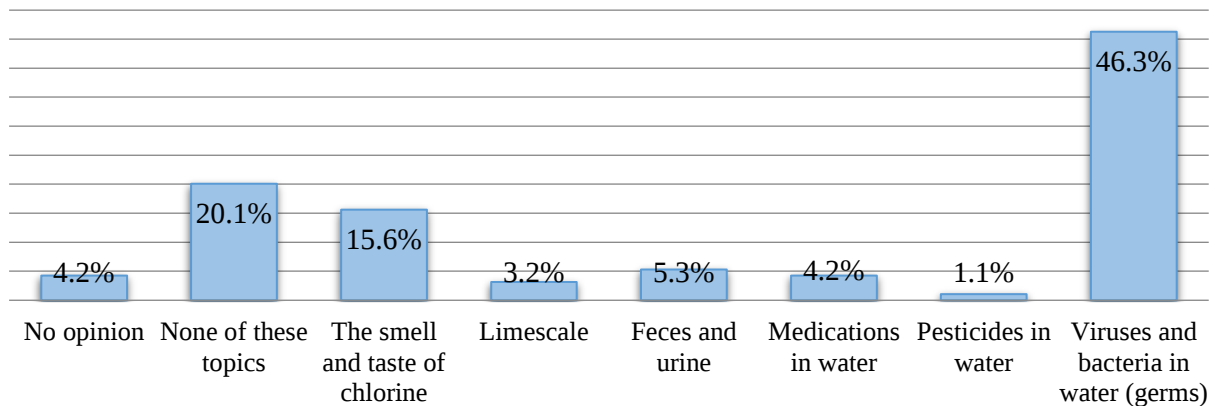


**Figure 7:** Respondents' opinions on the taste of tap water

Figure 7 presents respondents' perceptions regarding the taste of tap water. For interpretation purposes, the categories "somewhat agree" and "strongly agree" were combined to represent respondents perceiving a noticeable taste in tap water, whereas "somewhat disagree" and "strongly disagree" were combined to represent respondents who

did not perceive such a taste. Based on this classification, 47.4% of respondents reported perceiving a taste in tap water, including 24.1% who somewhat agreed and 23.3% who strongly agreed. In contrast, 22.3% did not perceive a noticeable taste, including respondents who somewhat disagreed and

those who strongly disagreed. The remaining 30.4% reported being uncertain.



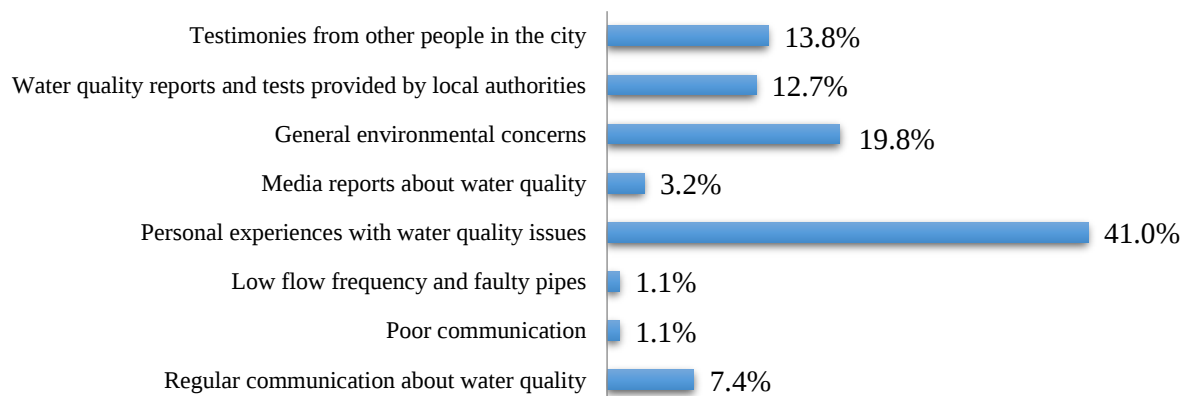
**Figure 8.** Elements of concern for tap water customers

Figure 8 summarizes respondents' main concerns regarding tap water quality. The most frequently cited concern was the possible presence of microorganisms, including bacteria and viruses (46.3%). Other concerns included residual chlorine (15.6%), fecal contamination (5.3%), unpleasant odor. The factors reported by respondents as influencing their confidence in the quality of

(4.2%), color changes (4.2%), and other quality-related issues. Approximately 20.1% of respondents reported no specific concern regarding tap water quality.

### 3.3. Factors influencing trust

tap water supplied by REGIDESO are presented in Figure 9.



