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Article

Promoting Social Accountability for Equitable Fisheries Within Beach Management Units in Lake Victoria (Kenya)

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Abstract

The decentralisation of resource management through co-management assumes that the devolution of power benefits resource users. This assumption is often premised on the democratic election of leaders within resource user organisations. In this article, we investigate the validity of co-management assumptions about who benefits from a devolution of decision-making power through a case study analysis of political equity in fisherfolk organisations of Beach Management Units (BMUs) in Lake Victoria (Kenya). From the analysis of the distribution of political power, we identify how, where, and for whom greater accountability can work to address the current political inertia of fisherfolk, who form a majority of the BMU membership. We also identify the relationships between the empowerment of fisherfolk, the accountability of the BMU leaders, and the distribution of political power determining decision making in co-management. We conclude with identifying how other mechanisms of social accountability beyond elections can improve accountability of elected leaders of resource users for improved co-management outcomes.

Keywords: accountability, co-management, decentralisation, fisheries, power, Lake Victoria, Kenya

INTRODUCTION

Co-management is widely embraced as an attempt to mitigate the failures associated with top-down government-led Natural Resource Management (NRM) approaches (Pomeroy and Berkes 1997; Berkes 2009; Ayers and Kittinger 2014). The top-down management approach is accused of failing to include resource users in decision making, leading to low

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compliance with management rules and thus failing to ensure the ecological sustainability of resources (Cochrane 1999; Chuenpagdee and Jentoft 2009; Ratner et al. 2012). On the other hand, co-management is viewed as a mechanism of inclusion (Armitage 2005) and empowerment of resource users—two societal goals identified as promoting achievement of more sustainable management of natural resources (Sen and Nielsen 1996; Ann Zanetell and Knuth 2004).

The co-management model is based on the assumption that when power to make and enforce decisions in NRM (Borrini-Feyerabend et al. 2004; Njaya et al. 2012) is shared between the government and resource users (Jentoft 1989; Try and Sitha 2011), co-management outcomes will be both more socially equitable and ecologically sustainable. The distribution of decision-making power and relations of power between stakeholders is seen as critical to the practice and outcome of co-management (Béné et al. 2009; Nunan

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et al. 2015), and has been analysed to explain and improve various co-management outcomes—from participation to accountability, empowerment, and inclusivity. For example, Béné et al. (2009) show how poorly designed co-management can merely redistribute power among actors who advance their own needs at the expense of fisherfolk, while Nunan et al. (2012) show how co-management processes can fail to enable the participation of key stakeholders in the fisheries because of unequal power relations. A current gap in knowledge is understanding how these relationships play out following the devolution of management from central control to local control. The fisheries of Lake Victoria provide a prime example of a major restructuring of the organisation of fisheries designed to enable greater decision-making powers based on formalised local governance.

To understand the extent to which decentralisation has enabled the participation of fisherfolk in Lake Victoria (Kenya) co-management decision making, the key question driving our research is how the elected leaders of BMUs exercise the powers devolved to them by the government and how accountable they are to those who elected them. To answer this, we apply the decentralisation framework (Table 1) from Agrawal and Ribot (1999) to identify (1) actors within the Lake Victoria (Kenya) co-management who exercise the powers devolved by the government, (2)the powers devolved by the government to the actors, and (3)the mechanisms that have been put in place to make fisherfolk leaders downwardly accountable to their constituents. These dimensions are crucial to understanding the extent to which decentralisation has taken place and the associated accountability within co-management for equitable decisionmaking (Agrawal and Ribot 1999).

 Table 1

 Decentralisation framework (Agrawal and Ribot 1999)

Decentralisation	
dimensions	Description
Actors	Actors who exercise some form of power over
	natural resource governance, at the regional,
	national, or local levels. They include regional
	body officials, government officials, political
	leaders, resource users' leaders, traditional
	leaders, NGOs, and resource users
Power types	Decentralised powers are categorised into four types
	Power to craft or modify rules
	Decision-making powers
	Implementation powers to ensure compliance
	with rules
	Dispute adjudication powers
	These powers also broadly categorised into
	legislative, executive, and judiciary, and are
	essential for effective decentralisation
Accountability	Measures used to make power holders
measures	accountable include:
	Elections (commonly used)
	Awareness creation
	Procedures for recall
	Third-party monitoring (by media)
	Community score cards

In this article we are concerned with the relationship between the distribution of decision-making power between resource users—what we identify as political equity, and co-management outcomes. Specifically, we are concerned with the key modality through which more inclusive and equitable powers to make decisions on NRM management are organised—democratic electoral processes. While some scholars have shown how equitable distribution of benefits is achieved if decisionmaking power is channelled through local/community-based organisations with democratically elected leadership (Béné and Neiland 2006), early on in the development of co-management models it was recognised that elections alone may not guarantee the accountability from elected leaders required for this outcome (Agrawal and Ribot 1999).

