



## Drinking Water Network Users' Associations and the sustainability of community-managed systems in the town of Kindu

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### ABSTRACT

Access to drinking water remains a major problem in the DRC, particularly in secondary towns such as Kindu, where REGIDESO does not serve the entire population. Drinking Water Network Users' Associations (ASUREP) provide a grassroots solution by ensuring water distribution through community mini-water networks installed in certain

neighbourhoods of the town, as well as their maintenance and the collection of revenue from water sales. The study examined the sustainability of four ASUREPs in Kindu (RVA, Big Five, Kabasoga/Airport and Basoko), based on surveys of 150 households and 20 association leaders.

The results reveal contrasting situations. RVA and Basoko offer more satisfactory technical continuity, whilst Kabasoga/Airport and Big Five suffer frequent interruptions.

Financially, RVA and Big Five have more robust cash flow and publish their balance sheets, whereas the other two do not. Community participation is strong overall, but issues of representativeness undermine Kabasoga/Aéroport and Basoko.

Sustainability rests on three pillars: technical performance, financial stability and inclusive social participation. ASUREPs that combine these dimensions, such as RVA, prove to be more resilient. The study recommends strengthening training for managers, improving transparency and providing institutional support to these associations to consolidate their role in participatory water governance in the DRC.

**Keywords:** Access to drinking water, Drinking Water Network Users' Associations, Sustainability, Community governance, Resilience, Kindu.

## 1. Introduction

Access to safe drinking water remains a major challenge in the Democratic Republic of the Congo, particularly in rural areas and the outskirts of secondary towns. In the town of Kindu, the administrative centre of Maniema, this challenge is exacerbated by poor public infrastructure and insufficient institutional funding. The services provided by the Water Distribution Authority (REGIDESO) do not cover the entire population, prompting communities to organise themselves. In this context, the Associations of Drinking Water Network Users (ASUREP) have emerged as a local solution. With the support of Belgian development cooperation, they rely on the direct participation of users, ensure the maintenance of the networks, collect financial contributions and guarantee local governance [1].

The sustainability of water supply systems depends on several factors: the technical quality of the infrastructure, the financial capacity of the managers, the social involvement of communities and transparency in governance. The ASUREPs lie at the intersection of these dimensions. They must reconcile local constraints with institutional requirements.

In urban areas, ASUREPs compensate for the lack of regular public services. They promote local ownership of infrastructure and strengthen communities' resilience in the face of crises. Their effectiveness, however, varies. Some associations maintain a reliable service; others struggle with a lack of training, limited financial resources or internal governance issues.

National and international comparisons confirm the importance of community-based management. In South Kivu,

the associations benefit from stronger support from international NGOs, which improves technical quality and financial transparency but creates external dependency [2] that may compromise the sustainability of the networks.

Kinshasa, an urban capital, presents a different situation. Infrastructure is more developed, but water governance remains dominated by REGIDESO. Community initiatives do exist, but remain marginal in the face of institutional centralisation. Local associations mainly play a complementary role, ensuring access to water in outlying neighbourhoods not served by public networks [3].

International studies point in the same direction. In Ethiopia, the reliability of water points depends directly on user participation and the quality of local governance [4]. In Ghana, management models for small towns show that sustainability is strengthened when communities have clear financial mechanisms and trained operators [5]. The work of Muhammad Alam provides further insight. His research in Pakistan demonstrates that the involvement of community organisations significantly improves the sustainability of rural water systems. Financial transparency, operator training and user involvement emerge as key factors for success [6], [7].

These findings reveal a gap in the scientific literature: whilst the role of community water associations has been documented in several contexts, few studies have examined the ASUREPs in Kindu. Yet these associations play a central role in service continuity and user satisfaction, in a context characterised by institutional weakness and structural poverty. This research aims to analyse the role of the ASUREPs in the sustainability of community-managed water supply systems in the town of Kindu. It has two specific objectives: to assess the contribution of the ASUREPs to the technical, financial and social sustainability of the networks, and to measure the level of user satisfaction with the operation and services provided by these associations. The study thus seeks to highlight the conditions for success, the limitations and the prospects for improvement of this community-, in order to inform scientific and policy-level discussions on participatory water governance in the DRC.

## 2. Methods and materials

### 2.1. Study area

The town of Kindu, the capital of Maniema Province, is the main focus of this research. Situated on both banks of the Congo River, Kindu is an isolated town where access to basic services remains limited. The majority of its population is

engaged in subsistence activities, with a local economy dominated by small-scale trade, agriculture and fishing.

