



RESEARCH ARTICLE

LOCAL WATER COMMITTEES: AN AGRICULTURAL ALTERNATIVE IN BURKINA FASO

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ABSTRACT

Background: Water resource governance is a major concern, as access to drinking water, agricultural water use, and water pollution are all challenges facing Burkina Faso. Consequently, initiatives have been implemented to enable communities to manage water resources autonomously in the High Comoé sub-basin, such as the Local Water Committees (LWC). However, farmers are placing pressure on available water resources. **Objective:** This study aims to contribute to the management of water resources for agricultural production by strengthening local water committees in the context of climate change. **Methods:** The study employs a mixed-methods approach, combining a quantitative survey of agricultural users with a qualitative survey of key informants. **Results:** The study reveals the complexity of local dynamics in the selection of executive committee members for the High Comoé Local Water Committee (HC-LWC) and the involvement of stakeholders in its operations. As a result, several challenges and difficulties coexist. These include challenges related to operations, funding, and the organization of stakeholders. **Conclusion:** The sustainable management and operation of the HC-LWC necessarily require dialogue and capacity building in terms of training and equipment. It is through these efforts that stakeholders will be able to make this LWC a viable agricultural alternative for producers.

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INTRODUCTION

Erratic rainfall and the growing number of farmers in Burkina Faso today are major contributors to the threat to water resources, leading to their degradation due to human activities (Siri, 2023). However, socioeconomic activities such as agriculture, irrigation of farmland, vegetable farming, livestock raising, and fishing depend on water, which is considered the primary resource but is, unfortunately, becoming scarcer by the day and year after year (Vachon, 2003). Faced with this challenge, the fight against poverty and the pursuit of food and nutritional security require policymakers to incorporate sustainable water resource management into agricultural development policies. While the basic water needs of humans and animals are minimal, the production of food and fiber crops requires a significant portion of water withdrawals—estimated at 70% of the total water volume in aquifers, rivers, and lakes (FAO, 2011). According to the FAO (2005), we are witnessing steady population growth and changing consumption patterns, leading to an increase in water demand. This trend could increase pressure on natural resources, particularly water resources. It is for this reason that Integrated Water Resources Management (IWRM) has been adopted as a method for the sustainable management of water resources. IWRM is a process that promotes the coordinated and

collaborative development and management of water and land resources with a view to ensuring their long-term sustainability for the benefit of various users. Thus, its primary objective is to adapt to the national context and comply with the guidelines defined by the Burkinabe government while respecting internationally recognized principles regarding the sustainable and environmentally sound management of water resources (Ministry of the Environment and Water (MEE), 2001). Furthermore, the overexploitation of water resources and the resulting conflicts among users have led authorities to adopt a participatory approach to water resource management by empowering local communities (Gohourouet *al.*, 2020). Indeed, the government of Burkina Faso has established the LWC, which serve as the building blocks for local management of water resources and water infrastructure (Walaszek, 2012). However, it is evident today that the High Comoé sub-basin faces several problems, including insufficient water for crops, pollution, and conflicts among users. Thus, it is worth asking: What are the achievements and challenges faced by the LWC in the High Comoé sub-basin? The LWC are able to carry out activities that facilitate farmers' work but face several challenges that they struggle to overcome. The objective of this article is therefore to highlight the achievements of the LWC-HC as well as the challenges they encounter on a daily basis by drawing on Callon (1986) Actor-Network Theory (ANT).

METHODOLOGY

Study Area: The study was conducted in the High Comoé sub-basin in the municipality of Banfora, Tannounyan Region (Burkina Faso), an area located between the waterfalls (10°43'26.43"N and 4°49'22.31"W) and the village of Diarabakoko (10°28'10.31"N and 4°46'45.16"W), spanning a length of 17 km (NISD, 2022). The High Comoé sub-basin is located in the northern part of the management area of the Tannounyan (formerly Cascades) Water Agency. It covers an area of 1,928 km², representing 10.94% of the total area of the national Comoé basin. It extends between latitudes 10°30'N and 11°10'N and longitudes 04°10'W and 05°20'W. This sub-basin corresponds to the area of jurisdiction under the authority of the LWC-HC, established on March 5, 2008, by a joint decree of the governors of the Tannounyan and Guiriko regions (formerly Hauts Bassins).