Analysis of the relationship between the development of democratic local organisations for co-management and political equity within resource user organisations are, for the most part, concentrated in literature on elite capture (Wong 2010; Schmidt and Theesfeld 2012). The term elite capture is used to explain the inequitable distribution of co-management benefits, which occurs when people who enjoy superior political status due to their wealth, education, and community status misuse their power (Bardhan 2002). Elite capture includes both distortions of economic (allocative) equity and political (procedural) equity (Jacobs 1989; Poteete 2004). Economic equity involves the sharing of benefits from natural resources (Persha and Andersson 2014), while political equity is about how resource users have their concerns raised and heard by their elected leaders (Jacobs 1989). Economic and political equity are often linked, but in this research we investigate political equity within fisherfolk organisations in Lake Victoria (Kenya), following our aim of improving the design of fisheries co-management. We discuss how political inequity in BMUs hinder democratic participation of fisherfolk in co-management decision making.

In our case study in Lake Victoria, several user organisations or BMUs were established at the local level following co-management adoption in the late 1990s. BMUs are the organisations through which power is devolved to fisherfolk by the government. The BMUs are composed of those who earn a livelihood from the lake's fisheries, including fish traders, boat owners, and fisherfolk. These form an assembly and vote to elect the BMU leaders who exercise devolved powers. There are 321 landing sites, organised into BMUs, whose operations are guided by the BMU regulations and by-laws (Government of Kenya 2007), each with an elected chairperson through whom the powers are devolved by the government to fisherfolk. The BMU chairperson may delegate the powers to other BMU executives, which include the elected BMU leaders such as vice-chairperson, secretary, treasurer, and committee leaders to enable them to monitor the implementation of the Fisheries Act (Government of Kenya 2016).

METHODS

To understand how decisions are made within the BMUs and how accountable the BMU leaders are to their constituents, a case study approach was chosen. This approach allowed for an in-depth understanding of elite capture and political inequity within fisherfolk organisations of BMUs in Lake Victoria (Kenya) co-management. Unstructured interviews using open-ended questions allowed for probing, providing an opportunity for the research questions to be fully explored. Open-ended interviews were used to identify the actors who exercise power within the BMUs, the powers devolved and captured by the actors, and the mechanisms that have been put in place to make the BMU leaders downwardly accountable. Focused Group Discussions (FGDs) were used to explore the questions further, to bring out information that may not have been captured in the interviews.

The four chosen BMUs were labelled as A, B, C, and D to conceal their identities for confidentiality. They were chosen following initial visits to some of the BMUs and various discussions with fisheries officials and the BMU leaders, considering the willingness of fisherfolk within specific BMUs to participate in the study, beach accessibility, and the extent of water hyacinth (Eichhornia crassipes) infestation. Beaches heavily infested by the weed were deliberately avoided since such beaches register limited or no fisheries activities. This does not mean that out of the 321 beaches on the Kenyan side of lake, only four BMUs could qualify to be included in the study based on that criteria alone. A total of 283 BMUs, without weed infestation, could have qualified to be included in the study, but we had to limit the number because of the limitation of time needed to generate meaningful answers. Selection of the BMUs was based on ranking by the local fisheries departments as (two) high performing and (two) low performing, in terms of resolving conflicts among members and record keeping.

Agrawal and Ribot's (1999) decentralisation framework was used to identify and analyse the relationship between co-management processes and outcomes of distribution of decision-making power. The framework identifies three empirical governance variables (actors, *de jure* powers, and accountability) that determine decentralisation (i.e., decentralised NRM or co-management) outcomes. The authors emphasise the importance of understanding who the actors are within decentralisation, what powers are devolved, and how issues of accountability are dealt with-to whom and how leaders are made accountable. They distinguish decision-making powers which they suggest are crucial for understanding decentralisation outcomes. These include: a) power to make rules; b) enforce rules; and c) adjudicate disputes. These are classified further as legislative, executive, and judicial powers.

Published and unpublished literature on co-management in Lake Victoria, Kenya were reviewed to examine the powers devolved to fisherfolk through the BMU leaders following the change in governance from top-down government-led management approach to co-management. This includes government policy and BMU documents. Interviews conducted with both the BMU leaders and fisheries officials were used to build sufficient inclusion of all actors. Observations on how the BMU leaders related with other assembly members were made during the data collection period, which lasted one year and four months. We observed how the BMU leaders answered questions and resolved conflicts during one BMU assembly meeting convened on beach D.

