

Research Application Summary

Quality and nature of partnerships in restoration efforts of Awoja watershed in Eastern Uganda
Running head: Nurturing Quality Partnerships for Awoja Watershed Restoration

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Abstract

Watershed restoration initiatives are often determined by the quality of partnerships they entail, along with factors such as institutional frameworks and the degree of community involvement. Despite a growing body of research investigating stakeholder engagement in Awoja watershed, significant gaps remain concerning the quality and nature of these partnerships. This study investigates the quality and nature of partnerships involved in restoring the Awoja watershed, situated within the Kyoga Water Management Zone in eastern Uganda. Utilizing an ex-post-facto cross-sectional research design, secondary document reviews and key informant interviews were conducted to gain insights. The findings indicate that the nature of partnerships was guided by the legal framework Farm Income Enhancement and Forest Conservation (FIEFOC) and affiliations with the International Union for Conservation of Nature for the Community Based Wetland and Biodiversity (COBWEB) project, inadvertently led to the marginalization of vital partners such as local communities. Results suggest an imperative need to enhance shared vision, accountability and effective communication to bolster the quality of partnerships for successful restoration efforts in the Awoja watershed. Furthermore, it is crucial to include key stakeholders at all stages, especially local communities, in future restoration activities within the Awoja watershed.

Key words: Community participation, Environmental Conservation, Institutional Framework, Marginalization, Social Exchange, Watershed restoration

Résumé

Les initiatives de restauration des bassins versants sont souvent déterminées par la qualité des partenariats qu'elles impliquent, ainsi que par des facteurs tels que les cadres institutionnels et le degré de participation communautaire. Malgré une littérature scientifique croissante explorant l'engagement des parties prenantes dans le bassin versant d'Awoja, il existe encore des lacunes importantes concernant la qualité et la nature de ces partenariats.

Cette étude examine la qualité et la nature des partenariats impliqués dans la restauration du bassin versant d'Awoja, situé dans la zone de gestion des eaux de Kyoga, à l'est de l'Ouganda. En utilisant une conception de recherche transversale ex-post-facto, des analyses documentaires secondaires et des entretiens avec des informateurs clés ont été réalisés pour obtenir des informations. Les résultats montrent que la nature des partenariats était guidée par le cadre juridique du projet Farm Income Enhancement and Forest Conservation (FIEFOC) et les affiliations avec l'Union internationale pour la conservation de la nature pour le projet communautaire de gestion des zones humides et de la biodiversité (COBWEB), ce qui a involontairement conduit à la marginalisation de partenaires essentiels tels que les communautés locales. Les résultats suggèrent un besoin impératif d'améliorer la vision partagée, la responsabilité et une communication efficace pour renforcer la qualité des partenariats afin d'assurer le succès des efforts de restauration dans le bassin versant d'Awoja. De plus, il est crucial d'inclure les parties prenantes clés à toutes les étapes, en particulier les communautés locales, dans les futures activités de restauration du bassin versant d'Awoja.

Mots-clés: Participation communautaire, Conservation environnementale, Cadre institutionnel, Marginalisation, Échange social, Restauration des bassins versants

Introduction

The Role and Nature of Partnerships in Watershed Management does not need to be over emphasized. The success of watershed management initiatives is closely tied to the quality of partnerships formed, an observation echoed by researchers worldwide (Diaz-Kope and Miller-Stevens, 2015; Kim and Batey 2020; Kim *et al.*, 2021). Debates on the centralization versus decentralization of water management have raged on, but partnerships remain a leading approach for environmental management in countries such as the United States and Australia (Duuren *et al.*, 2019). According to IFAD (2013), whereas partnerships encompass agreements for transparent and equitable co-operation, Quality partnerships encompass shared visions, missions, goals, structures, and processes that pave the way for successful restoration efforts (Nel and Harmer, 2004; Palmer, 2011; Benson *et al.*, 2014).

Partnerships in Watershed Restoration: The Benefits and Challenges Partnerships in watershed restoration provide an avenue to address complex challenges that single institutions often fail to navigate, including conflicts over limited resources and inadequate funding (Agranoff, 2006). The success of watershed restoration hinges on the quality and nature of partnerships (Akello *et al.*, 2017). This paper characterizes the "nature of partnership" as the engagement's typologies and processes and the "quality of partnership" as the performance indicators measured against attributes such as vision, institutional leadership, communication, collaboration, accountability, and alignment with the local context.