Sampling and Sample: The simple random sampling method was used to select the quantitative sample for the study. It included all farm managers in the Karfiguéla Plain and those located along the Comoé River, in accordance with the principle of representativeness. The sample size was determined using Rea's (1997) statistical formula for sample size calculation, based on:

- the sample size for the study;
- the number of vegetable farmers and rice farmers using the Comoé River as a source of irrigation for their crops during the dry season;
- the proportion of people growing rice on the Karfiguéla developed plain and growing vegetables along the sub-basin using water from the Comoé River. P was assumed to be 0.5.
- the value associated with the confidence interval. For this study, it is equal to 1.96 for a 95% confidence interval;
- the sampling error margin (7%).

The sample of respondents was drawn from a total population of 2,495 producers. Calculations resulted in a total sample of 182 producers, including 30 women. Producers were selected using simple random sampling without replacement from an Excel 2016 spreadsheet, based on lists of farmers obtained from technical services. To do this, a number was assigned to each name, and for each number drawn, the corresponding name was added to a list until 182 names were reached. The 182 producers were distributed proportionally based on the number of farmers in the Karfiguéla plain and the market gardeners in the sub-basin (Table 1). This sample was supplemented by six (06) key informants from technical and advisory support services. They were selected using a reasoned approach based on the diversity of their profiles and roles within the broader water sector. To this end, the Cascades Water Agency (CWA) was consulted given its level of involvement in the sub-basin's water management. This choice was driven by the need to reinforce the results obtained from producers through the insights of resource persons, who typically possess more in-depth knowledge of integrated water resources management and a thorough understanding of certain local realities. These included advisory support officers, technical services, and Comoé Sugar Company (CSC); the former were responsible for technology transfer regarding good governance, best agricultural practices, and water resource management, while the latter managed the

Moussodougou, Toussiana, and Lobi dams, which serve as reservoirs for the Comoé River. For data collection, certain tools, such as a questionnaire and an interview guide for the target population, were developed and administered in accordance with standard techniques for conducting questionnaires and semi-structured interviews. Once the data were collected, they were systematically processed according to their nature. Quantitative data were processed using Sphinx Plus 2 (V.5) software and the Excel 2016 spreadsheet program from Microsoft Office, while qualitative data were processed by grouping the discourse into thematic categories to identify recurring themes and classify them for analysis. As for the analysis, it was conducted using descriptive statistics and content analysis (Wanlin, 2007), the latter of which involves «*a set of increasingly sophisticated and constantly improving methodological tools applied to an extremely diverse range of 'discourses' based on both deduction and inference*».

Analytical Approach: This article uses the analytical concept of ANT. ANT also known as the sociology of translation, is a theory that straddles the fields of sociology and management science. It was developed in the 1970s by scholars such as Callon, Latour, and Akrich and is used to explain processes of change in society, particularly innovations. It offers a fresh perspective on organization by emphasizing the interrelationships and connections established between heterogeneous entities both human and non-human (referred to as actants), which gradually form a network that gives rise to a new collective embodying a change or innovation (Callon, 2006). In the context of our study, this theory helps us understand the functioning and achievements of the LWC-HC, which can be viewed as a collective that has led to innovation in water resource management within the framework of IWRM. ANR is first and foremost a method «designed to track collectives in the process of formation» (Callon, 2006). It requires a diachronic, longitudinal approach in which knowledge, its construction, dissemination, and appropriation, plays a central role. Callon and Latour (2006) have shown that the success of innovations depends on the success of a novel partnership among multiple and diverse actors. From this partnership, and from the mobilization and cooperation of all actors, a network and a dynamic of production will emerge, resulting in the efficiency and success of the process. Applying the ANR framework to the study of this process of establishing the LWC in water management, to paraphrase Van Der Yeught (2016), amounts to examining the dynamics of mobilization within the network of actors (human and non-human) that takes shape as the process progresses.

RESULTS

This section summarizes the results of this study. It has provided insight into the activities of the LWC-HC in its role of preserving and sustainably managing water resources, its operational mechanisms, and the challenges it faces.