Data from document reviews and observations were supplemented with 52 unstructured interviews with fisherfolk, local leaders (chiefs, assistant chiefs, and village heads), and fisheries officials. Those who earn a livelihood from the lake's fisheries were grouped into categories (boat owners, fish traders, gear repairers, fishers, and any other group registered with a BMU), after which each category was sampled randomly to allow category members an equal chance of being included in the study. Interviews with fisherfolk were then used to understand their perceptions on how they are involved in BMU management decision making and how their needs are served by their leaders.

The distribution of the interviews was eight local leaders (one chief and one village head for each beach), eight BMU officials, four fisheries officials, and 32 fisherfolk. Of the eight local leaders seven were men and one was a woman. The BMU A and B leaders were from the Samia ethnic group, while the BMU C and D leaders were from the Luo ethnic group. Fisherfolk who responded to our questions were also mainly from the two ethnic groups (Samia and Luo), and their gender distribution was 21 men and 11 women. Fisherfolk who had fished in the lake for over 40 years were purposefully included in the study because they could compare fisheries activities before and after co-management adoption. Interviews took place between June 2013 and August 2014. One FGD was held in each BMU with fisherfolk, deliberately excluding the BMU leaders, fisheries officials, and local leaders (chiefs and village heads) from the discussions to better enable fisherfolk to express themselves freely. The FGDs were used to discuss the research questions further.

RESULTS

Actors and Elites Within Lake Victoria (Kenya) BMUs

Within fisheries management in Lake Victoria (Kenya), actors who exercised power before and after co-management adoption and assumed the status of elites were identified. This was done by reviewing government and BMU documents, published and unpublished literature on co-management, and interview with fisherfolk conducted in four case study BMUs.

A BMU is made up of registered members (the assembly) whose livelihood activities are supported by the lake's fisheries. They include fishers, boat owners, and fish traders, and BMU membership is attained through payment of registration fees. Responsibilities of assembly members, BMU executives, and committee members are specified, as was noted from a review of the BMU regulations and guidelines. For instance, the assembly is mandated to approve activities such as income expenditure, determine membership fees and other fees to be levied on fisherfolk, and elect and remove committee members

from office. While any assembly member from any fisherfolk category can be elected as a BMU chairperson, it was observed that all the chairpersons in the four BMU studied were boat owners.

Results from interviews with local leaders and fisherfolk who had fished in the lake for more than 40 years and a review of literature on Lake Victoria fisheries management indicated that prior to shifting from government-led management approach to co-management in the late 1990s, access and use of fisheries resources of Lake Victoria (Kenva) was controlled by clan elders or local leaders (chiefs, assistant chiefs, or village heads). Clan elders, who were mostly the oldest members of a clan and came from the largest clan inhabiting the beach, managed fisheries resources by decree (Opondo 2011), but chiefs and sub-chiefs who inherited their positions from their fathers or uncles, directly appointed beach leaders with whom they managed the fisheries. However, in the 1970s, some form of democracy was exercised in the election of beach leaders by fisherfolk through *mlolongo* (a voting mechanism in which people queue behind the leaders they want, and the leader with the majority of people behind him is considered elected). This was done mainly when two or more people expressed interest in becoming a beach leader, as described by a retired fisherman from beach A: "beach leaders had to be appointed from the largest clan. If there were many people from the clan who wanted the position, then we would vote". There were no written rules on what was required for someone to be appointed or elected as a beach leader. While the clan elders mainly used customary laws to manage the fisheries (Opondo 2011), in 1989 the first Fisheries Act was formulated by the government. The Act contained rules formulated by the government to manage the lake's fisheries by the chiefs and their assistants, beach leaders, and fisheries officials. However, the local leaders used the Act in combination with customary laws to manage the fisheries.

Although a review of government policy documents showed that no form of power was devolved to chiefs and beach leaders by the government, the chiefs and beach leaders used the Fisheries Act and customary laws as their sources of power, with responsibilities including dispute adjudication and enforcement of fisheries regulations. The clan elders, chiefs/assistant chiefs, and beach leaders were considered local elites (Figure 1) during the top-down management approach due to their community status and the fisheries management powers they had at the beach.



