The influence of Socio-Political Factors on Public Policies for the Supply of Drinking Water in the North-Cameroon Region.

Pascal Ngouo¹, Maurice Wedjou Ndjouma, Ph.D.²

¹,²ICT University

Abstract
Access to drinking water is today an international emergency because of multiple challenges such as the management of the Covid-19 crisis, global warming, the protection of biodiversity, etc. According to UNICEF, the lack of access to water remains the leading cause of death in the world. Faced with this challenge, Cameroon has committed its DSCE to continue its reforms to improve the management of water resources and the implementation of drinking water supply programs throughout the country. Tested by the facts and despite many investments in this sector, the lack of access to drinking water is still glaring among our populations and in particular that of the Sahelian region of the North. Our study aims to explore the influence of socio-political factors in the supply and distribution of drinking water through wells and boreholes in the department of Mayo-Louti. Based on an inductive approach and using the qualitative research method, it is underpinned by the ontology of heuristic subjectivity. The sample is structured in 4 focus groups of 3 respondents each which give a total of 12 participants. These foci are the female, the community leaders, the youth, and the policymakers. However, the sample size is determined theoretically by the saturation point following the principles of grounded theory and the data is analyzed using the process of open coding, axial coding, and selective coding. The study shows the influence of determinants such as drought, demography, housing development, partisan politics, and health on the policy of supply and distribution of drinking water in the community of Mayo-Louti. Furthermore, the research work proposes an inclusive and sustainable model for setting the agenda for water points which is based on the ethical collaboration of all stakeholders in a process of development education.

Keywords: socio-political factors; Public policy; Water supply; North Cameroon

1.0 Introduction
Dublin Declaration (1992) mentioned that one in five inhabitants of the planet does not have access to water and one in three has good water. Faced with this challenge, the international community has set out to guarantee everyone's access to water through the Sustainable Development Goal-6 (United Nations, 1992), which has indirect impacts on other areas. Similarly, an International Decade for Drinking Water and Sanitation (DIEPA) was adopted with some objectives going in the direction of reducing the water deficit in rural areas and the integrated management of water resources for sustainable development (African Development Bank, 2010).

To respond to this emergency, Cameroon adheres to the recommendations of the World Summit on Sustainable Development Goals (SDG) and retains in its DSCE, the water sector as one of the priorities to increase the access rate of 45 to 75% water (MINEPAT, 2006). In addition to the documents reorganizing several articles have been rectified including, Law No. ° 2004/17 of July 22, 2004, on the orientation of decentralization; Law N ° 2004/017 of July 22, 2004, on the orientation of decentralization; Law N ° 2004/017 of July 22, 2004, on the orientation of decentralization; Law N ° 2004/018 of July 22, 2004, setting the rules applicable to the municipalities and Law N ° 2004/019 of July 22, 2004, setting the rules applicable to the regions (MINEPAT, 2006). Despite these efforts, the results of the survey carried out by the National Statistics Institute still note a glaring lack of drinking water with, 50% of households not having drinking water in disadvantaged communities.
2.0 Literature review
This study talked of 3 major key terms including the socio-political factors, the public policy, and the water supply, which are all reinforced by the agency foundation and the Theory of Utilitarianism. The Agency theory is premised by Michael C. Jensen and William H. Meckling (Jensen & Meckling, 1976). This theory defines a contract by which a top manager shares some of his tasks or responsibilities with his intermediate collaborator. In return, this particular agent must report to him with effectiveness and adequacy. In our study and based on the decentralization’s form of the state, the top manager is the state holding the resources, and the intermediate manager of the local communities who receives the powers to act on its behalf (Jensen & Meckling, 1976). On the other hand, the Theory of Utilitarianism is premised by Geremy Bentham (Bentham, 1948) and developed by his follower John Stuart Mills (Mill, 1962). This theory prescribes to act in the perspective of maximizing the well-being of the greatest number of people. Thus, the variable contribution to general utility becomes an indicator of the moral value of a specific action. In this study, the Theory of Utilitarianism invites the decentralization leaders to focus on the principle of the well-being of the populations (Mill, 1962).