The drinking water supply is characterised by poor coverage of public networks. REGIDESO, the national operator, is unable to serve all neighbourhoods. Residents therefore rely heavily on mini-networks managed by the Associations of Drinking Water Network Users (ASUREP), which ensure community-based management. These associations organise water distribution, collect payments and oversee maintenance.

Kindu's geographical and socio-economic context makes this study particularly relevant. The area's isolation limits access to external funding and technical support. The infrastructure is fragile and requires local management. The ASUREPs thus emerge as key actors in ensuring service continuity and strengthening the resilience of local communities [1].

Kindu was chosen as the study area because of its status as a provincial capital, where hybrid forms of water management coexist: a limited centralised public service and dynamic community networks. This configuration allows for an analysis of the role of ASUREPs in the sustainability of these systems within an urban-rural context characterised by structural poverty, population growth and institutional fragility. The study focused on outlying neighbourhoods, as these are the areas where ASUREPs play a central role in ensuring service continuity and the sustainability of water supply systems.

## 2.2. Population and sampling

The study's target population consists of households residing in the outlying neighbourhoods of the town of Kindu, where access to drinking water relies primarily on community networks managed by the Associations of Drinking Water Network Users (ASUREP). According to estimates by the National Institute of Statistics (INS) [8], Kindu has a population of approximately 500,000, of whom nearly 60 per cent live in these outlying neighbourhoods. The ASUREPs are the main local water governance structures in these areas, bringing together both individual users and community representatives.

Sampling was carried out using a purposive approach to ensure coverage of a range of socio-economic and technical contexts. Six outlying neighbourhoods were selected: 3Z, Basoko, Lwama, Mikelenge, Mission and Tokolote. In each of these neighbourhoods, water users access the standpipes installed by the four active ASUREPs identified in the Kasuku and Mikelenge municipalities covered by the study. In total, 150 user households were selected – 25 per neighbourhood –

taking into account representativeness criteria such as location, type of connection (domestic or communal) and length of membership of the ASUREP. Association leaders were also included in the qualitative sample, with 20 semi-structured interviews conducted with the chairpersons, treasurers and technicians of the ASUREPs.

## 2.3. Data collection

Data collection took place between March and May 2026 in the outlying neighbourhoods of Kindu. It employed a mixed-methods approach, combining quantitative and qualitative tools to capture both users' perceptions and the internal workings of the Drinking Water Network Users' Associations (ASUREP).

On the quantitative side, structured questionnaires were administered to 150 households. The questions covered access to water, the frequency of breakdowns, repair times, monthly costs, and the level of satisfaction with the services provided by the associations. Qualitatively, 20 semi-structured interviews were conducted with local authority officials, ASUREP representatives (chairpersons, treasurers and technicians), and representatives of street and neighbourhood leaders. These interviews helped to document governance mechanisms, financial transparency, community mobilisation methods and crisis resilience strategies.

Direct observations complemented the questionnaires and interviews, notably through visits to water points and community networks to assess their technical condition and management practices. This approach made it possible to link users' perceptions to the institutional practices of the ASUREPs, providing an integrated view of their role in the sustainability of water supply systems in Kindu.

## 3. Results

The results obtained from the four ASUREPs studied (RVA, Kabasoga/Airport, Big Five and Basoko) show contrasting performance levels depending on the indicators used. RVA and Basoko are technically more robust, but RVA and Big Five stand out for their greater transparency and more inclusive governance. Kabasoga/Airport and Big Five experience frequent service interruptions. Kabasoga/Airport and Basoko suffer from weak cash flow and face criticism regarding their representativeness. Community participation is high overall, and all ASUREPs ensure a minimum level of service continuity during crises, but their resilience remains limited by the lack of sustainable institutional support. The RVA mini-network is under heavy strain from the Kasuku neighbourhood, which comprises blocks 3Z, Mission and the

town centre. Nearby hotel facilities, which are connected to the network, regularly deprive the local population of water.

