Summary

This case study elucidates how deteriorating drinking water supply service delivery can trigger community mobilisation leading to a complete take-over and management of the system by local communities. Furthermore, it shows the importance of participatory management in resolving water catchment conflicts and improved cost recovery.

Description

The Kumbo water supply system initiated in the late 1960’s and completed in 1972 has a complex ownership claim. On the one hand, it is claimed to be a Nso community water scheme realised with the financial support of the people of Canada through the efforts of an elite of Nso. Others consider it as a government-owned scheme considering the provisions of the national legislation relating to water supply, and the technical and diplomatic role of the Government of Cameroon in the construction and mobilization of financial resources from the Canadian government.

In 1984, a presidential decree institutionalised state operation of all urban water supply systems under the then Cameroon National Water Corporation, better know by its French acronym as “Societe National des Eaux du Cameroun” (SNEC). It would appear this paradigm was of concern to several individuals due to non-involvement of locals in the management structure of SNEC. However, real trouble started when the Kumbo Council was billed for water consumed at public standpipes. This was compounded by the subsequent disconnection of over 60 public standpipes and what the Nso people considered as deteriorating services, and escalating water tariffs which forced the citizenry to return to unprotected stream sources for their daily water needs.

There has also existed for over thirty years a conflict over the use of catchment area by the locals and the municipal water supply system management. This has been principally due to the forceful ejection of the locals from their farmland by the paramount traditional authorities.

Action taken

In April of 1991, in the light of the political upheavals in the Cameroon, a locally orchestrated campaign led to the forceful expulsion of SNEC from Kumbo in October of 1991. A community based local institution, the Kumbo Water Authority (KWA), under the chairmanship of the traditional ruler, with support from the elites, was created to manage the Kumbo Water Supply. This structure had problems of legality (in the light of national legislation for water management) that were compounded by regular conflicts in, and a litigation case over the catchment area that threatened the sustainability of Kumbo municipal water supply. Thus, following the 2004 decentralisation laws in Cameroon, GWP Cameroon worked with the Kumbo Urban Council and facilitated the transfer of management of the Kumbo Water Supply system to the Kumbo Urban Council.

Key outcomes

The locally managed KWA has re-opened all public taps, extended coverage and introduced a differential water tariff structure. Moreover, the Kumbo Urban Council has formally taken over the Kumbo Water Authority, and integrated it within its management structure. This has resulted in the establishment of an inclusive and participatory community water governance structure for the KWA that involves key stakeholders like the landowners in the catchment area. The KWA is currently engaged in participatory protection and conflict resolution over the catchment area. Findings from public interviews (Voxpop)
suggest that there is an increase in the willingness to pay for services due to the provision of more reliable services and better communication between KWA and the population, especially those of the catchment area.

Key lessons
Command and control decision-making paradigm and deteriorating drinking water supply services can be triggers for social and political instability, as well as sources of water related conflict. Community based organisations can be platforms to enhance participatory governance for efficient and effective management of water resources and conflict resolution.

Tools used
A2.03 – The role of customary law in IWRM, B3.03 – Civil society organisations, B4.03 - Building partnerships, C5.03 - Conflict management

Keywords: Kumbo-Cameroon, water tariffs, participatory governance, catchment protection and conflict resolution

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Acknowledgement

Mr. Donatus Njong (Mayor)
Mr. Ibrahim Yufenyuy (4th Deputy Mayor I/C Water supply) Kumbo Council
General overview and history of the water supply system

Kumbo town is the divisional headquarter of Bui Division, North West Region of Cameroon. It has a population of about 163,019 inhabitants, an annual rainfall of about 2660mm, and an average temperature of 27°C ranging between 14.8°C and 30°C.

Kumbo water supply project was initiated in the late 1960’s and realised in 1972 as a community water supply project with the assistance of the Government of Canadian, the then Governments of the Federal Republic of Cameroon and the State of West Cameroon. The utility has a complex ownership claim; on the one hand, it is claimed to be a Nso community water scheme realised with the financial support of the people of Canada through the efforts of an elite of Nso. Others consider it as a government-owned scheme given the technical and diplomatic role of the Government of Cameroon in the construction and request of material from Canada. These notwithstanding, it should be noted that during the construction, clearing and trenching for the pipes to be laid was done by the community while the technical engineering aspects were executed by engineers from then Public Works Department (PWD). Upon completion the utility was managed by the PWD of the former State of West Cameroon.