**Figure 9.** Factors influencing confidence in tap water

The factors influencing confidence in tap water are presented in Figure 9. Personal experiences related to water quality issues were identified as the main influencing factor

by 41.0% of respondents. General environmental concerns accounted for 19.8%, followed by information received from other people in the city (13.8%) and

water quality reports or tests provided by local authorities (12.7%). Other factors, including regular communication on water quality, media reports, and technical service issues, were mentioned less frequently.

### 3.4. Discussion

The results should be viewed as indicative of perceptions among connected, literate residents of Kinshasa, not as fully representative of the general population.

The survey conducted among 378 respondents across Kinshasa revealed that 81% were men, contrasting with Dianty et al. (2022) in Bekasi, Indonesia, where 71% were women, and ARS & Atlantic'eau (2022) in France, with 53% women. This male predominance in Kinshasa can be explained by both sociocultural and methodological factors. Because the survey was mainly conducted online, participation required internet access and digital literacy, which are more common among men in Kinshasa. Moreover, gender gaps in digital inclusion, combined with women's limited availability due to household and caregiving roles, likely restricted their participation. These constraints reflect broader inequalities in access to public engagement, representing a limitation in capturing the full diversity of community perceptions.

Kinshasa's youth are more connected to the internet and are also concerned about crucial issues such as water. Academics were the majority participants in this survey, a finding similar to that of Maraqa and Ghouidi (2015) in the United Arab Emirates in a survey on public attitudes towards bottled water and tap water quality. About 74% of respondents stated that they had taps in their respective plots and were direct subscribers of Regideso, which confirms the statement of this company on the rate of drinking water supply in Kinshasa, estimated at more than 60%, and allows us to take into consideration the opinions of the respondents on the different aspects of the theme.

However, 56% of respondents do not know the source or provenance of the water that comes out of their taps. This finding suggests an important information gap between consumers and the water utility. Effective communication regarding water sources, treatment processes and water quality monitoring is widely recognized as an important determinant of public confidence in drinking water services. The lack of information on these aspects may contribute to uncertainty and reinforce negative perceptions of tap water quality. This result is similar to that found by Villar-Navascués and Frangkou (2021) in Antofagasta (Chile), where 54% of the population did not know the origin of the water supplied to them.

Regarding trust, our results indicate that a substantial proportion (65.3%) of Regideso subscribers do not have complete confidence in the quality of the water supplied to them. This is consistent with those of McLeod et al. (2014), who found out that 60.8% consume tap water, but 47.6% treat this water, which shows low confidence in its quality; and those of Villar-Navascués and Frangkou (op. cit.), who found poor perception of the population about tap water. On the other hand, these results contradict those of several authors: Kouame et al. (2024), who estimated that the quality of water is satisfactory in Ivory Coast; Grupper et al. (2021) in the USA, who revealed that 53% of respondents had a favorable impression of the quality of their tap water; and Maraqa and Ghouidi (2015), who found that more than 68% of respondents described tap water as good or of excellent quality. In France, 76% of the population has complete confidence in the quality of tap water (ARS and Atlantic'eau, op. cit.), and, in the Netherlands, up to 90% of people perceive tap water as safe (Brouwer et al., 2020). Also, according to Hug et al. (2020) in Catalonia in Spain, 26% of respondents consider tap water to be of poor or very poor quality.

Regideso subscribers not only lack confidence in the quality of tap water but also

lack confidence in the company. On the other hand, they have more confidence in private companies that market bottled water. This contradicts the statement of Brouwer et al. (op. cit.), who reported that in the Netherlands, customers have a high level of trust in the institutions that regulate tap water, which determines their high confidence in its quality. Similarly, Grupper et al. (op. cit.) believe that the intention to drink tap water directly as opposed to bottled or personally filtered water is linked to the individual's trust in the public service. The higher level of confidence reported for bottled water compared with Regideso-supplied water suggests that consumer trust is influenced not only by perceptions of water quality but also by confidence in the institutions responsible for water provision. This finding highlights the importance of transparency, regular communication and consumer engagement in strengthening trust in public drinking water services.

As for the perception of taste, 47.4% totally agree that tap water has a taste; however, this identified taste of chlorine is for them a factor limiting consumption. Similarly, the ARS and Atlantic'eau found that 57% of French people totally agree with the presence of taste in tap water and that this perception is highly correlated with the perception of water quality. According to Hatchuel et Ortaida (2000), in France, the main reason given for refusing to consume tap water was taste. Tiama et al. (2018) add that in Ivory Coast tap water is refused because of its clarity and taste. For Maraqa and Ghouidi (op. cit.), in the United Arab Emirates, although taste is the main reason, there is also the smell of chlorine that limits its consumption. Thus, Sarkar (2022) argues that the perception of water quality often relies on sensory qualities such as appearance, taste and smell, and that its actual (measured) quality has little influence on people's perceptions.

