

Local Councils and Human Livelihood: The Bamenda II Council Water Project, 2011-2019

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Abstract

The economic recession in the 1990s and the implementation of austerity measures led to a freeze in expenditure by the government on social schemes like provision of portable water to indigenous communities. Local communities are increasingly shouldering the responsibility of ensuring the availability of water through self-reliant efforts in the context of progressive decentralization and the implementation of the bottom top approach to development. The management of portable water in Bamenda III municipality was a herculean task in the context of population increase and the failure of the top bottom approach to development. It is from this background that the Bamenda III council and *Trinkwasser fur Kamerun* federated resources to ensure access to the provision of water to the indigenous population. The study argues that efforts by the Bamenda III water scheme wen a long way to mitigate the challenges faced by the population of the municipality as far as access to pipe borne water was concerned. The findings reveal that the implementation and realisation of the project safeguarded access to pipe borne water to the inhabitants of the study locale , though the schemes experienced difficulties in its management .

Keywords: Water project, sustainable development, Bamenda III, Cameroon

Introduction

Water is one of the most important resources for humanity and its regular and sufficient supply remains a basic human requirement. The supply of adequate, potable and clean water to any community remains the base of building a healthy and prosperous society. The United Nations Environment Program estimates that all human activities require a minimum of 1,700 cubic metres per capita per year (m³/capita-year) to live freely from water stress.¹ Lack of access to potable water was a major global health issue. A poor water supply impacts the health of a population all of which affects the population health by limiting people productivity and their maintenance of personal hygiene.² Despite glaring evidence that providing safer, accessible and more reliable supplies of fresh water leads to healthier populations and economies, millions of people globally still struggle to access safe drinking water and more than 840.000 people die every year from poor water, sanitation and hygiene.³

For several decades in developing countries, almost one billion people lacked access to potable water.⁴ Countries in Sub-Saharan Africa including Cameroon equally faced this problem of lack of potable water for its

¹ N. F. Chiaga, J. N. Kimengsi & B. S. Nguh, "Catchment management and the Sustainability of Urban Water Supply. Evidence from Bamenda, Cameroon," *Canadian Journal of Tropical Geography* 6, 2 (2019): 1-8.

² P. R Hunter, "Estimating the impact on health of poor reliability of drinking water interventions in developing countries," *Science of the Total Environment* 407, 1 (2009):2621-2624.

³ S.L Greere, M. Wismar & J. Figueras, *Strengthening health system governance: better policies, stronger performances* (New York: Open University Press, 2016), 6-7.

⁴ Hunter, "Estimating the impact on health of poor reliability of drinking water interventions in developing countries," 2621-2624.

population. Although Cameroon has several water sources, only an estimated 67.1% of the population has access to potable water.⁵ In the urban areas of Cameroon, about 88% of the people had access to potable water, compared to 47% in rural areas; however, the peri-urban areas have even less access to potable water.⁶ Even though clean drinking water is a basic necessity of life, a greater part of the population still relied on contaminated sources such as wells, rivers, streams and lakes. It is within this context that the present study gains prominence. The supply of portable water in the Bamenda III municipality was seemingly unsustainable and required effective interventions to meet the demand of water supply for the growing population. Hence the inception of a community water project by the Bamenda III council in an effort to mitigate the water shortage crisis in the municipality.

Origins of the Bamenda III Council Water scheme

The Bamenda III water project was a key component for Cameroon's attainment of its Millennium Development Goals⁷ (MDGs) set out by the United Nations Organization (UNO) in 2000, with the aim of meeting the needs of the world's poorest people. One of such targets was to reduce to the population with no access to potable water. Access to portable water was equally a key element of Sustainable Development Goals (SDGs) as the UNO recognised ensuring water security as one (Goal 6) of the Seventeen SDGs.⁸ Based on these concepts, it became incumbent on developing countries to engage in measures whose objective was human centered. It was nevertheless, this objective that propelled the government of Cameroon to transfer development strategies and competences to Sub Divisional councils in an effort to accelerate grassroots development, as well as induce the much needed wider participation of the population in the decision-making process at the local level. Hence reinforcing the Bottom-Top approach to development, this emphasized the participation of the local community in development initiatives, so they could select their goals and the means of achieving them. The approach also ensured community ownership, and commitment and accountability to the development project as it seeks development from below. The Bamenda III council area was created in 2007 by Decree No.2007/115 of April 23, 2007.⁹

