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Governing the Commons Through Customary Law Systems of Water Governance

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Abstract

The resilience of customary law systems of natural resource governance in many parts of the world lends credence to Ostrom's theory on the governance of commons. Ostrom argued that resource users who enjoy relative autonomy in the design of rules for governing and managing common-pool resources, frequently achieve better economic (as well as more equitable) outcomes than when experts do this for them.[2] In support of this theory and acknowledging that most common pool resource governance regimes are based on a customary law system, Bosselman has sought to demonstrate a link between customary law systems and positive outcomes for sustainable development.[3] Using a case study of the customary law system of water governance of the Marakwet community of Kenya, this paper tests and builds on the design principles and tools developed by Ostrom, to study normative institutions in a dynamic environment.[4] The paper proposes an analytical framework that helps identify the features that strengthen customary institutions and ensure their adaptability and resource sustainability. This exercise illustrates the parallels between commons governance and customary law governance of natural resources.

Keywords: *commons, common pool resources, customary, law, natural resource governance, irrigation system, sustainability, sustainable development, property, water*

Plate 1: *The River Embobut, which is the source of the irrigation furrows used by the Marakwet people. (Photo credit: Elizabeth Gachenga)*

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[2] (Ostrom 1990); (Agrawal and Gupta 2005); (Gibson, McKean, and Ostrom 2000); (Tang and Ostrom 1993); (Schlager and Ostrom 1992); (Ostrom and Basurto 2011)

[3] (Bosselman 2005)

[4] (Ostrom and Basurto 2009)

THE CONCEPTS OF CUSTOMARY LAW AND COMMON POOL RESOURCE GOVERNANCE SYSTEMS

Common pool resource (CPR) governance systems refer to the various models of norms and institutions used by communities to manage the use of a shared resource. The field of CPR governance gained popularity in the 1990s following the publication of Elinor Ostrom's book: *Governing the Commons: The Evolution of Institutions for Collective Action*.[5] Her work provided a highly insightful critique into the theoretical foundations of prevalent policy on natural resource governance, and motivated a reconsideration of the two-dimensional approach to the 'problem' of limiting the governance of common pool resources to state or 'market' (through privatisation) solutions.

Most of the work done in the area of CPR governance has been contextualized in economics and more specifically in institutional economics. However, since the publication of Ostrom's book, legal property theorists have also demonstrated an interest in the conclusion she drew; that tragedy is not a necessary fate for all commons. Consequently, in legal property literature, there is a growing appreciation of successful institutional arrangements for the management of commons that do not fall within the two-dimensional framework of private property or state control.[6] Despite reference by legal property theory to Ostrom's work, its practical implications have not been widely researched in the context of law. This paper seeks to explore one such application by investigating the linkages between the work of Ostrom and colleagues on the commons, and customary law governance systems for natural resources such as water.

Modern legal frameworks tend to associate customary law systems with the traditional norms and practices that local and indigenous communities have crafted/developed over an extended period of time. Although it is true that these systems are often closely related to long-standing activities of resource-dependent people, customary law constitutes a more dynamic reality. In this paper, the term 'customary law systems' refers to the norms and institutions whose moral authority and force emanates from the contemporary as well as traditional culture, customs, religious beliefs, ideas or practices of the people to whom it applies, rather than from the state.[7] Notions such as 'community-based', 'informal' or 'local' forms of governance are used regardless of their antiquity or association with tradition. In this context, customary law systems of resource governance are understood as a popular normative pattern reflecting the common understanding of valid compulsory rights and obligations relating to the resource.