3.0 Methodology:
This inductive research work is based on the qualitative research method and underpinned by interpretivism epistemology (Bujold, 2018). The data collection is through interviews which include 12 respondents divided into 4 focus groups. The research work is taking place in the Mayo Louti Division in the North region of Cameroon. The analysis focused on the 3 pillars of the grounded theory including open coding, axial coding, and selective coding. The level of saturation appeared when there are no new emerging codes or opinions. (Corbin, Juliet, & Strauss, 1990). The reliability and validity of results are tested by referring to the criteria of credibility, conformability, dependability (contingency), and transferability. The study adopts a case investigation model (Tiberghien, 2012).

3.0 Analysis of the Data Collected and Presentation of the Results
The analysis is done following the three phases of the Grounded Theory including the open coding, the axial coding, and the selective coding for the influence of socio-political factors on the supply of drinking water in the Mayo-Louti Division.

3.1 Open Coding of the social factors that influence the Supply of Drinking Water in the North-Cameroon Region.
The first phase consists in taking the keywords of each interviewee about the socio-political factors that influence the water supply as indicated in Table 1

Table 1: Open Coding of Social Factors

| FG | Categories | Abbr | Codes / Descriptive / Narratives |
|----|------------|------|----------------------------------|
| 01 | Drought    | DRO  | [---] Scarcity of water in the village due to the very long drought |
|    | Health     | HEA  | [---] The use of surface water which is polluted |
|    | Demography | DEM  | [---] The Demographic pressure due to the growth of the population. |
| 02 | Development| DEV  | [---] The authorities want to develop the area |
|    | Demography | DEM  | [---] Several conflicts are occurring between agricultural and pastoralists. |
|    | Health     | HEA  | [---] The presence of diseases due to the lack of clean water. |
|    | Drought    | DRO  | [---] The suffering of the population to raise animals in the dry season |
| 03 | Drought    | DRO  | [---] Deforestation implies the lack of sufficient water for the population. |
The economic growth is due to the increase of social infrastructures such as markets.

Assistance for nutritional needs and sanitation.

The lack of water to build houses.

The need of respecting the Covid-19 barriers measures such as washing hands.

The table above presents 4 determinants that influence drinking water supply policies in the Mayo-Louti division including Drought, Health, Development, and Demography. These factors are further structured in the axial coding below.

### 3.2 Axial Coding of the social factors that influence the Supply of Drinking Water in the North-Cameroon Region.

The axial coding consists of grouping the codes that express the same thing to form a single category.

#### Table 2: Axial Coding of Social Factors

| Questions                                      | Categories | Narratives / Descriptions / Codes                                                                 |
|------------------------------------------------|------------|---------------------------------------------------------------------------------------------------|
| What are the social factors that influence     | Drought    | --- Scarcity of water in the village due to the very long drought.                                 |
| the Supply of Drinking Water in the North-     |            | --- The suffering of the population to raise animals in the dry season.                           |
| Region of Cameroon?                            |            | --- Deforestation implies the lack of sufficient water for the population.                         |
| Health                                         |            | --- The use of surface water which is polluted.                                                    |
|                                                |            | --- The presence of diseases due to the lack of clean water.                                       |
|                                                |            | --- Assistance for nutritional needs and sanitation.                                               |
|                                                |            | --- The need of respecting the Covid-19 barriers measures such as washing hands.                   |
| Demography                                     |            | --- The Demographic pressure due to the growth of the population.                                 |
|                                                |            | --- Several conflicts are occurring between agricultural and pastoralists.                         |
| Development                                    |            | --- The authorities want to develop the area.                                                      |
|                                                |            | --- The economic growth is due to the increase of social infrastructures such as markets.          |
|                                                |            | --- The lack of water to build houses.                                                             |

By looking at the table above the determinants that mostly influence the supply of drinking water in the Mayou-Louti division include Health followed by drought, development, and demography. These factors are distributed throughout the different focus groups in the selective coding table below.