Gaps in Knowledge and Practice: A Focus on Awoja Watershed. While stakeholders' engagement in water resource management has been adequately studied in certain parts of the world, such as South Africa, key issues in watershed governance, such as the quality and nature of partnerships, remain underexplored (Megdal *et al.*, 2017). This gap is particularly evident in the Awoja watershed in Kyoga Water Management Zone, eastern Uganda, an area experiencing significant biodiversity loss due to pressures from increasing population and a dependence on watershed resources for survival (Akello *et al.*, 2016).

Previous restoration attempts, such as the Farm Income Enhancement and Forest Conservation (FIEFOC) and Community Based Wetland and Biodiversity (COBWEB) projects, aimed to restore Awoja watershed's ecological resilience and build capacity within the community (World Bank, 2013). However, despite these efforts, the full restoration of the Awoja watershed remains elusive (de Leeuw, 2016). This paper aims to fill the knowledge gap by testing this hypothesis, examining the nature and quality of partnerships in the Awoja watershed, which are integral to the success of restoration efforts. The study hypothesizes that the nature and quality of partnerships significantly influence the success of restoration efforts in the Awoja watershed. Specifically, we posit that a more inclusive partnership, marked by effective communication, shared vision, robust institutional leadership and strong accountability measures, will lead to more successful restoration outcomes.

Theoretical framework. Investigating the Quality and Nature of Partnerships: using Social Exchange Theory Perspective: The study's exploration of the nature and quality of partnerships in restoration efforts of Awoja watershed is grounded in the Social Exchange Theory (SET). SET, as proposed by Homans (1967), revolves around the reciprocity of social interactions. For partnerships to yield impactful outcomes, they must adhere to quality standards. SET rationalises this through the lens of self-interest in social relationships, suggesting a practical evaluation of benefits against costs (Homans, 1967; Ostrom, 2005).

Driving Quality Partnerships: Key Variables. Thibaut and Kelley (1959) suggested that the competitive dynamics of social systems influence the quality of partnerships, evident in repeated interactions among stakeholders. We assess the quality of partnerships in the Awoja watershed restoration initiative against six key variables: shared vision, institutional leadership, communication, accountability, collaboration, and capability, as identified and recommended by Behr *et al.* (2012).

Understanding Engagement. The Nature of Partnerships: The quality of partnerships can be accurately gauged through a comprehensive understanding of the nature of engagement (Diaz-Kope and Miller-Stevens 2015). This process involves acquainting with the collaborative dynamics, analysing the established partnerships and fortifying existing relations. These elements underpin our exploration of the nature and quality of partnerships in the Awoja watershed restoration, providing a robust theoretical framework for our analysis.

Materials and Methods

The study area. This study was carried out in Ngora district of Eastern Uganda. Awoja watershed was chosen because it had a high degradation rate in the last two decades of about 20%, compared to the national average of 11% (MWE, 2013). This watershed also had the highest perceived degradation rate of 76% compared to 63% from Lake Victoria crescent and 41% in the south western farmlands of Uganda (Turyahabwe *et al.*, 2013). Ngora district was preferred as a study area because it occupies a greater part of Awoja watershed besides piloting the two restoration intervention projects by Farm Income Enhancement and Forest Conservation (FIEFOC) and Community Based Wetland and Biodiversity (COBWEB). The district was also selected because its population density was 267.5 persons /Km², higher than the national average of 174 persons /km² (UBOS, 2015). Ngora district lies approximately between latitudes 1010' and 1035' North and longitudes 33030' and 34020' East (Figure 1). It covers a total area of 715.9 Km². The main water bodies in the district are; Lake Bisina and Rivers Nyaguo, Meito and Nyasala.