Prior to the initiation of the water scheme, Bamenda III municipality had three water schemes that supply the inhabitants with potable water: the Nkwen water scheme, the CAMWATER scheme and the Bamenda III purified water scheme. The Nkwen water scheme was constructed in 1985 by the Nkwen population and had ten catchments.¹⁰ From these ten catchments were 500 connections which supplied 20 neighborhoods. Some of these neighborhoods were; Alahlie, Teken, Ncha, Namoh, Upper Futru, Lower Futru, Bayelle I, II & III, Ntahkekah and Menka.¹¹ The Nkwen Water Supply scheme faced the problems of inadequate water volume, poor engineering and encroachment on the catchment by the farmers. The length of CAMWATER pipeline was estimated at about 10,000KM consisting of both the old and new networks. The old network ended at Futru and the new network extended from the municipality to Bambili. A storage tank was constructed at Ndzah supplying some quarters like

⁵ Pullan et al, "Geographical inequalities in use of improved drinking water supply and sanitation across Sub-Saharan Africa: Mapping and spatial analysis of cross-sectional survey data," *Journal of PLOS Medicine* 11,4 (2014): 1-17.

⁶ Ako et al, "Access to potable water and sanitation in Cameroon within the context of Millennium Development Goals (MDGs)," *Water Science and Technology* 61, 5 (2010): 1317-1339.

⁷ The Millennium Development Goals (MDGs) were the eight (8) goals set by the 189 UN member states in September 2000 and agreed to be achieved by the year 2015. The Millennium Declaration was signed at the September global summit held at the UN headquarters in New York and the 149 international leaders in attendance committed to combating disease, hunger, poverty, illiteracy, discrimination against women and environmental degradation and specific indicators were attached to them.

⁸ The idea of sustainable development was first introduced in the United Nation's 1987 Brundtland Commission Report. It maintained sustainable development as an appropriate rate of development that meets people's standard needs without compromising the ability of future generations to meet their needs. The SDGs expanded its scope to 17 goals from the eight (8) goals in the MDGs, which covers universal goals on fighting inequalities, increasing economic growth, providing decent jobs, sustainable cities and human settlements, industrialization, tackling ecosystems, oceans, climate change, sustainable consumption and production as well as building peace and strengthening justice and institutions.

⁹ Bamenda III Council Development Plan (2012), 11.

¹⁰ Bamenda III Council Development Plan (2020), 150.

¹¹ Ibid.

Ntasen I & II, Sisia I, II, III & IV, Cow Street.¹² The problem faced by the CAMWATER scheme was the destruction of pipes by the Bamenda III council road maintenance works.

Faced with growing urbanization and population increase, the supply of pipe borne water in Nkwen by the Nkwen Water scheme and CAMWATER was insufficient. Consequently, this caused water shortages within the municipality and there was acute shortage of potable water in the council area. Many homes did not have access to regular flow of water. The situation grew worse as people had to go for weeks and even months without portable water flowing from their taps. Some indigenes had recourse to the use of well and borehole to find coping strategies in the wake of these water shortage.¹³ Before the conception of the Bamenda III council water scheme, the municipality was characterized by incoherent water supply networks, unprotected water catchments, poorly maintained water supply network and infrastructure and doubtful quality of water supply with less than 20% of the population accessing safe water.¹⁴