Customary law systems for natural resources governance provide an ideal opportunity for investigating the emerging theories on commons' governance in a legal context. This is because most customary law systems of natural resource governance are based on a CPR governance system. In recognition of this, Ørebech et al (2005) have sought to explore the implications of commons governance research on customary law, suggesting a link between customary law and sustainable development.[8] This paper contributes to these efforts by exploring how Ostrom's work on commons can be applied to customary law systems for water resource governance. Focusing on a case study of the Marakwet people of western Kenya, and by applying Ostrom's work to Ørebech et al's research into customary law systems, I propose an analytical framework to help identify the main features of successful customary law systems for natural resource governance. The paper confirms that parallels do exist between the salient design principles identified by Ostrom and others as indicators of successful

[5] (Ostrom 1990)
[6] (Rose 1986)
[7] This definition is adapted from that of the International Council on Human Rights Policy. See (Policy 2009) 43.
[8] (Ørebech et al. 2005)

commons institutions and features of resilient customary law systems of governance. Above all, it establishes that customary law systems that enjoy autonomy over the design of rules and norms, and which are open to adaptation and change, are more likely to result in positive sustainable resource governance outcomes.

MARAKWET'S CUSTOMARY LAW SYSTEM FOR WATER GOVERNANCE

The Marakwet community of Kenya have a tradition of customary law and governance that predates colonial rule.[9] The community's customary law also forms the backbone of a robust water resource governance regime based on an irrigation system that runs along more than 40km of the Marakwet Escarpment from south of Arror to north of Tot.[10] The community practices a form of hill furrow irrigation common in East Africa, described as a slope off-take irrigation system. The irrigation furrows of the Marakwet, which date back to the initial occupation of the community in the valley, more than 200 hundred years ago, are the main source of freshwater resources both for agricultural and domestic use. As the country's oldest customary irrigation system, the Marakwet's water governance system thus provides an excellent case for analysis of a customary law system of water resource governance in Kenya.

Methodology

The primary data used for this case is based on a field study conducted from November 2010 to February 2011. A qualitative research methodology was used that combined various data collection methods, including semi-structured interviews, three focus group discussions, and participant observation. The population sampled came from Sambalat, the area of Marakwet that borders West Pokot.

The participants of the first focus group discussion were purposefully chosen from among clan council elders who are responsible for management of the furrows and thus knowledgeable on customary law norms and institutions for water governance in the community. The objective of the focus group discussion was to provide background information on the furrows, their management, and allow for an in-depth analysis of the Marakwet's customary law system for water governance.

Under this customary law system, women do not have a direct role in the management of the irrigation system. This research nevertheless sought to obtain the views of female members of the community and to determine the extent of their participation in the design and implementation of customary rules for water governance. A focus group discussion was thus organised with both a selection of older and younger women. The stratification of age groups was useful to determine if perspectives around the perceived roles of women in water governance had changed over time.

Data was also collected from randomly selected water users with the aid of semi-structured questionnaires. Forty-three water users, consisting of men and women of different ages and from different households, were interviewed. Interviews were also conducted with the local chief of the area, an official working in the Eldoret Water Services Company (ELDOWAS) and a representative of the Lake Victoria North Water Services Board (LVNWSB) Office in Eldoret.

The Marakwet's Customary Law System for Water Governance

Among the Marakwet community, it was clear that customary law continues to play a central role in societal life. In the case of water resource governance, customary law constitutes the primary regulatory framework for managing shared water resources.

Community members demonstrated a keen knowledge of their customary water resource governance system. The clan elders in charge

[9] This is evidenced by the early accounts of the Marakwet's law and custom. For example (Beech 1921)
[10] (Watson, Adams, and Mutiso 1998)

of furrows explained that the origin of the system dates back more than two centuries. According to oral histories, the first four furrows, belonging to the Lakeno, Kapterit, Shaban and Kabishoi clans, were constructed in 1882. Construction of the furrows was triggered by drought in the region. Irrigation furrows were considered the only means by which to bring water from the Embobut River to people on the valley floor, which lies more than 1000m below the escarpment.