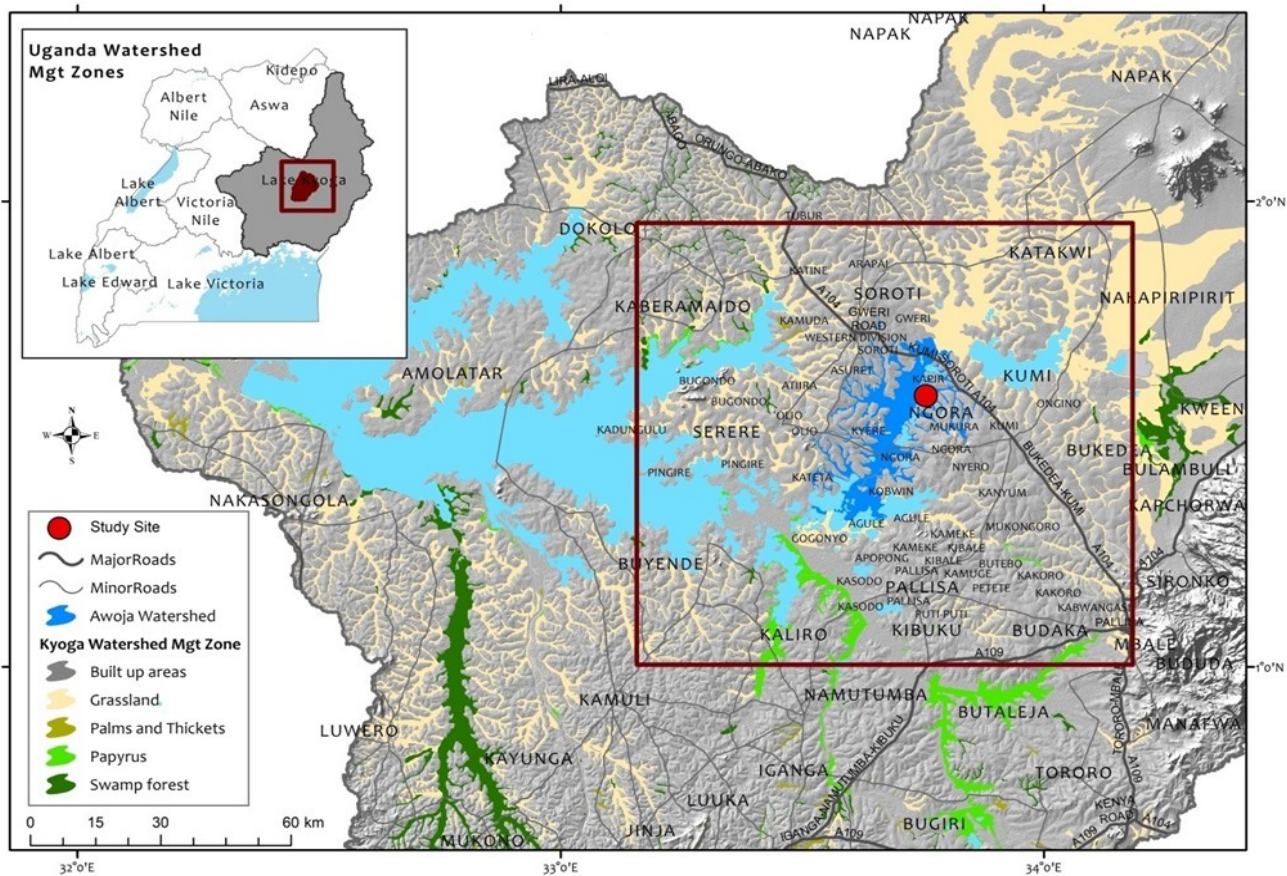


Figure 1. Location of Awoja watershed in Uganda

Research design. This study used an ex post facto cross sectional (after the fact) research design following an interpretive paradigm with qualitative data approach. An ex post facto study is often used when experimental research is not possible, such as when people have self-selected levels of an independent variable or when a treatment is naturally occurring and the researcher cannot "control" the degree of its use (Golafshani, 2003). It is very commonly used when using human subjects in real-world situations and the investigator comes in "after the fact." This design best suits investigations where an intervention has taken place like the restoration sites of Awoja watershed. The study also used cross sectional design because data were collected at one point in time (Sarantakos, 2013).

Sampling strategy and procedure. The study was undertaken in the two sub counties of Mukura for FIEFOC and Kapir for COBWEB. These were chosen because it is where the interventions were implemented. The two sub counties also had a household size of 5.3 and 5.2 respectively, which is above the country's average of 4.7 (UBOS, 2015). Two parishes of Moru-Kakise in Mukura and Omiito in Kapir were preferred because they were implementing parishes for the two interventions. The villages of Ariet and Puna in Moru- Kakise parish and; Kakor and Omiito in Omiito parish; were chosen randomly out of the eight implementing villages.