When talking about tap water in Kinshasa, the first impression of 46.3% of consumers is that it contains microbes, while another

significant proportion thinks of the presence of fecal matter and urine. These perceptions reveal persistent concerns regarding the microbiological safety of drinking water and may partly explain the low level of confidence observed among respondents. Similar concerns have been reported by the ARS and Atlantic'eau (op. cit.). This finding highlights the importance of improving public access to information on water treatment processes, quality control measures and monitoring results in order to reduce misconceptions and strengthen consumer confidence.

Our results show that personal experiences of past water quality problems influence the trust of 41% of respondents. This result corroborates that of Brouwer et al. (op. cit.), who found personal experiences and childhood anecdotes to be another important basis for trust in water quality. Opinions supported by answers such as **"I have been drinking it for 60 years, and I have never encountered a problem" and "I have always been told that Dutch tap water is good, even better than in most other countries."** These answers are still not the same in Kinshasa, where the population vilifies tap water. The healthiness of the environment (19.8%) and other people's accounts of their experiences (13.8%) also influence the trust of our respondents. Sarkar (op. cit.) found the opposite; the main element that influences the trust of water quality among households is the communication of water management authorities regarding water quality. Dianty et al. (2022) and Doria (2010) added that apart from personal experience, perceived control is an element influencing trust.

### 3.5. Limitations of the study

The findings of this study should be interpreted in light of certain limitations. First, the use of a non-probability convenience sampling approach limits the representativeness of the sample and the generalizability of the results to the entire population of Kinshasa. Second, the

predominance of male respondents (81.2%) and individuals with higher levels of education reflects the profile of internet users and may not fully capture the perceptions of other population groups. Although face-to-face interviews were conducted to complement online data collection, some categories of residents may remain underrepresented.

In addition, the study relied on self-reported perceptions and experiences, which may be influenced by subjective judgments, recall bias, or individual beliefs regarding drinking water quality. Nevertheless, these perceptions are valuable because they directly influence consumer behavior, trust in public water services, and water-use practices. Despite these limitations, the study provides rare empirical evidence on public perceptions of tap water quality and confidence in REGIDESO-supplied water in Kinshasa and contributes to a better understanding of the factors influencing consumer trust in an urban African context.

#### 4. Conclusion

This study highlights a significant lack of consumer confidence in the quality of tap water in Kinshasa. The results highlight that negative personal experiences, inadequate communication from water suppliers and sensory perceptions, such as taste and smell, are determining factors in this distrust. This study provides a new perspective on user perception, a previously underexplored area in Kinshasa. It highlights the importance of transparent communication and increased awareness to restore consumer confidence. Critical elements identified in this investigation pave the way for recommendations to improve water management in the city. Particular attention should be paid to the quality of information provided to users in real time and to stakeholder engagement in the communication process. These measures are essential to ensure sustainable access to quality drinking water and improve public

health in the complex urban context of Kinshasa.

Despite sampling limitations, this study provides rare empirical insight into the perceptions of literate users regarding water quality in Kinshasa. Future research should include stratified sampling and gender-balanced participation to ensure representativeness and guide inclusive water governance strategies.

#### Conflicts of Interest

The authors declare that they have no conflicts of interest regarding the publication of this paper.

#### References

- Bisimwa, B. M., Shongo, D. R., & Mukendi, M. J. (2021). Assessment of drinking water quality and its health impacts in Kinshasa, Democratic Republic of Congo. *Journal of Water and Health*, 19(1), 123–135.
- Brouwer, S., Hofman-Caris, R., & van Aalderen, N. (2020). Trust in drinking water quality: Understanding the role of risk perception and transparency. *Water*, 12(9), 2608.
- Dianty, F. R., Martono, D. N., & Priadi, C. R. (2022). Public perception of drinking water quality in Bekasi City, Indonesia. *Jurnal Penelitian Pendidikan IPA*, 8(5), 2551–2555.
- Doria, M. F. (2010). Factors influencing public perception of drinking water quality. *Water Policy*, 12(1), 1–19.
- Gauthier, B., Nzuzi, J., & Nyembo, F. (2018). Factors influencing trust in drinking water in Kinshasa. *Congolese Journal of Public Health*, 12(2), 45–56.
- Grupper, M. A., Schreiber, M. E., & Sorice, M. G. (2021). How perceptions of trust, risk, tap water quality, and salience characterize drinking water choices. *Hydrology*, 8(1), 49.