An important feature of Marakwet's customary water governance system is that it is entirely home grown or autochthonous, with the norms that underpin the system developed solely by the community. In the case of local water law, the rules governing development and use were designed by the clan elders, in consultation with the wider community, following construction of the furrows. This autonomy in design (both in terms of rules and their implementation) is considered sacrosanct. One discussant expressed the centrality of autonomy in the following way, 'There is no law that will come to tell us who will or how we will use the water. The water is for us and for our children from our elders. No one will tell us how to use it'.[11]

Although ultimately geared towards conservation and sustainability of the water resource, the scope of their customary water law is relatively broad and includes directives on the use of land and other natural resources. While the rationale for crafting rules is often based on environmental indicators, the connection between rules and ecological conditions is not always evident. For instance, some of the rules and norms are encoded within a sacred religious system that include taboos and prohibitions associated with the felling of trees, the contamination of furrow water, or the requirement to plant indigenous trees, which are regarded as sacred, around rivers and streams. In the course of discussion with village elders, it was confirmed that the underlying objective of these rules is to conserve water resources and foster a sense of respect for water among community members.

Although the clan council in charge of the furrows are viewed as custodians of customary law on water resources, the design, implementation and modification of the rules is carried out through a broad consultative process. Consequently, rules are subject to negotiation and modification with relative ease. For instance, most of the water users interviewed talked about the rule that stipulates how households whose male members do not contribute to furrow maintenance and repairs are not entitled to water provided by the irrigation system. However, before this rule is implemented, there is a consultative process in which the offender is given an opportunity to present his case. Depending on the reason for default, other sanctions may be applied to avoid punishing the entire household, such as a monetary fine. Young clan members unavailable for furrow work due to school or work commitments outside of the community may substitute their physical labour with monetary compensation.

This type of rule modification can be seen as a response to emerging circumstances. While based largely on norms and practices that date back many years, there are still changes that the rule system of the Marakwet has undergone in recent times. For instance, the custodian of the customary law system was traditionally a group of clan elders selected on the basis of their age and thus knowledge and experience of the furrow system. However, recognising the value of formal education, the community has begun to allow some younger community members to join the clan council. While obviously lacking in experience, younger members are often very resourceful and savvy in their relations with external organisations and donor agencies, as well as holding greater knowledge of (potentially useful) new technologies.

[11] Focus Group Discussion with Clan Elders and Representatives of Furrows Council (Marakwet District- Kenya, February 10 2010)

REVISITING THE DESIGN PRINCIPLES OF SUSTAINABLE COMMONS MANAGEMENT AND THEIR APPLICATION TO CUSTOMARY LAW SYSTEMS

As noted in the introduction, Ostrom's Governing the Commons illustrated how different communities develop rule-based institutional arrangements for the sustainable management of their shared natural resources. Ostrom's analysis culminated in the identification of eight design principles that appeared characteristic of successful commons management regimes.[12]

Salient Features of Successful CPR Systems and their Application to Resilient Customary Law Systems

One of the fundamental observations made by Ostrom is that appropriators who enjoy relative autonomy from government or other external actors in the design of their institutional arrangements are more likely to develop sustainable management regimes.[13] Such autonomy ensures that the users of the resource play a role not only in the design but also the modification of the rules that regulate access and use. The case studies also demonstrated that CPR governance systems with collective choice arrangements (that allow individuals affected by operational rules to participate in their modification) often result in positive outcomes.[14] Apart from participating in rule modification, the users in these successful CPR systems are also charged with the implementation of those rules[15], as supported by subsequent research that analysed multiple communal irrigation systems in Nepal.[16]

Based on the work of Ostrom and others, Ørebech et al (2005) argued that adaptability is also an indispensable characteristic of success in any complex resource management system.[17] Adaptability relates to the inherent capacity of a system not only to deal with the present but also continue to be relevant in the future. In other words, a system that has the capacity to adapt to changing conditions. Given that the social, economic and ecological factors that impinge upon and influence natural resources use and management are in a state of constant flux, any ideal system of resource management needs to be capable of adapting itself to such changes, whether anticipated or not.[18] This is what Ostrom and Basurto (2011) were pointing to when stating that CPR governance systems, in order to be successful, need to have a tested capacity for adaptability and openness to change;[19] typically by means of a normative system that exhibits substantial variety in its rules, with changes in rules driven by institutional memory as well as socio-economic and/or environmental change.[20]