Data collection tools

Review of secondary data. An extensive review of documents was conducted to generate information on the nature and quality of partnership that operated in Awoja watershed. Documents reviewed included journal articles on watershed restorations, plans and reports on Awoja watershed, FIEFOC and COBWEB project documents, Ngora District Development Plan and the State of Environment Reports. This was helpful in generating

information on the partners involved, partnerships formation process, how they operated, the stages of the project cycle, how implementation was carried out and gaps that needed to be investigated.

Key informant interviews

Key informant interviews were held with staff of International Union for Conservation of Nature (IUCN), Nature Uganda (NU), Uganda Wildlife Society (UWS), Wetlands Management Department (WMD), National Project Coordinator and Project Manager Farm Income Enhancement and Forest Conservation Project (FIEFOC), the Principal Forest Officer in charge of Monitoring and Evaluation (M&E), Director Natural Resources (DNR) and District Forest Officer (DFO). Others interviewed included Chairmen of Kakor beach management unit of Kaping and of Moru Kakise watershed management group in Mukura. These were knowledgeable individuals who participated in FIEFOC or COBWEB project interventions.

The interviews were carried out with the aid of a KII guide and checklists. The interview guide helped to generate information on the partnerships process (initiation, actualisation, functions, capacity built and synergies established). The checklist administered on nature of partnerships generated data on need of partnerships, choice of partners, what made partnerships work, planning collaborative action, implementation, minimising partnership barriers and reflection on the partnership. This was adopted from Walker (2000), McLeod (2001), and Gillespie (2013) using a likert scale of 1 to 5 was used to ascertain the levels of agreement of the respondents interviewed on nature of the partnerships. One (1) was taken to be strongly disagree and five (5) considered strongly agree. This aggregated information scores were then computed. Another checklist was administered to assess the quality of partnerships adopted from King *et al.* (2014), based on the six key quality attributes of shared vision, institutional leadership, effective communication, accountability, collaboration and ability to fit within the local context. This was also rated on a scale of 1 to 3, where 1 was taken to mean inadequate, 2 = average and 3 = adequate. All interviews were recorded using a voice recorder and transcribed in verbatim.

Data analysis. The qualitative data generated from the key informant interviews were organised into codes to generate themes. The themes generated on the partnerships processes were guided by the social exchange theory. The data generated on the nature of partnerships were analysed by computing average scores and interpreting them. On the quality of partnerships, scores were generated, entered in an excel Programme and a graph produced. The synergies amongst the partners were established by generating a diagram so as to understand the strength of the partnerships. These were supplemented with narrative texts

Results

The study revealed distinct partnership structures for the FIEFOC and COBWEB projects. In the case of FIEFOC partnership was between the Forest Sector Support Department (FSSD) and the Ngora District Local Government (NDLG). This partnership choice was guided by a legal framework. Conversely, the COBWEB partnership involved a consortium comprising the International Union for Conservation of Nature (IUCN) members and these included, United Nation Development Program (UNDP), Nature Uganda (NU), along with two government entities, namely the Uganda Wildlife Society (UWS) and Wetland Management Department (WMD) of the Ministry of Water and Environment (2012). This partnership was primarily membership-driven within the International Union for Conservation of Nature (Table.1). This is supported by a narrative text:

“...realistically speaking hhhmmmm (hesitant to speak).....this partnership was initiated among the IUCN member organisations with an aim of demonstrating an active participation of donor implementation in a project. The funding was from GEF (Global Environment Facility), whose funds are usually implemented through agencies like UNDP. The UNDP agency was represented by IUCN that carried out the coordination of the three organisations namely NU, UWS & WMD forming a consortium of five and on the ground, Nature Uganda was the one known...” (KI Kampala, April 2015).

The Forest Sector Support Department (FSSD) functioned as a supervisory body, monitoring work executed by NDLG and engaging in donor negotiations with the African Development Bank and Norwegian funders. Despite FSSD's control over soliciting service providers, NDLG effectively managed ground-level implementation with occasional technical support from service providers hired by FSSD.

Regarding the COBWEB project, the UNDP received funding from the Global Environmental Facility (GEF), which was then administered by IUCN for executing activities. IUCN assumed a coordination role, and Nature Uganda was responsible for implementation at Kapiro. This is supported by a narrative quote.