Governance of the LWC-HC

The LWC-HC and its area of jurisdiction: According to available information, the LWC-HC was established on March 5, 2008, by joint Decree N° 2008-07/RCAS/CR/SG issued by the governors of the Tannounyan and Guiriko regions (LWC-HC, 2008). Its area of jurisdiction covers the northern part of the High Comoé sub-basin, which is part of the CWA's

Table 1. Sample obtained

Site production	Target Population	Proportion (%)	Sample size		
			M	F	Total
Karfiguéla Plain	787	31,87	48	9	57
Vegetable farming along the Comoé River	1708	68,13	104	21	125
Total	2 495	100	152	30	182

Table 2. Challenges related to LWC-HC

Problèmes	Causes
Insufficient irrigation water (82.4% of respondents)	High number of users, low water flow supplied by CSC, limited capacity to mobilize water, and a lack of equipment (ADCP, current meters, etc.) for measuring flow rates at different levels; lack of vegetable garden wells and boreholes; and failure to utilize lake water
Low level of stakeholder engagement	Lack of communication with grassroots stakeholders
Low implementation rate of activity programs	Insufficient financial and logistical resources
Low field output	Insufficient logistical resources and fuel
No data archiving	Lack of office space and computer equipment for storing LWC-HC data; the mobility of certain members of the executive committee
Employee mobility	Empowering public administration employees
Insufficient leverage	Limited capacity of the water police; limited capacity of the LWC-HC to enforce compliance with the sub-basin right-of-way
rowing expansion of vegetable farmland in relation to water availability	Profitability of market gardening, availability of water from the sub-basin, use of agricultural land by CSC, low employability of young people
Unregulated use of pesticides	Low levels of training and awareness among users, combined with easy and affordable access
Low level of community ownership of IWRM at the grassroots level	High demand for water from farmers, poor production practices, poor grazing practices, and insufficient awareness and training for users regarding the importance of IWRM
Low rates of FCW payments and participation in community projects by business owners	The discouragement and frustration of some users

management area. With an area of 1,928 km², the sub-basin straddles four provinces: Comoé, Léraba, Kéné Dougou, and Houet.

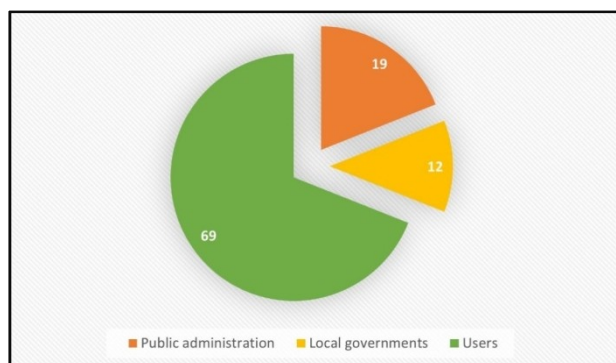


Figure 1. Proportion of LWC-HC stakeholders

Organizational Structure of the LWC-HC: According to the study's findings, the LWC-HC is organized around a small executive board of seven (07) members and a monitoring committee of three (03) members. The members of the executive board do not receive compensation for their service. Three main types of stakeholders make up the three colleges of the LWC-HC: the decentralized administration, local governments, and water users in the sub-basin.

Surveys reveal the complexity of local dynamics in the selection of LWC-HC executive board members. In the previous executive board, the position of chair, assigned to the administration, was perceived as a power grab by the authorities. This situation consequently led to frustration and discontent among water users. Thus, in an effort to improve operations and meet users' expectations, the establishment of the new executive board in October 2022 made it possible to

address all these shortcomings regarding the composition of the LWC-HC executive board. In this regard, Mr. I of the LWC-HC stated: « *The president and vice president of the new executive board are members of the water users' association of the High Comoé sub-basin. Of the seven (07) members of the executive board, only the secretary general and the director of training, outreach, and dispute resolution are from the government. The president and vice president of the new executive board are members of the water users' association of the High Comoé sub-basin. Of the seven (07) members of the executive board, only the secretary general and the director of training, outreach, and dispute resolution are from the government.* » (Interview conducted on August 9, 2023, at the Regional Directorate for Water and Sanitation (RDWS) in Banfora). Based on the composition of the LWC-HC's stakeholders, representatives of water users make up the largest group.