As a result of their genesis and nature, customary governance systems also tend towards versatility and flexibility in the sense that rules and institutions reflect the prevalent social, economic, cultural, political and ecological circumstances in which they operate.[21] To this extent, such systems contain an inherent adaptive mechanism that makes them suitable for natural resource management. However, as noted by Bosselman, not all customary law systems integrate this adaptive management strategy effectively.[22] A successful customary law system will recognise the structure of adaptations that it has made in the past and it is this that offers an effective vehicle for making changes to existing rules, encourages fine-grained rules that can be modified without having to modify the entire system, and has a meaningful feedback mechanism in place.[23]

Bosselman's principles of resilient customary law systems are comparable to the design principles identified by Ostrom and built upon by others, and the synergy that exists between the two will be looked at in more detail in the following section.

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[12] (Ostrom 1990)
[13] (Ostrom 1990), 101
[14] (Ostrom 1990), 93
[15] (Ostrom 1990), 94
[16] (Ostrom and Basurto 2011)
[17] (Bosselman 2005) 245
[18] (Ørebech et al. 2005)
[19] (Ostrom and Basurto 2011)
[20] (Ostrom and Basurto 2011), 336
[21] See for example (Australian Law Reform Commission 1986) for the Australian Aboriginal experience and (Pradhan 2002)409-446 for experience from India
[22] (Bosselman 2005)
[23] (Bosselman 2005)

AN ANALYTICAL FRAMEWORK FOR IDENTIFYING SUCCESSFUL CUSTOMARY LAW SYSTEMS OF NATURAL RESOURCE GOVERNANCE

Figure 1 encapsulates some of the main contributing factors that lie behind the success of customary law systems for natural resource governance. Departing from the premises put forward by Ostrom and building on Bosselman's work, the framework identifies five main indicators of successful systems all of which are dependent on users enjoying some level of autonomy in system design and implementation.

1. Knowledge Management System

Both Ostrom's and Ørebech's work point to the need for a rational process for the development and modification of rules in order for any normative CPR governance framework to work effectively. Based on insights drawn from the Marakwet case study, this paper recognises this crucial feature and develops it further.

First, any successful customary system for governing a CPR needs to have a record (oral or written) of how the system works under different conditions and that this knowledge and experience ought to be institutionalised. The term 'knowledge management' is used to denote this characteristic. For purposes of this framework, knowledge management signifies the capacity of the normative system to identify the insights and experiences necessary to develop rules that result in the sustainable governance of common pool resources. Knowledge management thus implies the capacity to capture the accumulated experiences of responses to environmental, socio-economic or other types of change. It is this record of past experiences that forms the basis for institutional memory and a repository of knowledge that is maintained for the purposes of improving the system down the road.

An insight into the importance of this feature was gained during fieldwork among the Marakwet. Through focus group discussions, the responses of water users, and the observations of the researcher, it was evident that an implicit system existed for accumulating knowledge of the conditions affecting water resources and associated rule system. Most interview respondents demonstrated knowledge of the origin of the furrow system in response to prolonged drought in the valley and of their water rules. The rationale for the rules and their relation to past experiences was not always evident as respondents often associated non-compliance of the rules with taboos and religious sanctions. However, as noted in the focus group discussions, clan elders explained that the objectives of water rules