The shift from top-down government-led management to co-management in Lake Victoria introduced new institutions and centres of power. This shift was necessitated by the understanding that the government alone could not enforce fisheries regulations due to limited resources and human capacity. There was also pressure from development partners, because the top-down management approach had failed to provide sustainable fisheries. The reforms gave rise to other elites at the beach level (Figure 2) as was noted from a review of the government policy and BMU documents as well as interviews with fisheries officials and fisherfolk. The BMU elites are the BMU assembly members who are elected as members of the BMU executive committee, thereby attaining a new community status within the BMU. From a review of the BMU regulations, it was noted the executive members should not be less than nine or more than fifteen (Government of Kenya 2007). At least three of the BMU executive positions are reserved for women. The BMU elites were identified as the BMU chairperson, vice chairperson, secretary, treasurer, and committee leaders (Figure 2). It was noted that the BMU elites in BMU A, B, and D were from the dominant clans and wealthier boat owners from specific beaches. In BMU C, six BMU elites were from smaller clans that settled around the beach, although the larger clans still dominated leadership positions.

Boat owners use their wealth to ensure they get elected as BMU chairpersons. For example, a fisherman from beach D said "a boat owner who wants to be elected as a BMU chairperson pays registration fees for the fisherfolk during the election year so that they vote for him". A trader from beach A also added her view that "boat owners pay our registration fees and promise to supply us with fish from their boats if we vote for them as BMU chairpersons". Since only registered



Institutions and centres of power introduced at the beach level following co-management adoption

BMU members are allowed to vote to elect the BMU leaders, a BMU secretary from beach C observed: "election years register the highest numbers of registered assembly members in the BMUs, as people prepare to elect their leaders".

The chairperson is in charge of the beach and is responsible for ensuring fisheries regulations are implemented for compliance. BMU committee leaders' responsibilities are stipulated in the by-laws and fisherfolk are free to establish as many committees as they deem necessary. Unlike the BMU leaders, whose elections are guided by the BMU regulations and guidelines, past beach leaders were appointed and operated without having a clear mandate. For instance, a fisherman from beach C who fished under both beach leaders and the BMU leadership compared the two: "BMUs have clearly written rules one must follow if they want to be elected. One must come from one of the fisherfolk categories (fishers, boat owners, traders, etc.) and then apply for a position through the Ministry of Fisheries". This was further corroborated by a fisheries officer: "before one can stand for an elective position in any BMU, he must fulfil some requirements laid down in the BMU regulations such as having not engaged in illegal fishing, should be nominated by at least ten fisherfolk, and should be able to read and write". Even with these requirements, the domination of larger clans on beach leadership has continued under BMUs. When asked to provide his view about the election of the BMU leaders, a fisherman from beach C indicated "Leadership comes from the largest clan. You have to be from the largest clan to lead here. Even politicians will not allow you to lead if you are not from the largest clan". Nonetheless, it was also noted from interviews with fisherfolk that occupation determines whether one can be considered an elite or not. For instance, boat owners are likely to be elites compared to fishers or fish traders due to their wealthier status.

Powers Held and Exercised by Actors Within BMUs

Results in this section describe the degree to which the three powers (legislative, executive, and judicial) required for effective decentralisation (Agrawal and Ribot 1999), have been devolved to the four BMUs. Both interviews and document reviews revealed limited powers are devolved to the BMUs by the government, and that the powers are held and exercised by a few actors within the BMUs.

The first level of power, legislative, is the power to craft or amend fisheries management rules. The review of the BMU by-laws (a set of rules crafted by fisherfolk for the day-to-day running of beach activities) of the four BMUs revealed a lack of fisheries management rules crafted by fisherfolk. Rules in use are those developed by the government and described in the Fisheries Act. When asked about the source of management rules implemented at the beach, a majority of interviewees (96%) had the understanding that the government crafts and amends management rules. For instance, a chief from beach D was of the opinion that "crafting rules has always been the job of the government even before the BMUs were established and it is their mandate till date", while a fisheries officer from beach B added "government is the policy maker and that is our job. How can we let the BMUs do this unless we are ready to lose our jobs? Do they have the capacity to develop rules"? A boat owner from beach C responded "fishing rules are government rules".

Power to craft rules for managing internal beach activities are devolved to fisherfolk. The rules are included in the BMU by-laws and all the four BMUs enlisted in this study had crafted their by-laws in which they included these rules. A review of the by-laws indicated a set of specified beach rules used for governing the internal operations of the BMUs, such as rules on fish handling at the beach, beach offences and corresponding fines, and procedures to be followed for membership registration. For example, on membership registration, a fisherman from beach D indicated "you first have to register as a member of the fisherfolk category before you pay for BMU membership". A BMU leader from beach A added "these are rules that were developed and voted for by fisherfolk during our assembly meetings. They are important for our daily operations on the beach".