They attribute this representation to the fact that they are the least mobile stakeholders and the closest to the sub-basin's water resources. They are also the most informed about on-the-ground realities and are the stakeholders whose activities have the greatest impact on water resources. They are followed in number by representatives from the administration and local governments. This distribution has the advantage of involving all stakeholders in the consensual and effective management of water. However, the larger number of representatives from the central government compared to local governments may hinder the proper functioning of the LWC-HC due to the mobility of government officials. Figure 1 shows the proportion of stakeholders in the LWC-HC. The results also show that 80.8% of respondents say they are familiar with certain members of the LWC-HC and the representatives living among them. The chair of the sub-basin irrigators' committee is himself the vice chair of the LWC-HC executive board. Additionally, 56.9% say they receive information from the

LWC-HC through the representatives. Regarding the resources available to the LWC-HC to support the various users, 74.7% responded “yes.” However, the interview with the AEC revealed that the LWC-HC lacks sufficient financial and logistical resources. Furthermore, its main financial and technical partners remain the CWA and the WKSD (Water Key to Sustainable Development).

Operations and Achievements of the LWC-HC: The LWC-HC is governed by a general assembly, an executive board, and an oversight committee. All these bodies are operational and were reappointed on October 11, 2022. Indeed, the LWC-HC is a consultative platform whose mission is to develop solutions to users’ concerns, mediate conflicts, and mobilize financial resources for the implementation of its program of activities. In line with this approach and in accordance with its bylaws, it holds its annual general meetings as well as executive committee meetings. Based on the survey results, the LWC-HC develops an annual program of activities, which is approved by the general assembly before implementation. For the 2022–2023 campaign, the program of activities that was developed included a number of major initiatives. These included activities to operationalize the LWC-HC, such as the planting of 1,500 oil palm, mango, and cashew trees along the banks of the Lobi Dam from August 13 to 15, 2023. There were also awareness-raising and information campaigns (96.2%), capacity-building initiatives (70.23% of respondents), as well as water resource management and protection efforts. At the start of each dry season, the LWC-HC invites all user representatives from the sub-basin to a meeting to provide information and allocate the available water.

An analysis of the results shows that 85.2% of respondents are satisfied with the LWC-HC’s efforts in the sub-basin. These efforts have helped regulate water distribution, reduce tensions between CSC and the irrigators’ committee, and contribute to capacity building among producers. Furthermore, 88.5% of respondents believe that the LWC-HC has contributed to an increase in agricultural production during the dry season. This outcome can be attributed to the management of water allocation and the “water rotation” schedule among users, as well as training for farmers on chemical pesticides (64.8%) and organic fertilizer production (75.3% of respondents).

Sources of funding for the LWC-HC: LWC-HC’s financial resources come from member contributions, Financial Contribution from Water (FCW) payments, and support from certain partners. On this subject, Mr. S of the CWA states: *«LWC-HC’s main technical and financial partner is the CWA, followed by the WKSD project. We support it in carrying out its program of activities.»* (Interview conducted on August 10, 2023, at the AEC in Banfora). The LWC-HC also collaborates with all users of the sub-basin, other LWC under the CWA, and LWC from other water agencies, as well as technical and security services in the region.

Multiple Challenges Hinder the Operation of the CLE-HC: Overall, the survey results reveal several challenges in the operation of the LWC-HC, as shown in Table 2.

Areas for Improvement in LWC-HC Governance: Regarding LWC-HC governance, 89.3% of respondents believe that the LWC-HC should improve its methods for monitoring the water allocated to different users. In their view, there needs to be rigorous monitoring of the quantities of water

distributed among users and ensuring that water is released from the dams. These water release rates must be monitored using hydrometric stations and instruments (Acoustic Doppler Current Profiler, current meters, etc.). In addition, 94.7% of respondents state that vegetable garden wells and boreholes should be constructed, or that water from lakes should be utilized. Finally, 87.9% of producers believe that awareness-raising and training initiatives for producers on pesticide use and the management of empty packaging should continue in order to combat water pollution in the sub-basin. Regarding the improvement of LWC-HC governance, Mr. S from the CWA adds: *«We are in the process of acquiring hydrometers to better monitor water flow rates. There is also a project to construct vegetable-farming wells to benefit the plain and the vegetable farmers.»* (Interview conducted on August 10, 2023, at the CWA in Banfora). According to Mr. K, from the department in charge of agriculture: *«We need to make better use of the water from the lakes. Building a dike around Lake Lémouroudougou could increase its water storage capacity, and this water could be used during the dry season to irrigate approximately 100 hectares of land.»* (Interview conducted on August 10, 2023, at the PDAARFin Banfora). As for Mr. O CSC, he states: *«We are currently exploring drip irrigation as an innovation in efficient agricultural water management within our organization.»* (Interview conducted on August 12, 2023, in Banfora).