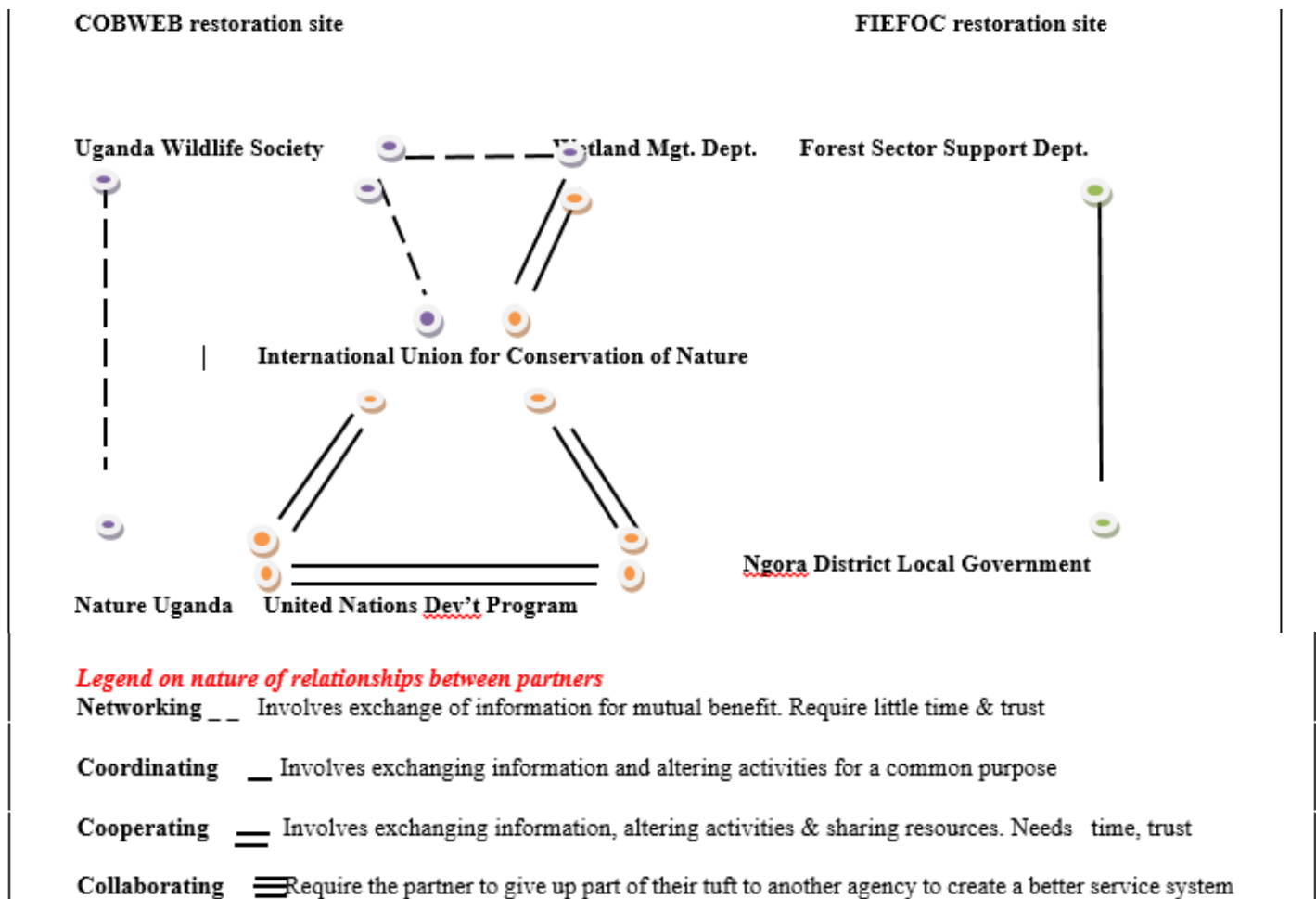
“...Ahhaaaaaaa these Nature Uganda people only got us involved (noise at the background a Ngora district local government vehicle passing) after realizing that they could not win the trust of the community without our involvement.....hhhmmmm well, even on activities like training that we could do, we only got involved once ...ahhhhh once in a while when they felt they needed us.....” (KI Ngora, May 2015).

