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# Changing conflict resolution institutions in the Ethiopian pastoral commons: the role of armed confrontation in rule-making

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## Abstract

Pastoralist access and use of common grazing resources in the Horn of Africa increasingly include armed confrontation over diminishing resources and reduced access. This comes about as traditional customary institutions (sets of rules) for commons management become compromised due to the presence of outside influences and actors which significantly change both resource availability, and conceptions about who is subject to traditional rules governing commons – particularly rules associated with exclusion. At the same time a combination of local knowledge regarding what happens to open access commons (degradation), a reluctance to give up control of commons and associated ways of life, and armed conflict as a viable alternative for exclusion rules, provide for combative situations and large costs. While a great deal of valuable work has been accomplished regarding the derivation of effective institutions to better manage commons, situations of armed conflict can seem particularly distant from effective rule-making, because few institutions can endure the stresses of armed conflict. Recent developments in Ethiopia however suggest an unexpected proximity between armed confrontation and the prospect for commons management rule-making. With examples from the Afar, Somali and Karamojong Cluster pastoralists, this paper examines the ingredients for rule-making in combative commons situations. Specific coincident forms of state recognition, donor flexibility, perceptions of the cost of conflict, and the local to international reaction to these, are examined for their utility and limitations in the provision of a facilitating context for institution derivation for commons management.

## Introduction

The dissolution of effective conflict resolution institutions in the Horn of Africa and the resulting insecurity has impacted significantly on the region's stability, food security, resource management, and vulnerability to a variety of problematic economic and political influences. Pastoralism is a primary form of livelihood in the Horn and the management of pastoral commons is particularly difficult in terms of conflict and conflict resolution (Fratkin, 1994; Gebre-Mariam, 1994; Ocan, 1994; Salih, 1994; Unruh, 1995a). While problems in the commons can often be seen as falling out along group lines (ethnic, clan), access and use of common property resources (CPRs) play a fundamental role in pastoral livelihood, identity, and conflict (Gadamu, 1994; Gebre-Mariam, 1994; Ocan, 1994; Salih, 1994; Unruh, 1995b). Much valuable work has been accomplished regarding the management of CPRs generally (e.g., McKay and Acheson, 1987; Berks, 1989; Lawry, 1990; Ostrom, 1990, Ostrom et al., 1999; Agrawal, 2001a, b; Ostrom et al., 2001; Johnson, 2004), and pastoral resources specifically (e.g., Runge, 1981; Warren, 1995; Mearns, 1996; Fratkin, 1997; Lesorogol, 2003; Hoffmann, 2004). But because few institutions can endure the stresses of armed conflict (Ostrom, 1999), conflict prone areas such as the Horn can seem particularly distant from opportunities to derive workable institutional arrangements able to effectively manage contested commonly held land. Recent developments in Ethiopia however hint at a surprisingly close proximity between armed conflict and derivation of institutions (sets of rules) for resolving disputes and managing contested pastoral commons. Despite the large body of work that has examined many aspects of CPR management, to date the relationship between armed conflict and CPR management has not been attended to. This is unfortunate given the prevalence of armed conflict in and over CPRs, particularly in Africa.

Using the relevant literature together with fieldwork, this paper presents three cases of armed confrontation over pastoral commons in Ethiopia and the developments which have led to significant opportunities for conflict resolution and rule-making. Subsequent to a broad description of the Ethiopian pastoral commons and a brief overview of the cases involving the Afar, Somali, and Karamojong Cluster commons, the article discusses the salient features of combative situations and their socio-political contexts which can lend themselves to the development of workable institutions for commons conflict resolution and management. The argument is presented that, provided specific fundamentals are present, latent opportunities for rule-making for CPR management, including conflict resolution, can be tapped within combative resource claim situations. As the Ethiopian Government considers new policies involving pastoralist sedentarization as a way to alleviate marginalization and associated problems (IRIN, 2004), examples such as those presented here illustrate the potential of alternatives.

## Fieldwork

The relevant fieldwork took place over 13 months in Ethiopia, complemented by 1 month of fieldwork in Djibouti and Kenya while the author was working in the capacity of Country Representative for the USAID Famine Early Warning System. Field work comprised extensive travel in Afar, Somali SNNP (Southern Nations Nationalities and Peoples), Tigray, Amhara, Oromiya, and Gambela Regions while conducting food security and livelihood vulnerability assessments. Key informant and group interviews were conducted with pastoralists in gathering locations (watering points, livestock markets, nomad encampments), with government at the *wareda*, zonal, regional, and national levels, and with representatives of national and international NGO's and the donor community. As well market price information was monitored at the district level to ascertain the relationship between livestock and grain prices; and remote sensing data was monitored in dekadal (10 day) periods to ascertain the status of grazing areas. In addition NGO, donor, and government field reports were used to supplement data collection and field observations; and local level government and donor sponsored workshops were attended where pastoralists, and pastoralist and government leadership at different levels discussed issues of conflict, conflict resolution, and grazing commons access.