In 1984, a presidential order institutionalised state operation of all urban water supply systems under the then Cameroon National Water Corporation, (better known by its French acronym as “Societe National des Eaux du Cameroun -SNEC) whose management paradigm led to increasing discontent among the population of Kumbo.

Triggers of conflict

Some of the problems which led to massive discontent with SNEC management were:
- Water shortages and irregular services
- Poor and deteriorating water quality
- No catchment protection (the carcass of a dead donkey was found at the intake of the system)
- Escalating water tariff
- For the first time the Kumbo Council was billed for water consumed at public standpipes, which were far beyond their budget capabilities. This was compounded by the subsequent disconnection of over 60 public standpipes and the fact that should the council be unable to pay even for the reduced number of standpipes, they will all be disconnected and the population will be forced to start fetching water from unprotected and unsafe sources.

Problems that led to integration of Kumbo Water Authority within the Kumbo Urban council

- Legality of the Kumbo Water Authority as a municipal water supply institution within the context of national legislation
- Continuous conflict over the catchment area and the litigation case in court against the KWA
- Administrative and financial problems that threatened the sustainability of the municipal water supply
- The inability of the KWA to rehabilitate the water supply system infrastructure

**Actions taken**

Real trouble stated in April of 1991 when a group of university students invaded and took over SNEC installations at the cost of six (6) lives. They orchestrated mass destruction of the SNEC office and a massive campaign against the payment of water bills. This led to the withdrawal of SNEC from Kumbo in October of 1991. This was followed by Government action; withdrew the legal status of the system and handed over the utility to the people of Kumbo under the tutelage of His Royal Highness the Fon of Nso.

In 1992, during a constituent meeting of the people of Kumbo, convened by the Fon, it was resolved that a constituted body be set-up for the proper operation and management of the utility. This led to the creation of an interim water management committee pending the establishment of a body which falls within the limits of the law.

In August 1994, an enlarged special General Assembly of the Nso Development and Cultural Association (NSODA) was convened by the Fon with the participation of the traditional Council, the elites, quarter heads and consumers representatives, to examine the best structure, within the legal context in force, for the operation and management of the Kumbo water utility. Considering the provisions of Law No 92/006 of 14 August 1992 relating to Cooperative Societies and Common Initiative Groups which allow organizations such as NSODA to create maintenance committees for community projects, it was resolved that NSODA be invited to take over water supply management in Kumbo. This led to the creation of an autonomous Community Water Organization known as the Kumbo Water Authority (KWA), with duties such as;

- Collection, treatment, storage and distribution of potable water to the population.
- Billing, revenue collection, operation, maintenance and network extension
- Source water protection and water quality monitoring to ensure compliance with WHO standards- the standards applicable in Cameroon.
- Source funding opportunities and establish local, national and international partnerships for capacity building and material support for improved performance.

Following law No. 2004/18 of 22 July 2004 to lay down rules applicable to councils, which attributes to Councils responsibility for distribution of drinking water within their area of jurisdiction, and in a bit to provide legal foundations for the management of KWA, Global Water Partnership Cameroon has facilitated the process of transfer of management of the Kumbo Water Supply system from the elites and traditional authorities to the supervisory Authority of the Kumbo Council.

**Key outcomes**

There are several achievements and challenges of the current community water management in Kumbo. However, it would appear that despite these challenges (discussed later) the consumers are
satisfied with the level and quality of service because their voices are heard and count in decision-making. In addition, the actions taken since 1992 suggest that the community is committed to an adaptive management paradigm for continuous improvement in drinking water supply governance in Kumbo. Some of the key positive efforts and achievements are:

- Participatory stakeholder governance and gender mainstreaming
  According to the legal statutes, the Kumbo Water Authority has two organs: The General Assembly and the Management Board.

  The General Assembly (G.A.) with a three-year mandate is comprised of elected representatives of consumers (one per consumer zone), the Mayor, traditional authorities, five elite representatives (two of whom must be of opposite sex), three representatives of important interest groups (one of whom must be of opposite sex), and the management of KWA. It also includes three professionals (Accountant, Civil/Water Engineer and a Lawyer) as well as representatives of government institutions in Kumbo as ex officio members. The G.A. approves the policies and budget for KWA, approves and amends regulations, rates and statutes of KWA, as well as elects the management board.
  The management board is made up of a chair and vice-chair, the Mayor and Fon or their representatives, KWA manager, accountant and the three professional mentioned above. Other members of the board include a representative of NSODA, and five members appointed by the Mayor (two of whom must be of opposite sex) from the G.A. The board has several responsibilities which can be summarised as follows making proposals to the G.A. for deliberations, executing and enforcing the decisions of the G.A.