The Wetland Management Department served a quality assurance function, bridging the gap between government and COBWEB to integrate lessons learned into government plans. The Uganda Wildlife Society also played a part in implementing COBWEB project activities.

A diagram was constructed to depict the synergies among partners, revealing variations in perceived linkage strength among them (Figure 2). An examination of the partnership process yielded five distinct themes related to the nature of partnerships (Table 2). The nature of partnerships, assessed through scoring, showed an average score of 127.4 for FIEFOC and 131.6 for COBWEB, suggesting that while the partnerships were rooted in genuine collaboration, their sustainability was uncertain.

The study also shed light on the quality of partnerships, indicating that certain attributes like shared vision in the case of (FIEFOC), and accountability, communication, and alignment with the local context (COBWEB) were rated low (Figure 3), which points to their inadequacy during the Awoja watershed restoration.

Furthermore, the COBWEB project exhibited desired qualities of institutional leadership, collaboration, and shared vision, while FIEFOC demonstrated effective communication, collaboration, accountability, and fitting within the local context. These attributes scored above average (2), signifying their adequacy for sustaining the partnerships throughout the restoration of the Awoja watershed.



Source: Himmelman (2001).

Figure 2. The linkage and strength of partnerships between FIEFOC & COBWEB partners

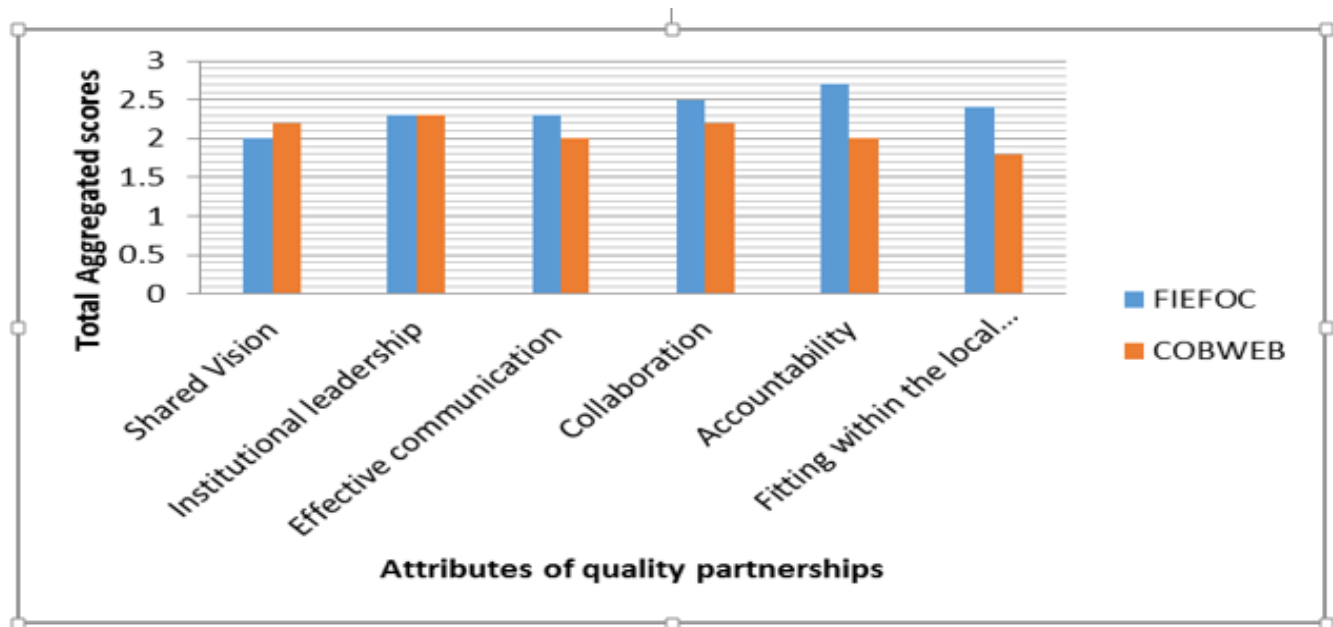


Figure 3. Attributes of quality of partnerships in the restoration of Awoja watershed

Source: Himmelman (2001).