### 3.1. Technical quality of infrastructure

**Table 1:** Technical functionality of the networks

| ASUREP                  | Regular access         | Frequent interruptions | Repairs < 48 hours     | Repairs > 7 days       |
|-------------------------|------------------------|------------------------|------------------------|------------------------|
| <b>RVA</b>              | 28/40<br>(70 per cent) | 12/40<br>(30 per cent) | 18/40<br>(45 per cent) | 8/40<br>(20 per cent)  |
| <b>Big Five</b>         | 25/40<br>(62 per cent) | 15/40<br>(38 per cent) | 14/40<br>(35 per cent) | 10/40<br>(25 per cent) |
| <b>Kabasoga/Airport</b> | 22/35<br>(63 per cent) | 13/35<br>(37 per cent) | 12/35<br>(34 per cent) | 9/35<br>(26 per cent)  |
| <b>Basoko</b>           | 23/35<br>(66 per cent) | 12/35<br>(34 per cent) | 16/35<br>(46 per cent) | 7/35<br>(20 per cent)  |

ASUREP RVA and Basoko stand out for their superior technical responsiveness. Their repair times are shorter, and a higher proportion of households have regular access via standpipes. In contrast, Kabasoga/Airport and Big Five experience more interruptions, particularly during the dry season, with repairs taking longer due to power supply issues. This situation undermines service continuity and increases the vulnerability of households, which depend almost exclusively on these standpipes

### 3.2. Financial situation and capacity of operators

**Table 2:** Financial situation of ASUREPs

| ASUREP           | Average cost (CDF/month)                             |                                      |                                                  |                                      |                            | Strong cash position | Financial transparency |
|------------------|------------------------------------------------------|--------------------------------------|--------------------------------------------------|--------------------------------------|----------------------------|----------------------|------------------------|
|                  | Unit cost per 20-litre jerry can in Congolese francs | Daily cost per household of 6 people | Transport cost per motorbike in Congolese francs | Total daily cost in Congolese francs | Monthly cost per household |                      |                        |
| RVA              | 300                                                  | 1,800                                | 2,000                                            | 3,800                                | 114,000                    | Yes                  | Yes                    |
| Big Five         | 300                                                  | 1,800                                | 2,000                                            | 3,800                                | 114,000                    | No                   | No                     |
| Kabasoga/Airport | 300                                                  | 1,800                                | 2,000                                            | 3,800                                | 114,000                    | Yes                  | Yes                    |
| Basoko           | 300                                                  | 1,800                                | 2,000                                            | 3,800                                | 114,000                    | No                   | No                     |

ASUREP RVA and Big Five have more robust financial resources and publish their balance sheets, which boosts user confidence and their ability to invest in maintenance. Kabasoga/Airport and Basoko suffer from limited resources, linked to the number of standpipes, and a lack of transparency, which limits their credibility and effectiveness. This financial disparity partly explains the differences observed in the technical quality of the infrastructure.

### 3.3. Community involvement

**Table 3:** Community participation and resilience

| ASUREP                  | Participation in meetings | Complaints about a lack of representativeness |
|-------------------------|---------------------------|-----------------------------------------------|
| <b>RVA</b>              | 30/40 (75 per cent)       | 6/40 (15 per cent)                            |
| <b>Big Five</b>         | 26/40 (65 per cent)       | 8/40 (20 per cent)                            |
| <b>Kabasoga/Airport</b> | 24/35 (69 per cent)       | 8/35 (23 per cent)                            |
| <b>Basoko</b>           | 25/35 (71 per cent)       | 9/35 (26 per cent)                            |

Community participation is high in all ASUREPs, reflecting strong social mobilisation and local ownership of the infrastructure. However, Kabasoga/Airport and Basoko face

more criticism regarding representativeness, which may undermine governance and reduce user confidence. RVA and Big Five enjoy greater social legitimacy thanks to governance that is perceived as more inclusive.

### 3.4. Transparency in governance

**Table 4:** Transparency in governance

| ASUREP           | Publication of financial statements | Continuity in times of crisis |
|------------------|-------------------------------------|-------------------------------|
| RVA              | Yes                                 | Yes                           |
| Kabasoga/Airport | No                                  | Yes                           |
| Big Five         | No                                  | Yes                           |
| Basoko           | Yes                                 | Yes                           |

Transparency is ensured by ASUREP RVA and the Big Five. Kabasoga/Airport and Basoko, on the other hand, suffer from a lack of transparency, which fuels criticism of their governance. All ASUREPs manage to maintain a minimum level of service during times of crisis, but their resilience remains limited by the lack of sustainable institutional support, which leaves them vulnerable to failure in the event of prolonged disruptions.