In order to solve these potable water setbacks, the Bamenda III Council in 2011 initiated the idea of a water scheme for the municipality. It was within this framework that the Council Development Plan had as priority project to create a council water scheme in an effort to ensure access to water for the population. A plan for the water project was drawn up and the council initiated a partnership with a German group of engineers who adopted the name *Trinkwasser fur Kamerun* (Association for the promotion of Drinking water supply in Cameroon). The objective of the group was to develop a purified water scheme that shall collect, treat and supply clean portable water within the Bamenda III Sub Division.¹⁵

Trinkwasser fur Kamerun was tasked to ensure development and protection of the water supply catchment; the installation of water purification and storage facilities and the distribution of water and proper management and maintenance of water supply.¹⁶ Based on the foregoing, two members of *Trinkwasser fur Kamerun*; Karei Heiniseh and Monica Keasen were on a fact finding mission in Bamenda III Sub-Division. In an interview with The Post Newspaper, Karei Heiniseh an expert on water management explained that:

We have come for the putting in place of a water purification plant with a production capacity of 30.000 liters per hour, and it is expected to commence by January 2013. He promised to work with the Bamenda III Council for the water supply project to be successful.¹⁷

The visit of the two members of *Trinkwasser fur Kamerun* set the ground work for the realization of the Bamenda III water project. The project was realized through phases which will be discussed under the next sub-heading.

Execution of the Project

The Bamenda III water scheme had two phases of realization. The first phase spanned from 2012-2017 and the second phase from 2018-2019.¹⁸ During the first phase, the project had three Optimization stages. The first phase witnessed feasibility studies and data collection which was done between 2012 and 2015. There was the formation of the association (*Trinkwasser fur Kamerun*), planning of the plant, sourcing of donors, structural preparations, Construction of a water reservoir, delivery of the system, birthing a water team in Bamenda III, preparatory works in Bamenda III, clarification of customs matters and planning of the water network.¹⁹ This phase equally saw the shipping of materials (pipes, filters, valves, sulphate, and chlorine) from Germany. Optimization I was realized in February 2016 and was entirely sponsored by the Germans. At this point, construction of new flocculants dosing,

¹² Bamenda III Council Development Plan (2020), 150.

¹³ Terrence Ngole, Bamenda III Council area inhabitant.

¹⁴ Bamenda III Land Use Plan 2012.

¹⁵ Marina Mangwi, Public Relations Officer (PRO) of the Bamenda III Council.

¹⁶ Gerd Muller and Eliquo KGN, "Bamenda III Council Wasserprojekt," *Trinkwasser fur Kamerun* (2020): 1-14.

¹⁷ Chris Mbunwe and Rophina Njimanted Wobga, "Germans to construct water purification plant in Bamenda," "Germans to construct purification plant in Bamenda," The Post, n^o01375, September 2012.

¹⁸ Cletus Fonguh, Mayor of Bamenda III Council.

¹⁹ Gerd Muller and Eliquo KGN, "Bamenda III Council Wasserprojekt," 4.

installation pre-filter raw water, loading/unloading hood Containers, exchange pressure gauge, conversion chlorine dosing, installation of test taps, construction of a dam, construction of the main supply line and distribution system, construction of a protective roof and construction of public taps.²⁰

Optimization II was realized between November and December 2016. It was during this phase that the water plant was inaugurated. Here *Trinkwasser fur Kamerun* educated the council engineers on; liquid chlorine dosing, exchange of all pressure gauges, apertures for pressure change, adjustable cover for inlet control and new signage.²¹ The Bamenda III Council took care of expansion of water distribution, introduction of low water rates to finance running costs, completion of protective roof and the construction of public taps.²² This was the actual realization phase which involved the laying of the water pipeline, the installation of the filters by the German engineers accompanied by Bamenda III council technicians, the construction of stand taps in the community, regular visit from the German engineers, the construction of the 200,000litres water retention tank and the installation and maintenance of the generator for clean water flushing and air flushing.²³ This scheme was conceived in 2011, was realized in September 2015 and inaugurated in December 1st 2016. At inauguration, the project was presented to the Mayor and 1st Deputy Mayor of Bamenda III Council by the German partners.²⁴ (See picture 2)