Executive power includes power to implement fisheries rules in the Fisheries Act (Government of Kenya 2016), power to achieve compliance, and power to make decisions on fisheries management within co-management areas. A review of the BMU regulations indicated that power to implement fisheries rules for compliance are devolved to the BMUs through the BMU chairpersons (Table 2). Other committee members within the BMUs may exercise these powers through delegation by the BMU chairpersons.

Power to make decisions on fisheries resource use within BMU co-management areas is devolved to the BMUs, although this power is not utilised by the BMU leaders. A review of the BMU regulations showed that BMUs are required to develop co-management plans for their areas, specifying fisheries management measures to be observed by the assembly members. The co-management plans are to be developed in conformity with the Fisheries Act and enabled through the BMU by-laws.

It was observed that none of the four BMUs enlisted in the study had developed a co-management plan. However, it was noted, from a review of their by-laws, that some fisheries management rules from the Fisheries Act were included as part of the BMU by-laws. A BMU leader from beach A, when asked if the BMU had developed fisheries management rules for their co-management area, made a reference to the management rules in the by-laws: "everything we need to

Table 2

Power to implement fisheries rules and make management decisions

- Collection of membership registration fees
- · Administration of gear identification marks
- · Arrest of fisherfolk violating the Fisheries Act
- · Undertaking of patrol activities within BMU areas
- Confiscation of fishing gear used to commit offences and fish harvested using outlawed fishing gear and methods

manage fisheries in our area is here and it is what fisheries rules say in the Fisheries Act". A leader from BMU D, when asked if they had developed some management rules for their BMU area, asked:

What do we need a co-management plan for, if everything is clear in the Act regarding the fishing gear to be used, fishing methods allowed, the areas where fish breed are known? Our job is to make sure government rules are followed and not to start making our rules here. These rules are also in our by-laws and members know what to do and what not to do. For us leaders, we are here to enforce the rules, and for members who break the rules the by-laws are used to punish them.

To give his view on the development of co-management plans by the BMUs, a fisheries official from beach D added that "it is true the BMU regulations require all BMUs to come up with co-management plans for their BMU areas, but most of them have not done this. They basically use the rules provided in the Fisheries Act".

Judicial power enables adjudication of disputes which arise within the BMUs. Two types of disputes were identified within the BMUs studied. Disputes from fisheries rule implementation and from misunderstandings among BMU assembly members. Power to adjudicate disputes from fisheries rule enforcement is not devolved to the BMUs. This power is with the judicial court. In the event that the fisheries rules are violated, the BMU leaders can only arrest the offender and hand him over to the fisheries officials who can take him/her to court. For instance, when a fisherman from beach C was asked to describe how fisheries disputes are handled on the beach, he was of the opinion that "the BMU leaders arrest the offenders and hand them over to the fisheries office after which the matter is taken to court and the offender is either jailed or fined". An ice seller on beach A had a similar view: "those who are found violating fisheries rules are arrested and taken to court". A fisheries official from beach B stressed:

Disputes emanating from fisheries rule enforcement cannot be adjudicated by the BMU leaders, but by the courts. The BMU leaders do not have the capacity to adjudicate such disputes and are required to forward such cases to our offices after which we forward them to the court.

However, most fisherfolk (75%) were of the opinion that the BMU leaders adjudicate disputes emanating from fisheries rule enforcement and forward very few cases to fisheries officials. For example, a fish trader from beach D said "if the BMU leaders find you using a disallowed fishing net, they will arrest you and take you to the office and they will fine you. If you refuse to pay the fine, they will threaten to chase you from the beach". A boat owner from beach C added: "most fisheries problems are solved in the BMU office here. It is long since I saw someone being handed over to the fisheries office".

Power to resolve conflicts among assembly members is devolved to the BMUs. A review of the by-laws of the four BMUs showed that there are mechanisms in the by-laws for resolving conflicts caused by issues such as theft and destruction of fishing gear as well as fights and domestic disagreements among members. Fines for these offences are also defined in the by-laws. To demonstrate the process of conflict adjudication among members as handled in the BMU office, a trader from beach A described the process as:

I report the person I have a grievance with to the BMU office. We each pay a fee of Ksh 200 (US\$2) for the case to be heard by the BMU leaders and the person on the wrong side of the law is fined as specified in the by-laws.

But a chief on beach B registered disappointment with the power to resolve conflicts at the beach level being devolved to BMUs. He stated:

Although BMUs have been allowed by law to resolve conflicts that happen within the BMU among its members, these leaders are resolving conflicts that have nothing to do with fisheries. These are issues that need my attention and not that of the BMU leaders. Chiefs' duties include maintaining law and order in our locations and the BMUs are in our locations. So it is our mandate to maintain law and order, and the BMU leaders should enforce fisheries rules as required.