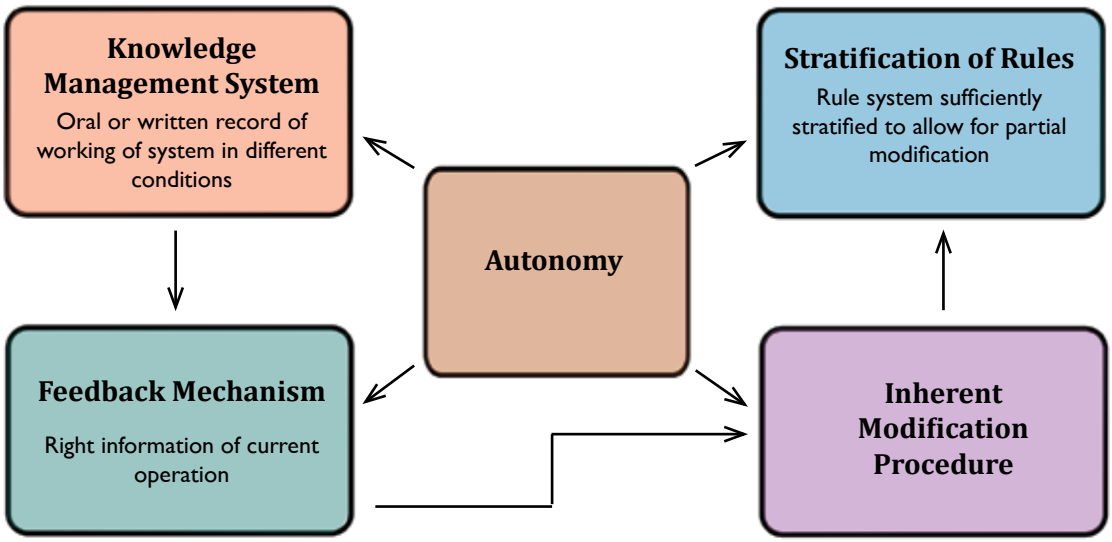

Figure 1: *Framework for Analysing Successful Customary Law Systems of Water Resource Governance*

were the preservation of water resources, environmental conservation, or the socio-economic welfare of local people.

2. Feedback Mechanism

A second feature characteristic of successful customary law systems is the presence of a feedback mechanism. A successful system must have ways of ensuring that accurate information is promptly fed back into the system and that information then used in the decision making process.[24] This mechanism is dependent on the knowledge management system, which ensures that relevant information is captured and used to drive the appropriate adaptation of resource rules and institutions.

The Marakwet's customary water governance system provides clear evidence of this. The flexibility of rules on water and land use point to their adaptation to ecological conditions. For instance, while commercial mango farming was not a traditional practice among the community, many women are currently involved in growing mangoes that are proving successful given their higher tolerance to the increasingly dry climate. Further, some of the respondents indicated that they are testing the feasibility of farming green gram commercially, along with other non-traditional crops that require less water. The customary law rules on farming and use of irrigation water have consequently been adapted to allow for commercial farming and changes in cultivation practices.

The Marakwet case thus points to the importance of an effective feedback mechanism and suggests that successful customary law systems need to include a wider base of knowledge inputs that encompass not only environmental change but economic and social shifts also. As Ostrom and Basurto (2011) note, the success of any such system is also dependent on an enabling environment that facilitates learning from the success and failure of others.[25] Such an informal social learning mechanism can be observed in the community habits of the Marakwet, whereby customary norms are crafted, implemented and enforced by means of member consultation—further aided by a physical space, the Sambalat trading centre, which acts as a hub for irrigation users to share experiences.

3. Inherent Rule Modification Procedure

Bosselman developed this feature by building upon Ostrom's work on rules and game theory in the context of institutional arrangements for natural resource management.[26] It concerns a procedure by which any given resource rule system can be improved and thus ensure its continued relevance in the context of changing circumstances. It is both considered an essential attribute of system sustainability[27] and requires the maintenance of an open-minded attitude to rule making by those involved—thus assuring congruence between rules in use and local conditions.