## 4. Discussion

The technical findings show that two ASUREPs (RVA and Basoko) ensure better service continuity, whilst Kabasoga/Airport and Big Five experience frequent interruptions and prolonged repair times. These findings raise major challenges for the sustainability of the systems: regular service and rapid maintenance reassure users and ensure the long-term viability of the infrastructure, whereas prolonged interruptions undermine the legitimacy of the committees and increase the vulnerability of households.

From a technical perspective, the advantages observed in RVA and Basoko – notably the speed of repairs and the high proportion of households with regular access – reflect greater technical resilience. This performance promotes the sustainability of the system as it reduces downtime and limits the risk of prolonged outages. Conversely, frequent interruptions and repair times exceeding one week in Kabasoga/Aéroport and Big Five compromise service continuity and may lead to user scepticism, which undermines

community mobilisation and causes a drop in revenue from water payments at standpipes.

These findings are consistent with those from the DRC. In Kinshasa, the evaluation of the PILAEP 2 project showed that standpipes managed by ASUREPs function well where a local technical team is in place, but that prolonged interruptions occur in associations with limited resources [9]. Kayser, Moriarty, Fonseca and Bartram [3] also emphasised that the sustainability of community-based systems depends on technical indicators such as the frequency of breakdowns and the speed of repairs, confirming that the performance observed in RVA and Basoko is a key factor in long-term viability. Kativhu, T., et al. [10] demonstrated that the lack of preventive maintenance leads to frequent breakdowns, which corresponds to the difficulties encountered by Kabasoga/Airport and Big Five. The performance and sustainability of community water supply networks depend not only on the condition and technical characteristics of the equipment, as well as the availability of spare parts, but also on the capacity of community structures to mobilise financial resources and ensure effective governance of maintenance [11], [12].

Communities with strong organisational structures minimise downtime, which explains the greater responsiveness observed in RVA and Basoko. Water service interruptions may be linked to weaknesses in local governance, particularly the limited capacity of community structures, as well as insufficient resources, skills and mechanisms for infrastructure maintenance [13], [14]. Castiblanco Venegas et al. [15] demonstrated that technical sustainability is enhanced by the integration of local knowledge and transparency in management. Varady et al. [16] have also shown that the robustness of community systems depends on the associations' ability to mobilise local resources and ensure regular maintenance. These findings confirm that the results obtained in this research are not isolated: the technical performance of ASUREPs is directly linked to governance and social mobilisation, and determines the sustainability of the infrastructure.

Financial performance confirms that sound cash flow management and transparency are essential conditions for the sustainability of ASUREPs. Recent studies in the DRC and elsewhere show that financially fragile community associations experience frequent service interruptions and a loss of user confidence.

ASUREP RVA and Big Five enjoy relatively stable cash flow and publish their balance sheets, which is a major advantage in terms of sustainability. By contrast, Kabasoga/Airport and

Basoko, with lower revenues and a lack of accountability, are struggling to cover their operating costs. The consequences are severe: service disruptions, weakened infrastructure and mistrust among users, which reduces community engagement and jeopardises the system's long-term viability. These findings are consistent with those of Malumbe Asukulu, Kabambi Tshitadi and Bisimwa Ngulire [17], who confirmed that community operators incur high costs and have unstable financial margins, which undermines their effectiveness compared with private and public operators. Their study concludes that the viability of these associations depends on rigorous financial management and sustainable institutional support. Similarly, the Presidential Pact [18] for the management of the water sector in the DRC emphasises the need to mobilise sufficient funding and to enhance transparency in order to guarantee the continuity and sustainability of services. Harvey and Reed [19] demonstrated in a study carried out in Zambia that community-based systems often fail due to a lack of clear financial mechanisms and transparent management, whilst associations capable of generating regular revenue ensure better service continuity. Chowns [11] emphasised that inclusive governance and financial accountability of committees in Malawi are essential for maintaining user confidence and ensuring sustainability. Marks and Davis [20] argued that financial transparency and accountability are essential conditions that reassure users and guarantee the sustainability of community-based systems. Jesus Ochoa Valer [21], for his part, emphasised the role of participatory financial mechanisms in strengthening the sustainability of community infrastructure.

Thus, the study's financial findings confirm an overall trend: sound cash flow and transparency in management are essential conditions for the sustainability of community water systems. The benefits observed at RVA and Big Five show that user confidence and investment capacity reinforce sustainability, whilst the consequences of financial vulnerabilities at Kabasoga/Airport and Basoko illustrate the risks of failure and loss of legitimacy.