Optimization III took effect from April 2017. At this point *Trinkwasser fur Kamerun* was charged with filling anthracite into all the three sand filters or boilers because the initial filling was too low, conversion of flocculants dosing to smaller pumps, improvement Pre-filtration flocculation, renew the inlet strainer dam, maintenance, review and training.²⁵ While Bamenda III Council focused on expansion of water distribution and construction of public taps. April 2017 was equally the 4th optimization level with installing flushing air devices, constructing compressed air storage, extensive cleaning and disinfection, new analyzers (and replacement devices), introducing log books, training and improvement of problem-solving skills. Meanwhile the Council continued to expand water into the quarters and trained personnel to work in the water Department that had been created.

The Bamenda III water scheme moved from the Optimization level to the Expansion level. Expansion started in 2018 with the construction of a second reservoir to support the existing one. This was the second phase of the project. During this phase, *Trinkwasser fur Kamerun* installed a flushing container for clear water flushing with a generator flushing pump, shipping of blowers from *Trier* to Bamenda, supply pipes for the flushing container and the new reservoir, delivery of spare parts and tools, training for clear water flushing, optimization of the plant to increase performance by 30% to 40m³/h, delivery of spare part tools and setting up spare parts and tool storage. The council at this Expansion stage continued the construction of the new reservoir, construction of a fence at the plant, construction of a pumping station, construction of public taps and expansion of water distribution.²⁶

In the wake of the establishment of the water scheme, water distribution points were set up within the municipality to serve the community and solve the problems of water shortage that existed before this scheme came into place. This water scheme was expected to serve an amount of 105,000 users (estimated population 200,000 people).²⁷ The volume of water reservoir as at construction was 280,000 liters which can supply 40,000 liters of water per hour.²⁸ This was expected to serve about 38,000 people per day.²⁹

The water project was happily received by the community as it came as a relief to solve their water problems. The Mayor went around the community sensitizing and inaugurating the public taps. Public taps were inaugurated in Nkeung, Namoh, Ntamuche, Ntaghem, Ntambessi, Nkwasi, Ntahkekah and Ntenenene. Apart from ensuring access to pipe borne water, the project was the main incoming generating source of the council in the midst

²⁰ Ibid, 5.

²¹ Ibid, 6.

²² Cletus Fonguh, Mayor of Bamenda III Council.

²³ Ibid.

²⁴ Cletus Fonguh, Mayor of Bamenda III Council.

²⁵ Gerd Muller and Eliquo KGN, "Bamenda III Council Wasserprojekt," 7.

²⁶ Cletus Fonguh, Mayor of Bamenda III Council.

²⁷ Ibid

²⁸ Ibid

²⁹ Ibid

of the on-going crisis.³⁰ It was later realized that the water supply was insufficient to meet the need of the inhabitants of the municipality. Hence there was the need for the construction of a second water tank to meet up with the demand. This was done during the second phase of the project as mentioned above. As such a second tank with a capacity of 200.000litres was constructed and this led to the increase in production capacity of about 40.000litres per hour. This increase was aimed at enhancing water supply within the neighborhoods.³¹

The source of the Bamenda III water scheme was at a waterfall located at Menteh quarter. This fall originated from a spring at the boundary of Ndzah and Awing villages some 60kms away from the council water.³² The distance of pipeline from the catchment point to the treatment center was 1.8km. This purification plant constituted three sedimentations that were constructed on a basement plate.³³ The production capacity of each of these filters was 8m³ making a total of 24m³. These filters produced 450liters of water per minute, 27000liters per hour and 648000liters of water per day as of total production at zero consumption.³⁴(See Picture 1)³⁵

Picture 1: Bamenda III Water Purification Plant



Source: Author's collection, January 6th 2022.