Table 1. The various partners and their roles during the restoration of Awoja watershed

PROJECT	INSTITUTION/ ORGANISATION	PLANNED ROLE	IMPLEMENTED ROLE
COBWEB	IUCN	-Coordinate all activities -Received funds from UNDP -Part of the implementation & decision making	-Coordinated all activities -Dominated decisions making
	Nature Uganda	-Focal point at implementation	-Implemented activities
	Uganda Wildlife Society	-Part of the implementation	-Made certain decisions -Implemented very few activities
	(UWS) Wetland Management Department	-Part of the implementation -Document lessons learnt and incorporate them into the national plans	-Implemented activities -Document lessons learnt & incorporated them into the national plans
	United Nations Development Programme	-Quality assurance role -Receive funds from Global Environment Facility	-Received funds from Global Environment Facility
	(UNDP) Forest Sector Support Department	-Channeled the funds for implementation to IUCN -Supervisory	-Channeled the funds for implementation to some partners and the field -Supervised activities
	(FSSD)	-Bargained with donors on behalf of government -Source service providers	-Bargained on behalf of government -Sourced for service providers
	Ngoma District Local Government	-Timely Organisation of activities -Source service providers	-Delayed in sourcing service providers -Didn't source for service providers
	(NDLG)	-Mobilise the community for implementation of activities	-Mobilised the community & facilitated some trainings
	FIEFOC		

Table 2. Themes on the nature of partnership in Awoja watershed restoration process

Partnership Aspect	Planned activities for implementation	Kapir WEB Implementation site	COB-Imple-mentation site	Mukura FIEFOC Implementation site	Implication on restoration
Initiation	Partners involved	UNDP, IUCN, NU, WMD, UWS		FSSD & Ngoma DLG	Exclusion of 14 potential partners during the partnership process and opportunity of sharing their experiences on restoration in COBWEB on low rates of survival was missed out e.g. KUNEDO, VISION
	Typology of partners	Gov't & NGO		Gov't & Gov't	TERUDO, KULIKA
	Kind of Involvement	Voluntary		Defined by the Constitution & LG Act	FADEP, EPSEDEC, SOCA-DIDO, PAGPDS, NAADS, NDLG/S/C
	Mutual benefits derived	Institutional satisfaction		Institutional satisfaction	LG, HEIFER, IRR, PAC and OMIDI meanwhile FIEFOC excluded partners namely VISION, TERUDO, NAADS, SOCADIDO, MIDA and WAR ON WANT
					The community received training & establishment of the eco-tourism site

Actualisation	Signed document	MoU	Contract signed by Solicitor	In Kapir the contract was a social one and was not fully binding , creating a SACCO that was not part of the initial plan; So the community did not acquire enough training on how to sustain the funds with very low loan replenishment cited and illegal harvests re-emerging
	Decision making	Mainly IUCN	By FSSD	
Functions	Specific Defined roles	Dominance by Nature Uganda	Contracted Consultants for technical back stopping with inadequate time	Lengthy and rigid procurement procedures led to delivery of seedlings off season with < 40% survival of trees planted, less vegetation cover realized
Capacity building	Improved the capacity	Farmers trained on Nursery Management	Famers trained on tree planting, Soil & Water conservation technology.	Contributed to the slight increase of the Crested Crane population. This has resulted into protection of the Community Conservation Area marked at L. Bisina
		Monitoring Biodiversity	Formulation of bye laws	Contributed to the decline in the number of shoebills killed from 13 to 8 quarterly
Synergies/ linkages established	Partner Relations	Fairly adequate	Strong synergies developed which led to the emergence of a CBO, Mukura Integrated Development Initiative (MIDI) within the community where the project operated.	MIDI has a component of environment protection which promotes tree planting and soil & water conservation technologies. This is hoped to increase tree cover in the area.

Discussion

This investigation has thrown light on the nature of partnerships in the context of environmental interventions, drawing from Key Informant Interviews conducted utilizing a checklist. The resultant perceived scores of 127.4 for FIEFOC and 131.6 for COBWEB partners suggest a certain instability in the sustainability of these partnerships, despite their roots in genuine collaboration. This observation takes its cue from earlier research by Himmelman (2001) and Benson *et al.* (2014). Evidently, the partnerships under investigation achieved only partial effectiveness at both intervention sites, thereby reflecting the importance of well-defined goals, processes, and structures for sustainable partnerships, as stressed by Hardy and Koontz (2010) and Nel and Harmer (2004). It also underscores the criticality of partner selection in such endeavours.