For the ASUREPs in Kindu, community participation is generally high, but concerns regarding representativeness have emerged in certain ASUREPs, notably Kabasoga/Airport and Basoko. This social involvement is an advantage for sustainability as it promotes local ownership and the mobilisation of resources, but a lack of representativeness can result in weakened governance. The main advantage remains the high level of engagement among households attending community meetings. This involvement strengthens the committees' legitimacy and promotes service continuity, even in times of crisis. However, the criticisms voiced in Kabasoga/Aéroport and Big Five reflect a perception that

governance is less inclusive, which may lead to a decline in users' trust in the ASUREP and a reduction in revenue, thereby jeopardising the long-term viability of the systems.

These findings are consistent with those of Bengibabuya Hombanyi and Karemere [22] and those of Jimenez-Redal et al. [23], who argue that, in South Kivu, community participation appears to be an important factor in the sustainability of water and sanitation projects, insofar as it promotes ownership of the infrastructure, strengthens the functioning of the committees and contributes to the mobilisation of the resources necessary for their operation. Similarly, Jimenez-Redal et al. [23] observed that a lack of representativeness in certain committees undermines governance.

Several studies confirm this link between social involvement and sustainability. Harvey and Reed [19] demonstrated that user participation in decision-making enhances the sustainability of community systems, whilst social exclusion leads to system failure. Chowns [11], for his part, emphasised that inclusive governance and the accountability of committees are essential for maintaining service use by users and ensuring service continuity.

Further research confirms that social participation is a cornerstone of sustainability. Cleaver and Toner [24] have shown that collective water management practices contribute to social resilience when they incorporate local knowledge and user participation. Similarly, Mansuri and Rao [25], in a global review of community participation, emphasised that inclusive and participatory governance strengthens the robustness and sustainability of infrastructure.

Thus, the findings from the town of Kindu confirm a global trend: strong social involvement is a major advantage for the sustainability of ASUREPs, but criticisms regarding representativeness constitute a negative consequence that can undermine governance. The financial results from Kindu reveal a significant disparity between the ASUREPs: RVA and Big Five have solid cash flow and publish their balance sheets, whilst Kabasoga/Airport and Basoko suffer from limited resources and a lack of transparency. These differences have direct consequences for the sustainability of the systems: stable cash flow and transparent management enable investment in maintenance, whereas financial fragility compromises service continuity and increases the vulnerability of the infrastructure.

The benefits observed at RVA and Big Five are linked to more transparent governance and greater accountability. This transparency enhances the legitimacy of the committees and

fosters community engagement, which is a key factor in sustainability. In contrast, Kabasoga/Airport and Basoko, where balance sheets are not published and where representativeness is contested, suffer from a lack of credibility. The consequences are severe: a decline in revenue, weakened governance and the risk of system failure.

These findings are consistent with those of Jimenez-Redal et al. [23], Bengibabuya Hombanyi and Karemere [23] and Zagabe [26], who argue that the sustainability of community water services in South Kivu depends on the quality of local governance, user participation and the availability of financial resources. Participation in management bodies and trust in the committees notably encourage payment for services and thus contribute to their financial viability, whilst insufficient resources, weak committees and low levels of community mobilisation jeopardise the sustainability of the initiatives. A lack of accountability leads to mistrust among users and undermines mobilisation. In Kasai-Oriental, MacArthur, J., Volanarisoa, R., Yakalo, T. and Ngeleka, J. [27] demonstrated that the analysis of water management committees should not be limited to the number of women serving on them, but should also take into account the social dynamics and power relations that influence their effective participation in decision-making. The lack of representativeness observed within certain committees could thus limit their legitimacy in the eyes of users and reduce their ability to secure support for decisions relating to the management and maintenance of infrastructure. This was supported by MacArthur et al. [26] and their colleagues, who argue that the presence of women on committees brings benefits including improved collaboration, cohesion, equality, equity, unity, trust and peace. Hope [28] demonstrated that transparency and accountability within committees improve the performance of community systems and reduce downtime. Chowns [11] emphasised that inclusive governance and the financial accountability of committees are essential to ensuring sustainability.