Equally, a village head on beach D was of the opinion that:

The BMU leaders have taken over our jobs. We cannot enforce fisheries rules as we used to do before BMUs were established. That job has been given to the BMUs. They are also resolving conflicts that have nothing to do with beach activities. I think it should be made clear to the BMU leaders what conflicts they can resolve and those that should be left for the office of the chief.

The quotes from local leaders suggest they have lost some of their adjudication powers to the BMU leaders following the adoption of co-management. In giving his opinion on BMU adjudication powers, a fisheries official from beach C said "the BMU leaders are overstepping their boundaries. They know very well that their powers as specified in the by-laws concern operations or what happen within their BMUs and not outside. They just need to understand that to avoid conflicts with the local leaders". However, the conflict between the BMU leaders and the local leaders on dispute adjudication may be a result of fisherfolk forum shopping. Fisherfolk prefer to register their disputes with the BMU leaders and not the local leaders, because they believe they are likely to get favourable and less punitive rulings from the BMU leaders compared to those from the local leaders.

Downward Accountability Within Lake Victoria (Kenya) BMUs

To understand the extent to which the BMU leaders are downwardly accountable to their constituents, interview questions focused on powers devolved by the government to the BMUs, how the BMU leaders use the powers, and perceptions of fisherfolk on how their leaders serve their needs and involve them in co-management decisions. To do this, the interview questions focused on the two forms of power devolved to the BMUs—the power to implement fisheries rules for compliance and make BMU management decisions, and the power to adjudicate conflicts among assembly members.

Interviews with fisherfolk revealed that the BMU leaders use power to implement fisheries rules to favour their friends and relatives. They also use power to their advantage (Table 3). For instance, a fisherman from beach D was of the opinion that "a BMU chairperson may find a relative using an illegal gear and he will do nothing, but if he finds someone who is not a friend or relative, he will confiscate his gear". However, a boat owner from beach A was of the view:

BMU and committee leaders have no regards for the fisheries management rules. They are just using their offices to benefit themselves instead of ensuring illegal fishing gear are not used in the lake. Because of what they are doing, there is almost no fish in this lake. Sometimes you cannot even get fish to eat.

To support the boat owner's sentiments, a fisherman from beach B said "the BMU leaders are supposed to enforce the rules to get rid of illegal fishing gear in this lake. Instead, they own the majority of illegal fishing gear. I can tell you my chairperson owns four beach seines". There were also indications of the BMU leaders misusing information from the government to benefit themselves and their family members and friends. For instance, a trader from beach C noted that "information from the government to the BMU concerning any impending patrol was quickly shared with family and friends enabling them to hide their illegal fishing gear until patrol is over". This was also observed on beach B during data collection. The beach all of a sudden had fewer beach seines because there was an impending monitoring and enforcement activity from the government, and beach leaders had shared the information with those close to them enabling them to hide their illegal fishing gear. As soon as the government inspection was over, most beach seines were back on the beach.

Concerning the use of BMU finances which include levies charged on assembly members as membership registration

Table 3 Examples of outcomes of political inequity identified in the four BMUs studied

The BMU leaders not taking action on family and friends who violate fisheries rules

Selective sharing of information with family and friends on impending enforcement by the government

The BMU leaders engaging in illegal fishing practices instead of enforcing fisheries rules for compliance

BMU finances used by the BMU leaders for personal gain instead of supporting beach activities

Power to adjudicate beach disputes used by the BMU leaders to generate personal income

BMU assembly members unable to hold the BMU leaders accountable

fees, fines imposed on BMU rule violators, and fish landing fees, over 90% of fisherfolk interviewed were of the view that the BMUs do not include them in BMU financial management decisions. For example, a fisherman from beach B said "every day we land fish on this beach and pay fish landing fee, but we do not know where the money goes. What we know is the BMU account is not operational but we pay fees everyday".

A boat owner from beach D added:

It is true that assembly members contribute a lot of money every day through the activities undertaken on this beach, but if you try to question where the money goes, you will cause yourself problems and the leaders may even say you engage in illegal fishing practices just to get rid of you.