- Hatchuel, G., & Ortalda, L. (2000). *La perception de la qualité de l'eau et la sensibilité de la population à l'environnement* (Document n° 24209). CREDOC.
- Hug March, X., Garcia, X., Domene, E., & Sauri, D. (2020). Tap water, bottled water or in-home water treatment systems: Insights on household perceptions and choices. *Water*, 12, 1310.
- Ibebeke, Y. (2024). *Course on water collection and storage systems and maintenance of works and equipment of a drinking water production plant* [Master's course material]. Regional Water School / University of Kinshasa.
- Kaba, D., Kiyombo, M. S., & Luleka, J. N. (2019). Water supply and sanitation in urban Kinshasa: Challenges and opportunities. *African Journal of Environmental Science and Technology*, 13(4), 148–158.
- Kanjinga, N. A., Kusunika, N. A., Gbede, E. S., Mampuya, N. A., & Tangou, T. T. (2024). Antimony contamination of mineral water put into PET plastic bottles sold in Kinshasa. *International Journal of Novel Research and Development*, 9.
- Katswangene, P. K., Oleko, W. R., & Kazadi, M. Z.-A. (2021). Spatiotemporal portrait of the quality of water supplied by REGIDESO/Butembo, Democratic Republic of the Congo. *Advances in Microbiology*, 11, 225–242.
- Kayembe, J. M., Mbuyi, K., & Matondo, B. (2022). Drinking water quality and public health risks in Kinshasa, DRC. *Environment, Development and Sustainability*, 24, 11785–11799.
- Kouame, P. N., Tchapelé Gbagbo, G. A., Yapi, E. A. M., Kpaibe, S. A. P., Seki, T. O., Bakayoko, A., & Amin, N. C. (2024). Household perceptions of tap water quality in the Adjouffou, Gonzagueville and Anani districts of the Port-Bouët municipality in Ivory Coast. *International Journal of Biological and Chemical Sciences*, 18(1), Article 24.
- Lelo, N. F. (2008). *Kinshasa city a environment*. L'Harmattan.
- Levallois, P. (2006). Drinking water and public health: Current and future challenges. *Water Science Review / Journal of Water Science*, 19(2), 127–135.
- Maraqa, M. A., & Ghoudi, K. (2015). Survey of public attitude towards bottled and tap water quality in the UAE. *Global NEST Journal*, 17(3), 607–617.
- McLeod, L., Bharadwaj, L., & Waldner, C. (2014). Risk factors associated with the choice to drink bottled water and tap water in rural Saskatchewan. *International Journal of Environmental Research and Public Health*, 11(2), 1626–1646.
- Regideso. (2023). *Annual report on water quality and distribution*. Regideso Publications.
- Regional Health Agency (ARS) & Atlantic'eau. (2022). *Tap water: Exemption and new treatment process in Massérac – Survey on the perception of water quality*. <https://www.atlantic-eau.fr/sites/default/files/2022-07/sondage.pdf>
- Sarkar, M. (2022). *Perceptions of drinking water quality: A review of the literature and surveys covering the topic*. U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://www.huduser.gov/portal/sites/default/files/pdf/Perceptions-of-Drinking-Water-Quality.pdf>

- Shotyk, W., & Krachler, M. (2007). Contamination of bottled waters with antimony leaching from polyethylene terephthalate (PET) increases upon storage. *Environmental Science & Technology*, 41(5), 1560–1563.
- Tangou, T. T. (2023). *Water and wastewater technologies*. Éditions Presses Universitaires de Kinshasa.
- Tiama, G. N., Essoh, A., Gnagne, J. E. Y., Fofana, V., & Yapo, B. O. (2018). Assessment of household perceptions of tap water quality in two municipalities, Cocody and Yopougon, of the city of Abidjan, Ivory Coast. *Afrique SCIENCE*, 14(6), 48–57.
- UNICEF. (2020). *Report on access to drinking water in the Democratic Republic of Congo*. UNICEF.
- Villar-Navascués, R. A., & Fragkou, M. C. (2021). Managing water scarcity futures: Identifying factors influencing water quality, risk perception and daily practices in urban environments after the introduction of desalination. *Water*, 13(19), 2738.
- World Health Organization (WHO). (2017). *Drinking-water quality guidelines* (4th ed.). WHO.
- Zuhair, E. A., Alaoui Sossi, F. Z., & El Khatori, Y. (2023). Managing risks to water quality: Application of the PGSSE and the HACCP method. *SHS Web of Conferences*, 175, 01037.