  An outstanding innovation to ensure an adequate community representation is the creation of what is known as ‘water consumption zones’ by Kumbo council. Each zone elects her representative to the G.A. and oversees the operation and management of public standpipes in its zone. This down-scaling of management responsibilities has provided an inclusive atmosphere (enabling environment) for men, women and youths to work together to ensure timely repairs and maintenance of taps for regular water supply.

  Water pricing: cross subsidy, water demand management and reserve fund
  KWA has taken appropriate steps to ensure that drinking water supply services are accessible and affordable. In addition, it has also adopted measures to signal to the public that drinking water supply involves costs which should be shared by all stakeholders including the poor.

  Accessibility has been improved by reopening of all the public standpipes, extension of the water distribution network and the construction of additional public standpipes. Each standpipe is managed by an elected water consumption zone committee which operates the tap, distribute the billed consumption among the users of the tap and collect payments for onward payment to KWA. This is unlike the practice with privatised public standpipes in other municipalities where users pay over four times the regular charge. In other cases there is no payment for public standpipes, a situation which sends a false signal on the costs of water supply and is counter-productive to water demand management. KWA operates a differential tariff structure which enhances affordability and foster cross subsidy. Public stand pipes rate have been reduced, domestic rates are still lower than that charged by SNEC, and business rates are
highest. Penalty for late payment is significantly lower but this is counter-balanced by a very high reconnection fee as shown in the Table 1.

For purposes of comparison, commercial rates by the private national service provider are as follows:

1 – 10 m$^3$ = 293 frs CFA,
>10 m$^3$ = 364 frs CFA,

Meter rate = 800 m$^3$ and penalty for late payment is about 4500CFA

(Remark: 1000 CFA = $2 of November 2009)

<table>
<thead>
<tr>
<th>Client type</th>
<th>Previous rate</th>
<th>2009 rate</th>
<th>Author’s observation</th>
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<tr>
<td>Public taps</td>
<td>125</td>
<td>100</td>
<td>20% reduction,</td>
</tr>
<tr>
<td>Elementary schools</td>
<td>125</td>
<td>155</td>
<td>24% increase</td>
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<tr>
<td>Secondary/High Schools</td>
<td>175</td>
<td>225</td>
<td>29% increase</td>
</tr>
<tr>
<td>Domestic consumption</td>
<td>200</td>
<td>250</td>
<td>25% increase</td>
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<tr>
<td>Business</td>
<td>225</td>
<td>285</td>
<td>27% increase</td>
</tr>
<tr>
<td>Maintenance</td>
<td>250</td>
<td>570</td>
<td>128% increase</td>
</tr>
<tr>
<td>Reconnection fee</td>
<td>1500</td>
<td>3000</td>
<td>100% increase</td>
</tr>
<tr>
<td>Late payment fee</td>
<td>1000</td>
<td>1000</td>
<td>No change</td>
</tr>
<tr>
<td>Meter transfer</td>
<td>3000</td>
<td>5000</td>
<td>67% increase</td>
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According to authorities of the Kumbo council, these changes reflect the voices and aspirations of the people and would be continuously revised as need be to reflect inflation and to provide reserve funds to take care of maintenance and future investment. It would appear that this is an outcome of an elaborate study conducted by a Canadian Executive Service Organisation (CESO) Volunteer. Key informant interviews suggest that the current tariff balances economic efficiency, social acceptability and administrative feasibility as well covers the current full cost of service delivery. It was also revealed that KWA has a growing reserve fund thanks to the affordability of the tariff, high rate of cost recovery and improved financial management.

It is worth noting that all public standpipes in Kumbo are metered. This probably accounts for the observed interest to reducing wastage and regulating access by closing the taps during periods of low demand as shown in Figure 1.
– On-going strategic partnerships for capacity, financial and material support
In compliance with the motto of the Kumbo council “working in partnership with all stakeholders for the socio-economic development of Kumbo” the council has continued to seek and establish functional partnership with different categories of state and non-state actors at the local, national and international levels, for capacity support, financial and material assistance. At the local level, it enjoys good relations with the public perhaps due to trust as a result of the participatory management approach which has reduced information asymmetry and top-down decision-making, and the memorandum of understanding between NSODA and the council over KWA. Through the Kumbo Council, KWA is a member of Global Water Partnership Cameroon (http://www.gwpcm.org/fr/welcome/index.php) which has provided enormous capacity support in conducting research, training, networking and conflict mediation. It also maintained good relations with the Ottawa-Kumbo (OK) Water Project in Ottawa - Canada which have been very resourceful both in human capacity support and financial assistance (for more information see: http://www.okcleanwaterproject.org/whatis.html)