The BMU chairperson has the power to convene an annual general meeting at the end of every financial year. The meetings are supposed to be used to inform assembly members about BMU income and expenditure. It was, however, noted from interviews with fisherfolk that such meetings are rarely held and, if convened, nothing much comes out of the meetings. A fish trader summed it up: "we just go there to be informed and not to question", while a fish grader said, "they are not transparent in the way they use our money. They just read the budget and it does not matter whether you agree with it or not". It was also observed from the review of BMU documents that only beach A and D had convened at least one assembly meeting in a year, although the BMU regulations specify that at least four assembly meetings should be held in a year by a BMU. Observations were made during an assembly meeting convened on beach D which corroborated what was reported by fisherfolk on how questions by fisherfolk were given minimal attention by the BMU leaders. These quotes illustrate how the BMU leaders use their decision-making powers to appropriate BMU finances without involving assembly members, while denying them access to financial information.

Interviews with BMU and committee leaders, nonetheless, indicated the leaders consulted assembly members before making financial and fisheries management decisions in the BMUs. For instance, a BMU chairperson from beach D noted, "by law, the BMU assembly is the organ through which decisions are made in a BMU through voting and there is no way I can decide on anything on my own without the support of the assembly". To add to this, a BMU treasurer from beach C said, "all our financial books are open to any member/ person who may want to see how much money we have collected and how it has been used", although he declined to produce the books when requested during the course of this research.

Interviews with fisherfolk also suggested powers to adjudicate disputes within the BMUs using by-laws are misused by BMU committee leaders who are using those powers for their own gain. For instance, fees paid to the BMU to adjudicate disputes and fines paid by offenders are not banked as required, but end up in the committee leaders' pockets. For example, a boat owner from beach C noted, "fines paid by offenders here are shared among the BMU leaders who preside over and determine the cases", while a trader from

beach B added, "the committee leaders are not paid a salary and therefore they have to 'eat' such money". Observations on beach B and C indicated there were many cases being adjudicated in the BMU offices, with some having nothing to do with beach activities. This according to a village elder on beach B was mainly driven by greed since the BMU leaders "have gone beyond their boundaries by doing what they are not mandated to do". When asked about the cases they were adjudicating in the BMU offices that did not concern fisheries activities, a BMU leader from beach B stated, "the cases concern members who are registered in this BMU and that is why they bring them here", while a leader from beach C was of the opinion, "our members know where to take their cases and that is why they do not go to the chiefs". On the issue of benefitting from fines paid by offenders instead of depositing it at the bank as beach revenue, a leader from beach D stated, "we may share the money sometimes, but not always", while a leader from beach A justified their use of the fines by stating, "this is the money we can use to pay ourselves some allowance because what we do here is basically charity work. There is no pay and even the money from fines is not enough".

In addition, results from the review of BMU documents showed the BMU leaders are not accountable to the assembly members. In theory, the BMU assembly is an institution that has the powers to bring the BMU leaders to account. In reality the assembly finds it difficult to bring the BMU leaders to account because the leaders use their decision-making powers to control activities within the BMUs. The assembly is supposed to approve and question the activities of the BMU leaders through assembly meetings which are supposed to be convened every three months (Government of Kenya 2007). The powers to convene assembly meetings and any other meetings rests with the BMU chairpersons who may deliberately fail to convene the meetings so that they are not brought to account. In the event they convene the meetings, interviews with fisherfolk from the four BMUs demonstrated the BMU leaders use their powers to dominate and intimidate assembly members, making it difficult for fisherfolk to challenge some of the decisions made by the BMU leaders.

DISCUSSION

Decentralised NRM approaches are promoted as more equitable than top-down management (Jacobs 1989; Poteete 2004) and as a mechanism that better enables resource users' participation in co-management (Pomeroy and Berkes 1997; Ayers and Kittinger 2014). In the Lake Victoria (Kenya) BMUs, the powers devolved to fisherfolk by the government are clearly more limited than those generally accepted for co-management (Borrini-Feyerabend et al. 2004; Béné et al. 2009; Berkes 2009). Agrawal and Ribot (1999) highlight the structural and capacity limitations of devolution to fisherfolk who have little, if any, power to hold the BMU leaders accountable.

The devolution of the powers to implement fisheries rules for compliance and to adjudicate disputes among assembly members has created elites among the fishing communities, with an enhanced status as elected leaders within the BMUs. The current state is reminiscent of the power in Lake Victoria during the pre-colonial period (1880–1894) within elites who could decide where, when, and who could fish (Opondo 2011). The benefits envisioned for more equitable and effective fisheries management (Ribot et al. 2006; Ansink and Bouma 2013) have not been achieved by the creation of the Kenyan BMUs (Etiegni et al. 2016; Irvine et al. 2018). Minimal co-management benefits have been registered for Tanzanian and Ugandan BMUs owing to unequal power and gender relations (Nunan et al. 2015).