### 3.3. Selective Coding of the social factors that influence the Supply of Drinking Water in the North-Cameroon Region.

The selective coding represents the distribution of all the social factors generated from the open and axial coding are health, drought, development, and demography. These determinants are dispersed across the focus groups including Females, Community Leaders, Youth, and Policy Makers.

#### Table 3: Selective Coding of Social Factors
| Themes  | FGI | FGII | FGIII | FGIV |  |
|---------|-----|------|-------|------|---|
| Health  | 1   | 1    | 1     | 1    | 4/4 |
| Drought | 1   | 0    | 1     | 1    | ¾  |
| Development | 1 | 1    | 0     | 1    | ¾  |
| Demography | 1 | 0    | 0     | 1    | 2/4 |

Memo: Based on the table above, it is observed that 4 focus groups out of 4 shows that Health constitutes the major determinants that influence the issue of supply and drinking water in the Mayo-Louti Subdivision, North-Region of Cameroon. However, 3 focus groups [75%] mention that drought and Development are also the factors that impact the supply and drinking water. Finally, 50% of the focus groups agree on demography being another cause of supply and drink water in the Mayo-Louti.

Figure 2: Modelling a Framework for the Social Factors of Drinking Water

4.0 Discussion and Conclusion.
Based on the grounded theory analysis several factors influence the public policy of drinking water supply in Mayo-Louti, region of North Cameroon. The study revealed that the health factor is the main source in motivating the governors to place a water point in this locality. Additionally, this research work enables scientists to develop an inclusive and sustainable model for the construction of the agenda and political management. Similarly, (Miller & Wyborn, 2020) added that co-production including social factors of drinking water constitutes one of the most valuable contributions in theory and sustainable development. Also, It is necessary to mention that the different strategy programs including the Agenda 2035 in Cameroon (Ministry of Economy, Planning and Regional Development, 2009), the Agenda 2063 promoted by the African Union (African Union Commission, 2015) and the sustainable development goals of the United Nations (United Nation, 2015) which are all fighting against poverty in disadvantaged communities believe that controlling social factors such as health, drought, development, and demography may play a major role in eradicating this issue. This strategy of co-production allows the population to master the concept of participatory development, the basis of effective decentralization, and to empower town hall officials on managerial tools and techniques to maximize the well-being of the greatest number in this context of Covid-19, where water is an absolute necessity.

Reference

1. African Development Bank. (2010). RURAL DRINKING WATER SUPPLY AND SANITATION PROJECT. Yaounde: AFRICAN DEVELOPMENT FUND.
2. African Union Commission. (2015). Agenda 2063: The Africa We Want. Addis-Abeba: African Union Commission.
3. Bentham, J. (1948). An Introduction to the Principles of Morals and Legislation.
4. Bujold, M. (2018). Les défis des méthodes mixtes en sciences sociales et science de la santé.
5. Corbin, Juliet, & Strauss. (1990). Basics of qualitative research. Grounded theory. Procedures and techniques. Sage Editions.
6. Jensen, M., & Meckling. (1976). A Theory of the Firm: Governance, Residual Claims and Organizational Forms. Journal of Financial Economics.
7. Mill, J. (1962). On Liberty, in Utilitarianism.
8. Miller, C., & Wyborn, C. (2020, November). Co-production in global sustainability: Histories and theories. *Environmental Science & Policy*.
9. MINEPAT. (2006). *Vision 2035*. Yaounde: Minepat.
10. Ministry of Economy, Planning and Regional Development. (2009). *Cameroon Vision 2035*. Yaounde.
11. Tiberghien, P. V. (2012, Juillet-Août-Septembre). La démarche d'investigation dans le cadre des nouveaux programmes de sciences physiques et chimiques: Etude de cas au collège. Retrieved Août 28, 2020, from Revue française de pédagogie: http://journals.openedition.org/rfp/3810
12. United Nation. (2015, September). 17 goals to transform the world for persons with disabilities.
13. United Nations. (1992). *The Dublin Statement on Water and Sustainable Development*. Dublin: UNITED Nations.