– Water catchment management and conflict resolution
The Kumbo council has demonstrated interest and good faith in resolving the out-standing conflict between the people of Kumbo and the population of Yeh (the water catchment and intake area for Kumbo water supply). After several meetings, forum and workshops among Kumbo council, KWA and the management committee of the Yeh people, all litigations (over 20) have been withdrawn from court and conflict resolution is at an advanced stage. An agreement has been signed with the watershed community (Yeh people) and under the slogan “Water for the town of Kumbo and livelihood for the people living and farming in catchments area at Yeh”. Mapping and zoning have been employed to protect source water quality and control soil erosion by allocation of zones for different farming activities and source water protection. This approach has ensured a friendly and sustainable exploitation of water and land resources in the watershed, and serves the interest of different stakeholders to avoid resistance by the people of Yeh. The agreement is monitored and enforced by a joint-monitoring team made up of representatives of Kumbo council, KWA, Yeh management

Figure 1: Public standpipe with meter and lock (picture by author in the afternoon- period of low demand)
committee, Yeh youths and Yeh Watershed Women Farmers (a registered common initiative group of women farmers who utilize the watershed for agriculture).

Extensive actions have been taken to stabilize the slopes of the catchments, construct soil traps and to replace the eucalyptus plantation around the catchment with water friendly trees.

**Key challenges**

KWA also faces some challenges which deserve adequate and urgent attention to ensure the continuous provision of safe and reliable drinking water supply now and in the future. Some of these include:

**Expansion and rehabilitation of the supply network:**
According to the Mayor of the Kumbo council, the asbestos pipes in the system have exceeded their life span of 25 years given that the system is about 40 years old. The cost of replacing these pipes is estimated to over 800 million cfa which is way beyond the capacity of the KWA and the council. Furthermore, he observed that it becomes increasingly costly to maintain the aging system partly due to difficulties in locating compatible pipes to replace damaged asbestos pipes. Although recent water quality testing results did not reveal any heavy metal (asbestos) concerns, it would be proactive to take measures to replace these old pipes. In the meantime there is need to carry out regular water quality testing.

**Inadequate technical and human capacity:**
The absence of adequate and qualified technical field staff is affecting responsiveness to repairs and maintenance and the quality thereof (see figure 2). This suggests that the utility may be suffering from high quantity of unaccounted-for water and commercial losses.

![Material (rope) used in preventing leakage](image)

*Figure 2: Poor craftsmanship for leak repair at a public standpipe*
Furthermore, concern was also expressed on the lack of qualified personnel capable of dealing with and designing policies and strategies for emerging challenges such as climate change, new public management, and education and outreach. The authorities are fully aware of the need for a comprehensive vision in water supply management in the face of climate challenges.

Integration of satellite schemes for efficient management and sustainability:
There is a growing number of small community water supply schemes within the jurisdiction of Kumbo council. It would appear these schemes are distributing untreated water and are increasingly facing management challenges. There is urgent need for Kumbo council to develop a policy on integrating these schemes within KWA. However, special attention should be given to issues of human and technical capacity at KWA and an appropriate tariff for them.

Lessons learned

- Deteriorating drinking water services can fuel conflicts leading to social and political instability.
- Youths can be catalyst for change in community development and actions.
- Organised communities can take up huge drinking water supply management challenges and foster an adaptive approach in service delivery.
- Watershed conflicts can be better resolved using an integrated land-water zoning approach.
- Giving the opportunity, communities can better provide demand-driven services, foster a payment culture and promote participatory dialogue and concerted action necessary to improve willingness to pay and high rate of cost recovery.

Conclusion

Although there is mix-feeling regarding the practice in Kumbo especially the ability to finance rehabilitation and extension, it must be noted that under the current public private partnership practiced in Cameroon and the on-going decentralisation initiative, KWA and Kumbo council could be considered as a service provider while CAMWATER, the public partner, could finance issues related to investment in infrastructure and source water protection. Following the successes, innovative and evolving adaptive management, this case should be considered as a exemplary participatory community (municipal) water management pilot project by Government, and should consider adapting this model in other municipalities with corrective measures to address the challenges in Kumbo.