In line with the propositions by Hardy and Koontz (2010), the choice of partners emerges as a significant determinant of partnership sustainability. The principles and foundational elements that underpin a partnership can often forecast its success or failure. Notably, the COBWEB partnership, in particular, was actualized at a higher level through a memorandum of understanding or a "social contract". This involved representation from multiple parties, namely the Uganda Wildlife Society (UWS), Wetland Management Department (WMD) of the MWE, and three Civil Society Organizations, represented by the International Union for Conservation of Nature (IUCN), Nature Uganda (NU), and the United Nations Development Program (UNDP). However,

despite a clear delineation of roles and responsibilities for different partners, evidence suggests dominance of certain partners in key decision-making processes, corroborated by narratives from key informants.

Interestingly, membership and legal frameworks determined the shape of partnerships in Awoja, and in the case of FIEFOC, this resulted in initial community and lower local government exclusion. The predetermined nature of both projects at the onset raises concerns about the engagement process. This study affirms the observation made by Puzyreva and Roy (2018) regarding the sustainability risks arising from weak internal governance among community-based associations and the potential failure of local governments due to limited resources. While the FIEFOC project made commendable attempts to build community and technical staff capacity at the district level, the allocated time was insufficient. This echoes the assertion by Behr *et al* (2012) that capacity building among partners is crucial for partnerships. However, synergies between partners, which are vital for strengthened partnerships (Turner-Halliday *et al.*, 2018; Coombe *et al.*, 2020; Loban *et al.*, 2021), were not sufficiently realized during the interventions. Furthermore, this study emphasizes the exclusion of women from decision-making processes in areas significantly impacting their lives, mirroring the concerns raised by Puzyreva and Roy (2018). The consequences of such exclusions manifest in social and safety implications, leading to a cascade of adverse effects on domestic life and increased vulnerability to violence hence a soft spot for non-commitment from the women eventually.

Concerning the quality of partnerships, the findings indicate that shared vision (in FIEFOC's case) and accountability, communication, and local fit (in COBWEB's case) were lacking, thereby contributing to continued degradation. However, institutional framework adequacy in the COBWEB project led to increased involvement of Ngora district local government. The analysis of the partners' strengths revealed weak linkages, even between government institutions. This weakness stems from unclear role delineation, ineffective advocacy and mistrust. In fact, different procurement and reporting procedures across institutions caused significant delays, an issue that resonates with study findings of Goedegebuure *et al.* (2013). These findings strongly corroborate the viewpoints of Nel and Harmer (2004), emphasizing that partnerships perceived as effective are those where partners maintain a positive attitude toward one another. Partnerships, where one partner's role becomes domineering, are perceived as less effective in producing desired outcomes.

The study suggests that partnerships in the restoration of Awoja were predetermined by IUCN membership (COBWEB) and legal framework (FIEFOC). This approach led to the exclusion of potential partners, notably local communities and women, affecting project ownership and sustainability. Trust-building and continuity planning should be key elements in future interventions. Moreover, in terms of partnership quality, this study asserts the need for enhancing shared vision (FIEFOC), accountability, effective communication, and local fitting for successful restoration and better coordination. Finally, this study recommends broadening partnership participation to include other institutional members, and incorporating partnership-initiated activities into local government planning and budgeting processes.

Implication for practice or Conceptual implications: Comprehensive Stakeholder Engagement: Projects that involve multiple partners should design stakeholder engagement processes that ensure equal representation and participation from all members to strengthen trust, shared vision, and overall project sustainability.

Emphasize Capacity Building: Sufficient time and resources should be allocated to capacity-building exercises, enhancing partners' competencies, and fostering productive synergies, thereby contributing to the project's overall effectiveness.

Review Partnership Structures: Predetermined partnership structures should be reviewed to ensure they do not inadvertently exclude key stakeholders, especially those at the grassroots level, thereby facilitating a sense of ownership and commitment among all involved.

Strengthen Internal Governance: Implementing robust internal governance mechanisms can mitigate sustainability risks associated with weak governance arrangements among partners, further supporting successful project execution.

Incorporate Gender Perspectives: It is crucial to incorporate gender perspectives into project planning and decision-making processes, acknowledging women's vital roles and addressing gender-specific vulnerabilities.

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