DISCUSSION

Effective Water Resource Management by the LWC-HC: The LWC-HC consists of three main groups: the administration, local governments, and water users. The data on the composition of the LWC-HC are consistent with the findings of several authors who have studied LWC, such as Walaszek (2012), Somda (2017), Palé (2020), and Siri (2023). According to them, it is important to include all stakeholders in local water resource management because they are the ones closest to and most affected by the resource. In addition to these authors, the composition of the LWC-HC follows the logic advocated by the ANR. Indeed, this association of actors (agents) sharing a common challenge is, according to the ANR, the necessary step toward achieving their shared objectives (Walsh and Renaud, 2010). This composition of the LWC can be explained by the fact that Burkina Faso has adopted the IWRM approach to meet the principles of planning, equitable sharing, and sustainable, balanced, and economically rational water use. It also has the advantage of providing a better understanding of the realities faced by the various water users in the sub-basins.

The results also showed that the LWC-HC is structured around a select committee that meets regularly. This committee is responsible for implementing the LWC-HC’s programs of activities, one of whose objectives is to increase agricultural production at the sub-basin level (88.5% of respondents) by building the capacity of stakeholders (70.33%). Furthermore, farmers expressed high satisfaction with the LWC-HC’s support in water resource management (85.2%). This support has helped improve communication between irrigators and CSC, as well as among the irrigators themselves, regarding water withdrawal from the Karfiguéla Plain canal by vegetable growers. It also led to improved capacities regarding good agricultural and water management practices. This is consistent with the findings of Palé (2020) on the Karfiguéla rice-

growing plain and those of Sanogo *et al.* (2023), who discussed the adaptation strategies of irrigators in the face of water scarcity. According to these authors, this adaptation takes the form of a “water rotation” system among irrigators, the division of the five cooperatives in the Karfiguéla Plain into two groups for dry-season agricultural production, and improved communication regarding the amount of water available. Furthermore, unlike these authors, another researcher, Siri (2023), shows in his study that LWC do not enjoy the same resources and legitimacy throughout the country. He presents the case of the CLE in the Lower Bagré Watershed, which faces major difficulties in organizing community stakeholders for effective water resource management as recommended by IWRM. Information on the amount of water to be distributed is important because it allows for adjustments to the areas to be planted and helps resolve tensions between the LWC-HC and users regarding water release rates. The LWC-HC’s reports on water releases for 2019, 2022, and 2023 illustrate the gap between available water quantities and the needs expressed by users. These gaps, which are more pronounced in years of low rainfall, are exacerbated by the silting up of the country’s major waterways (Boena, 2001). In terms of the activities carried out by the LWC-HC, it is noted that the agency ensures the allocation of water among the various stakeholders during the dry season. It has raised awareness and provided information to stakeholders on water resource management in the sub-basin (96.2%) and intervenes to resolve conflicts among them. According to the same findings, tensions between irrigators and CSC have eased since this body was established. This has created favorable conditions for improving agricultural production in the sub-basin (88.5%). According to Somda (2017), the LWC are local management bodies responsible for mobilizing donations and grants to ensure their financial autonomy. The mobilization of the various stakeholders that enabled the sound management of water resources in the Comoé Basin is fully in line with the Theory of Change, which shows that the success of innovations depends on the success of an unprecedented partnership among multiple and diverse stakeholders facing a common challenge. From this partnership, along with the mobilization and cooperation of all stakeholders, a network and a dynamic of production emerge, resulting in the efficiency and success of the process (Callon and Latour, 2006).