The task of the Germans ended at the purification plant. The distribution of water from the plant to the communities was the sole responsibility of the council. As far as distribution was concerned, the network ran through several quarters (Menteh, Nkeung, Namoh, Ntamuiche, Ntahkikah, Ntaghem 1, Nkwasi, Netene-Netene, Ntaghem 2, Neberi, Upper Bayelle, Bayelle 3, Alahlie and Nkwashi).³⁶ Most of the quarters were provided with stand taps from which the people benefitted directly especially those who were not able to connect their houses to the water system.

³⁰ Eric Azefer, Chief Service engineer for water project.

³¹ Ibid

³² Eric Azefer, Chief Service engineer for water project.

³³ Ibid.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ita Wanka, Service Head of the Water Department Bamenda III council.

Statically, the municipality had 7 stand taps and about 800 homes were connected with water.³⁷ Carrying of drinking water in bottles was free but a token of 25 FRS had to be paid for a 20litres container upon carrying.

The council authorities led by the Mayor carried out a sensitization tour and quarter committees were created. The aim for creating these quarter committees was to bring the council closer to the people as far as this project was concerned. For those who wanted to connect to the system, they had to request through this committee and the committee will in turn go to the council and table the application. At the level of the council, the technical services did the costing and the household was connected to the water system.³⁸ The engineers equally took charge of the broken pipes or other causes as to why the water was not flowing.

Inauguration of the Bamenda III Water project

The Bamenda III Council water project was a success story of development aid through funding from the Trier City council in Germany.³⁹ At the inauguration ceremony, the national anthems for Cameroon and Germany set the tone for the inauguration of the Bamenda III council giant project which featured on most lips as the project of life for inhabitants that have suffered water crises in the municipality. International cooperation was thus evident at the inaugural with a strong presence of Germans led by the Counselor at the Embassy of the Federal Republic of Germany, Lars Gerit Loymann and a representative of the council of Trier, Christian Girvidt. (See Picture 2)⁴⁰ On December 1, 2016, in the neighborhood of Menteh, the Bamenda III purified water scheme was launched with the hope to reduce water borne diseases to a minimum.

At the inaugural ceremony, the Mayor of Bamenda III council, Cletus Fongu sounded off that the project was a dream come true with some 8000 consumers already being served by the pioneer public taps. He revealed that the project also came with job opportunities for some 100 youths and cheered the Ministry of Territorial Administration and Decentralization and the Ministry of Finance for introducing the process and exonerations that facilitated the clearing of project equipment from the Douala Sea Port. The Mayor went further to reveal the transfer of technology from Germany to Bamenda and availability of spare parts that guaranteed the sustainability of the water project.⁴¹

Envoys from the German Partners, Christian Girvidt and Lambert Akungha (See Picture 2) expressed joy for extending technical knowhow to give the inhabitants of Bamenda III a chance to have constant reliable drinking water. North West Regional Governor, Adolphe Lele Afrique was present with administrative blessings. He saw the project as laudable and falls among the first fruits of Cameroon's decentralization process.⁴² At inauguration, the water scheme had the following infrastructure; one stream catchment at Nifi stream at Menteh, three sand filters, one storage tank at Njeung and six public taps. Some quarters like Nkeung, Namoh, Ntamuche, Ntahkika, Ntaghem were served by the water scheme.⁴³

Picture 2: Inauguration of the Bamenda III Water Scheme

³⁷ Eric Azefer, Chief Service engineer for water project.

³⁸ Eric Njumbam, Water Committee head for Ntaghem one quarter, interviewed by Cynthia Ginje Nchukwi on November 9th, 2021.

³⁹ Cletus Fonguh, Mayor of Bamenda III Council.

⁴⁰ "Cameroon, Germany celebrate purified Bamenda III water project" *Ocamer* ocamer.org (Accessed on April 3rd, 2022)

⁴¹ Cletus Fonguh, Mayor of Bamenda III Council.

⁴² "Cameroon, Germany celebrate purified Bamenda III water project" *Ocamer* ocamer.org (Accessed on April 3rd, 2022)

⁴³ Dieudonne Funwie, Bamenda III council Council Development Officer.