Research confirms that transparency and participatory governance are pillars of sustainability. Cleaver and Toner [24] have shown that collective water management practices strengthen social resilience when they incorporate user participation and transparency. Thus, our findings confirm that transparency and inclusive governance are essential conditions for the sustainability of community water systems. The benefits observed in RVA and Big Five show that user trust and the legitimacy of the committees strengthen sustainability, whilst the consequences of governance weaknesses in Kabasoga/Aéroport and Basoko illustrate the risks of failure and loss of legitimacy.

The findings from Kindu show that the resilience of ASUREPs varies significantly: RVA and Basoko appear more robust, whilst Kabasoga/Airport and Big Five reveal vulnerabilities. This difference has direct implications for sustainability: strong social and institutional resilience enables disruptions to be overcome, whilst weak resilience exacerbates vulnerability and undermines the sustainability of the systems. As regards the resilience of community-based systems, the main strength of RVA and Big Five lies in their ability to mobilise users and quickly restore the service following a breakdown. This social and technical resilience enhances sustainability as it minimises disruptions. In contrast, Kabasoga/Airport and Big Five, with longer repair times and contested governance, demonstrate lower resilience. The consequences are clear: a loss of trust, a decline in revenue and the risk of prolonged service failure. Experiences of community water management in Haut-Katanga highlight the importance of local committees in ensuring the operation, maintenance and sustainability of infrastructure [29]. This approach also requires the effective mobilisation of communities and governance mechanisms that promote transparency and accountability. In the context of Maniema, difficulties in structuring and operating community-based water management mechanisms can act as a constraint on service continuity. Research on community-based water management in the province highlights the importance of having local organisations capable of managing, maintaining and mobilising users. This issue echoes Kirk's [13] observations in Goma, which highlight the low level of public recognition of water committees, their dependence on external support and their limited capacity for accountability. These findings suggest that the legitimacy, representativeness and governance capacities of local structures are key factors in ensuring the effective and sustainable management of water services.

Research carried out in Maniema shows that local power dynamics can permeate local water management committees, and that their functioning is not always equitable or democratic. This may limit their ability to ensure the effective and sustainable management of water services. Tadesse, Bosona and Gebresenbet [4] have established that the resilience of community-based systems depends on the active participation of users and the accountability of the committees. Several studies agree: the sustainability of community-based water supply systems depends not only on the availability of infrastructure, but also on the quality of their governance. Low user participation, a lack of inclusion in decision-making bodies, difficulties in mobilising resources and weaknesses in maintenance mechanisms can reduce the systems' ability to maintain service in the face of disruptions and crises [12]. Mandara and colleagues [30] emphasised that

resilience depends on the quality of governance, transparency, user participation and the committees' capacity to carry out monitoring and maintenance. Biswas and Tortajada [31] demonstrated that participatory governance and transparency strengthen the institutional resilience of water systems. Walters and Javernick-Will [32] emphasised the role of participatory governance and the committees' capacity for adaptation in social and institutional resilience.

Our findings confirm that the resilience of community-based systems is a major asset for their sustainability. The vulnerabilities observed in some ASUREPs, however, represent a negative consequence that may jeopardise the continuity and legitimacy of services.

## 5. Conclusion

An integrated analysis of our study's findings shows that the sustainability of ASUREPs rests on the interplay of four dimensions: technical performance, financial soundness, social engagement and transparent governance. The ASUREPs in RVA and Basoko illustrate the benefits of successful synergy: service continuity and strong community engagement. Those in RVA and Big Five demonstrate stable cash flow and transparent governance. These combined factors strengthen the system's resilience and sustainability. Conversely, Kabasoga/Aéroport and Big Five demonstrate the negative consequences of cumulative fragility, with frequent service interruptions. Kabasoga/Aéroport and Basoko reveal a lack of resources, criticism regarding representativeness and a lack of accountability. These weaknesses undermine user confidence and heighten the risk of prolonged failure.

These findings are consistent with the conclusions of several studies. The sustainability of community networks depends on inclusive governance and rigorous financial management; the resilience of systems rests on a combination of technical performance, social mobilisation and institutional transparency. Participatory governance and transparency thus emerge as pillars of the sustainability of community infrastructure.

The practical implications for the town of Kindu and the DRC are clear. Strengthening training for committees on financial management and transparency, establishing regular accountability mechanisms, supporting preventive maintenance through stable funding, and encouraging inclusive governance that incorporates local knowledge: these measures aim to build users' trust, reduce service disruptions and ensure the long-term viability of the ASUREP community water systems in the town of Kindu.

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