Multiple Constraints Hinder the Functioning of the LWC:

The study’s findings revealed that, despite the existence of the LWC and the implementation of activity programs, difficulties persist. These include the LWC-HC’s limited logistical resources, the mobility of administrative staff, and the poor organization of water sector stakeholders in the sub-basin. According to Venotet *et al.* (2014), despite the existence of LWC executive boards, which are most often multiparty and meet more or less regularly, these bodies operate in isolation, with no connection to the stakeholders they are supposed to represent. This could be attributed to the disproportionate representation of government officials on the executive board, the failure to involve all stakeholders in the development of activity programs, and the lack of an effective channel for disseminating information among stakeholders. The results also showed that the LWC-HC lacks the financial autonomy to carry out its program of activities. These operational difficulties faced by the LWC are highlighted in the work of Venotet *et al.* (2014), who noted a lack of stakeholder engagement during the execution of certain projects. Similar

difficulties are also evident in the findings of Somda (2017) on the Bougouriba LWC, in the National Committee for Irrigation and Drainage of Burkina Faso (NCID-B) (2009) document on the Karfiguéla plain, and in the work of Wetta *et al.* (2017) on the “South Downstream” Bagré and “East Upstream” Ziga LWC. According to them, the main problems facing the LWC lie in technical, financial, political, and institutional governance. The LWC-HC’s limited financial resources are reportedly due to low FCW payments by water users and a lack of technical and financial partners. These findings are consistent with those of Cour (2010), who argues that problems related to the maintenance of canals and drains, as well as operators’ reluctance to pay the FCW, stem from their frustration, which has worsened over the years. The issue of dam management by CSC to the detriment of LWC-HC is highlighted in the work of Sally *et al.* (2011), who demonstrated that reservoir water resources are controlled by the dominant user. However, it is necessary to find both endogenous and policy-based solutions to enable the LWC to serve as effective and independent instruments for IWRM and water users, ensuring the effective and efficient management of water for agricultural use. To this end, 94.7% of respondents believe that other water sources should be considered, such as vegetable garden wells, boreholes, or the use of lake water. Regarding the issue of groundwater pollution, awareness campaigns and training for agricultural producers in the High Comoé sub-basin must continue (87.9%).

CONCLUSION

Conducted in the High Comoé sub-basin in the municipality of Banfora, the study focused on the roles and challenges of the LWC-HC in water resource management. Indeed, in an effort to ensure effective and efficient water resource management, LWC were established in Burkina Faso to enable local communities to participate in the management of water sources (dams, watersheds, hydro-agricultural infrastructure, etc.), which remain important sources of income for the population since they are used for agriculture, an activity that employs 80% of the population. This study therefore examined the organizational structure and governance of the LWC-HC, as well as the tasks it has undertaken. The article also highlights several challenges faced by this committee. Furthermore, it demonstrates that there are opportunities to improve water resource management in the study area. This involves enhancing the capacities of the LWC-HC and farmers to effectively address the constraints identified. Looking ahead, it would be desirable to extend this study to other LWC in order to find sustainable solutions to the governance challenges facing LWC in Burkina Faso.

Key Points: This paper has made it possible to:

- Identify organizational issues among LWC actors and stakeholders regarding water resource management;
- Highlight the need to strengthen the operational capacities of LWC members and raise awareness among LWC actors about the OHBLA law, a tool to support public administration;
- Identify the need to integrate water resource management into a public policy framework through the government’s sectoral policies.

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List of Abbreviations

ADCP : Acoustic Doppler Current Profiler
ANT: Actor-Network Theory
CWA: Cascades Water Agency
FAO: Food and Agriculture Organization
FCW : Financial Contribution from Water
IWRM: Integrated Water Resources Management
LWC: Local Water Committees
LWC-HC: Local Water Committees of the High Comoé
MEE: Ministry of Environment and Water
NCIDB: National Committee for Irrigation and Drainage of Burkina Faso
NISD: National Institute of Statistics and Demography
OHBLA: Organization for the Harmonization of Business Law in Africa
PDAARF: Provincial Directorate of Agriculture, Animal Resources, and Fisheries
RDWS: Regional Directorate of Water and Sanitation
CSC: Comoé Sugar Company
WFC: Water Financial Contribution
WKSD: Water: Key to Sustainable Development