As noted, Marakwet's customary water governance system, while based on traditional norms and institutions, continues to evolve to adapt to changing circumstances. For instance, the incorporation of younger men into the clan elder council responsible for irrigation furrows is one important example of institutional flexibility that allows for rule modification when needed.

4. Stratification of Norms

One of the necessary conditions for designing an effective feedback mechanism is a rule system that is sufficiently stratified. Bosselman refers to this feature as 'fine graininess',[28] and involves rules that can be easily modified; that partial changes can be made without having to affect the entire system. Although this feature guarantees the sustainability of the rule system rather than the sustainability of the resource system, resource sustainability is closely associated with a resilient governance system that exhibits institutional adaptive

[24] (Bosselman 2005)
[26] (Ostrom, Gardner, and Walker 1994)
[27] (Ostrom and Basurto 2011)
[28] (Bosselman 2005)

capacity. A system with a great potential to deliver sustainable development outcomes would be useless if it were to fail in its actual operation as a rule system—for example, a system whose design requires an entire overhaul each time a single rule is changed.

While most rules of the Marakwet's water resource governance system were broadly defined, implementation take places through consultation with all water users, which subjects rules to negotiation and also allows them to be modified with relative ease. For instance, while there are clear rules on clan allocation of water resources from the furrow systems, the elders explained that these rules could be altered to grant more water resources to those families in greater need.[29] In other words, discretion is sometimes used in the application of rules, but this occurs without having to change the major institutions that fall under customary law.

5. Autonomy

Lastly, as was noted in the work of Ostrom and Basurto (2011), evidence from research on irrigation systems from different countries around the world has clearly demonstrated that the autonomy of resource users to design, operate and modify rules governing the water resources they use and depend on, ensured better and more equitable outcomes. This finding resonates strongly with the analysis of the customary law system of the Marakwet, where the community itself develops norms. The operation and implementation of rules is thus in the hands of resource users, with such autonomy in rule design regarded as inviolable.

LESSONS FROM OSTROM FOR CUSTOMARY LAW SYSTEMS

This paper confirms the parallels that exist between CPR governance systems and customary law governance systems. While the former focus on the normative structures (rules in use) for managing shared resources, customary law systems for natural resource governance are interested in a similar institutional framework albeit one where the basis of authority rests in informal rather than formal/statutory norms and institutions and where the focus is the relationship that connects actors and their environment to those rules. Given these parallels, Ostrom's pioneering work on commons management provides a set of most useful insights into the operation of resilient customary law systems for the governance of common pool resources, such as the irrigation system of the Marakwet.

The centrality of autochthony for building resilient customary law systems confirms Ostrom and Basurto's observation that, in places where commoners enjoy autonomy in CPR rule design there is an increased likelihood for positive outcomes.

The centrality of autochthony for building resilient customary law systems confirms Ostrom and Basurto's (2011) observation that, in places where commoners enjoy autonomy in CPR rule design there is an increased likelihood for positive outcomes. As noted, while the origin of customary law systems is often linked to past traditions and customs, the systems themselves must continue to evolve in response to changing environmental and socio-economic circumstances. Consequently, Ostrom and Basurto's tool for analysing ever-changing commons governance institutions also provides a most useful framework for the analysis of customary law governance systems.

[29] (Focus Group Discussion with Clan Elders and Representatives of Furrows Council (Marakwet District- Kenya, February 10 2010) 2010)

As is the case with successful CPR management systems, customary law systems must also contain mechanisms to ensure adaptability to changing circumstances if they are to persist. The analysis presented in this paper lends credence to Ostrom's central thesis that 'tragedy' is not a necessary outcome for commons scenarios and by extension customary law systems for natural resource governance. As demonstrated by the analysis of Marakwet's customary water governance system, autochthonous or home grown normative and institutional frameworks for governing CPRs, providing they can successfully adapt in the face of change, can produce positive and sustainable resource outcomes.

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