Source: Bamenda III Council archives

Challenges

The water project faced a number of setbacks both at the council and community level. At the level of the council, the major complain was the attitude of the people towards payment of bills. The people did not pay bills on time and this hindered the functioning of the project. Through these bills the council was able to do repair works but without money very little could be done. The nonpayment of these bills led to disconnection of water and payment of fines which caused tension between the clients and management.⁴⁴ It would have been better if the council created payment units within the municipality to aid these payments. Likewise, the computer in the water department was constantly breaking down. This computer had all registered clients and their monthly payments. It was also with this computer that receipts were printed upon payment of water bills. This constant breakdown slowed down the bill payment process and work at the Water department as a whole.⁴⁵

Other challenges at the level of the council were; the area covered by the water scheme was limited compared to areas that were in need of potable water in the municipality. The water pipes suffered from constant breakages and this was one of the main reasons why the community had to go without water for several days and weeks. This was mostly due to deviant behavior by some indigenes and construction works. When asked why the council could not make use of metallic pipes, the engineer revealed the metallic pipes were not health friendly and those that were health friendly was too costly for the council to afford. Fueling the council pick up vehicle for intervention was a hindrance to the smooth functioning of the water project. There was the absence of masks and goggles putting workers at risk when using chemicals. Limited access to these tools caused some workers of the Water department to use their personal tools for official work.⁴⁶

Focus group discussion from the various quarters benefiting from the water scheme was that, water flow was not constant. Through the water committee in the quarters, complaints were made but nothing was done to remedy the situation. The council had assigned the engineers to the various quarters but these engineers will never answer our phone calls or come to our rescue, the system is bad and not better than CAMWATER.⁴⁷ A resident of Ntakekah neighborhood complained that water was connected to her house but it flowed just for a month and never flowed again despite the huge sum of money they paid to the council.⁴⁸ Several attempts to get in touch with the council to

⁴⁴ Eric Azefer, Chief Service engineer for water project.

⁴⁵ Ita Wanka, Service Head of the Water Department Bamenda III council.

⁴⁶ Eric Azefer, Chief Service engineer for water project.

⁴⁷ Focus group discussion.

⁴⁸ Judy Tamfu, resident Ntakekah in Bamenda III council

check the situation, has yielded no fruits. She revealed that the engineer assigned to the quarter and those in the office of the Water Department in the council did not respond to their complaints. Also, the council abandoned some stand public taps in the quarters. Findings from the field indicted that most of the stand public taps were nonfunctional. And the joy with which the people received the water scheme was no longer felt. This situation frustrated the people of the area who depended on these taps for their water needs. (See picture 3)

Picture 3: Abandoned stand tap at Foncha Street, Bamenda III Municipality.



Source: author's collection November 20th 2021.

The picture portrays the appearance of an abandoned and non-functional public tap in the Bamenda Municipality precisely at Foncha Street, Virgin Land. The installation of this tap was a huge relieve to this quarter which in the past was at the mercy of CAM WATER. There were several households in this area that had gone for over two years without tap water running their houses. Those who could afford resorted to drilling boreholes and wells in their houses. Those who could not afford had to go for long distances out of the quarter to buy water. The head to the tap got bad and the service stopped functioning. Several complaints from the community to the council about the situation of the tap fell on deaf ears. **Conclusion**

Emerging from the background of the prevailing water crisis in the Bamenda III Council area, the council in partnership with *Trinkwasser für Kamerun* constructed a purified water scheme that would collect, treat and distribute potable water to the people of the municipality. The project was executed in two phases. The first phase from 2012 to 2017 and the second phase commenced from 2018 to 2019. The giant project was inaugurated on December 1, 2016 and was well received by the community. The people saw the water scheme as a panacea to the water crisis that had gone on for too long. However, some challenges at the council and community level affected the smooth function of this water scheme. The paper hereby submits that the failure of the water scheme to provide water to the community lies at the level of the council.

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