REFERENCES

- Boena C. L'ensablement du lac-Bam : causes et conséquences (master's thesis). Ouagadougou University, Burkina Faso, 2001.
- Callon M., 1896. Elements for a sociology of translation: The Domestication of Scallops and Fishermen in Saint-Brieuc Bay. *Année Sociologique*, 36: 169–208.
- Callon M. "The Sociology of the Actor-Network." In M. Akrich, M. Callon, and B. Latour (eds.), *The Sociology of Translation: Founding Texts*, Mines school, Paris, 2006: 267–276.
- Callon M. et Latour B. « Can the great leviathan be tamed ? ». Akrich, M., Callon, M., and Latour, B. (eds.), *Sociology of Translation : Founding Texts*, 2006: 11–32.
- NCID-B, 2009. Participatory assessment and action planning for the Karfiguélairrigation district, Comoé province, Burkina Faso, 47 p.
- Cour J., 2010. Water management in the upper Comoé basin (Burkina Faso), 40 p.
- FAO, 2005. Ministerial meeting on water for food and agriculture, working paper, 29 p.
- FAO, 2011. The state of the world's land and water resources for food and agriculture. Managing systems at risk. Summary report, 52 pp.
- Gohourou F., Koffe-Bikpo C. Y. et Ahua E. A., 2020. Policy for raising public awareness of water resource degradation in the city of San-Pédro (Southwest Ivory Coast). *Journal of Geography of the University of Ouaga I*, Prof. Joseph Ki Zerbo, 22 pp.
- NISD, 2022. Fifth General Population and Housing Census (RGPH) of Burkina Faso. Summary of final results, 136 pp.
- MEE, 2001. Integrated Water Resources Management. Status report on water resources in Burkina Faso and their management framework, final version, 252 pp.
- Palé S. toward better agricultural water management using open-source remote sensing and communication platforms in Burkina Faso (thesis). University of Liège, Belgium, 2020.
- Rea L. M., 1997. Calculating sample size for a survey, Technical and methodological fact sheet, N° 4, 4 p.
- Sally H., Levite H. et Cour J., 2011. Local water management of small reservoirs: Lessons from two case studies in Burkina Faso. *Water alternatives* 4 (3) :365 – 382.
- Sanogo F., Kaboré F., Bagaya O. et Badolo Y., 2023. Participatory governance of water resources in hydraulic structures: Case studies on water allocation in the upper Comoé, Yalgo, and Kou sub-watersheds in Burkina Faso. International symposium "water, management, and development in the context of climate change." theme 2: Water governance and the role of stakeholders in hydro-agricultural development projects, Ouagadougou, January 25–27, 2023, 17 p.
- Siri Y., 2023. Conflicts over access to public drinking water services in a context of insecurity and humanitarian crisis in the urban and peri-urban municipality of Ouahigouya (Burkina Faso), *Revue Sénégalaise de Sociologie*, No. 15/October 2023, 23 p.
- Somda Y. L. Water governance in the Bougouriba 7 Local Water Committee (LWC BGB7) area (master's thesis). Joseph Ki-Zerbo University, 2017.
- Vachon N., 2003. River siltation: processes, causes, and effects on ecosystems, with a special focus on catostomids, particularly the copper minnow (*Moxostomus hubbsi*), Technical Report 16-13, 56 p.
- Van Der Yeught M., 2016. Building a 'sustainable tourism' value chain in a region: An approach based on Actor-Network Theory. *Management & Avenir*, 84, 159–177.
- Venot J. P., Torou B. M. et Daré W. "Territorialization or spatialization: local water agencies and committees in Burkina Faso." In *L'espace géographique*, 2014/2 (Vol. 43), Editions Berlin, 2014: 148–163.
- Walaszek A. "What is the appropriate scale of governance for a common good? the case of a local water committee in Burkina Faso" (master's thesis). Joseph Ki-Zerbo University, Burkina Faso, 2012.
- Walsh I. et Renaud A., 2010. A Reexamination of translation theory, or change management in translation. application to a merger and acquisition case requiring a change in the information system. *Management & Avenir*, 9(39): 283–302.
- Wanlin P. "Content analysis as a method of qualitative interview analysis: A comparison of manual and software-based approaches, 2007: 243–272.
- Wetta C., Sampana L., Kini J., Noufé T., Sna M. et Sirima V., 2017. Toward integrated water resources management in Burkina Faso, Joseph Ki-Zerbo University, in collaboration with the Overseas Development Institute, PRESA working paper, 60 p.