In contrast, the activities of elites within the BMU organisations have considerably reduced co-management benefits. The BMU leaders, who now have local power, favour themselves and their close associates, leaving other assembly members with limited influence on decision-making that affect their livelihoods. The leaders have failed to sanction those who harvest fish using outlawed fishing gear and methods, thus encouraging political inequity. These findings are similar to those reported by Schmidt and Theesfeld (2012) in their study of a local fishery in Albania, where local fisherfolk were side-lined by local elites. Similarly, unequal power distribution within the Lake Malawi fisheries co-management resulted in the marginalisation of fisherfolk (Béné et al. 2009), although Mansuri and Rao (2004) demonstrated that elites can produce outcomes that are beneficial within community-driven development initiatives.

In the Lake Victoria (Kenya) BMUs, elections do not guarantee downward accountability as they favour those who already occupy powerful positions based on their wealth. Although the BMU regulations specify that at least 30% of BMU executive representation should be filled by fishers (Government of Kenya 2007), it would be difficult for this group to occupy the most powerful roles, including that of the chairperson. Additionally, as most fisherfolk are employed by boat owners, who in some cases also pay for their registration fees, they are unlikely to oppose or compete with their employers.

BMU organisations are the link between fisherfolk and the government within the lake's co-management arrangement. The BMU chairpersons are the contact people at the beach level, and are often the first to receive information concerning fisheries management from the government. How they manage and use the information passed to them by the government is clearly very important. Our study indicates that information on impending monitoring, control, and surveillance activities is shared among the BMU elites and their friends and kin. The BMU elites may also pay fisheries officers 'protection fee' so that they are kept informed of planned government enforcement activities (Etiegni et al. 2016). The summative consequence of the elite capture of power contributes to the marginalisation of other resource users who may not have the financial resources to invest in fishing gear or bribe fisheries officials to avoid sanctions.

CONCLUSIONS

In Lake Victoria (Kenya) co-management, limited powers are devolved by the government to fisherfolk through their organisation of BMUs, suggesting that fisheries management is not fully decentralised and does not lead to a participatory approach. Nonetheless, the powers that are devolved are captured by the elected BMU leaders who can be classified as elites within the BMU organisations. Although development of representative local level resource users' organisations is encouraged to avoid misuse of power (Béné and Neiland 2006; Persha and Andersson 2014), these powers are used to limit the space for participation of fisherfolk in decision making (Nunan et al. 2012). Although the leaders of BMUs are democratically elected, they are hardly accountable to their constituents and use the devolved powers to advance their personal agendas. This promotes political inequity within the BMUs. As such, co-management as currently structured in Lake Victoria has not provided the space for effective fisherfolk participation in co-management, but has only allowed redistribution of powers devolved by the government among the BMU leaders (Béné et al. 2009).

The activities of the BMU leaders conflict with the assumed benefits linked to resource user engagement in co-management, including livelihood improvement and participation in decision making (Pomeroy and Berkes 1997; Persha and Andersson 2014; Ho et al. 2015). Development of institutions to encourage genuine fisherfolk representation and involvement in decisions is therefore encouraged. This may require a relook at the lake co-management institutional structure and how it enables power sharing (Béné et al. 2009; Ho et al. 2015) and inclusive participation (Armitage 2005; Nunan et al. 2012).

Election of organisation leaders, although encouraged as a mechanism for ensuring representation and downward accountability (Agrawal and Ribot 1999) does not guarantee political equity as our study has shown. In situations where powerful positions of BMU chairpersons are occupied by wealthier boat owners, other fisherfolks' needs may not be served by their elected leaders. We suggest inclusion of other accountability mechanisms within the BMU regulations, such as external procedures for the recall of the BMU leaders and monitoring of their activities by third parties such as civil society. These measures may be useful in the event that fisherfolk are not in a position to hold their leaders accountable due to power imbalances.

Empowerment of fisherfolk through capacity building and awareness creation (Nunan 2006; Ho et al. 2015) may also enable BMU assembly members to make their needs known while ensuring that they are involved in decision-making within the organisation of BMUs. Fisherfolk can also use social accountability mechanisms such as community score cards, social audits, and budget monitoring (Malena et al. 2004; Kimchoeun et al. 2007). These are methods that not only involve the resource users who may not be in a position to question their leaders, but also other co-management stakeholders such as government, NGOs, and civil society. By working together, the stakeholders create synergy which is crucial for social accountability efforts (Malena et al. 2004). With such arrangements, resource users' leaders are less likely to use their power to intimidate their constituents. The marginalised also use their engagements with other stakeholders to learn how to demand accountability from their leaders and in the process empower themselves. This empowerment enables resource users to become more proactive in demanding accountability from their leaders for equitable co-management outcomes.

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