## Conflict and commons

Management issues involving common property regimes can quickly come to involve notions of who is and who is not a legitimate member of the group(s) able to access a particular resource at a particular time. This 'exclusion problem' is a fundamental issue to the management of commons, due to the perceived reduction in resource availability (e.g., Ostrom, 1990; Ostrom et al., 1999; Dietz et al., 2001) or increased territorial encroachment (Lawry, 1990) which makes exclusion necessary. When rules seen as legitimate and effective for limiting access to resources are lacking or becoming ineffective, free riding, encroachment and overuse of the resource can occur (Hardin, 1968; Lawry, 1990; Ostrom et al., 1999). However in situations where resource users know well in advance the repercussions associated with an inability to exclude based on rules, confrontation and violence for purposes of exclusion are also options, particularly if such confrontation falls out readily along group lines and/or conflict is an ongoing and established alternative (Gadamu, 1994; Gebre-Mariam, 1994; Kuney, 1994; Ocan, 1994; Unruh, 1995a).

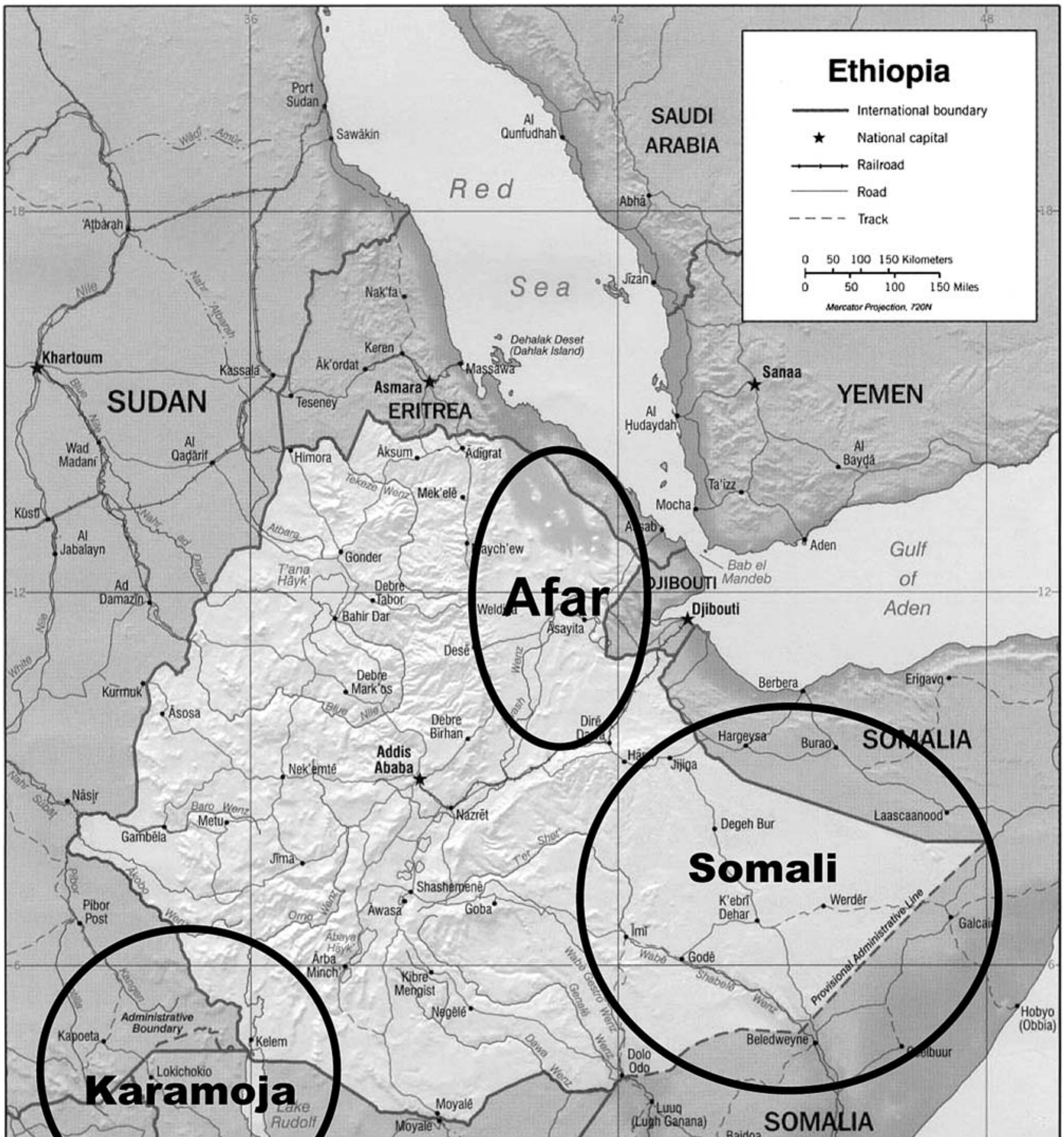
Opposite from violence, cooperation is regarded as a primary avenue toward effective management of CPRs (e.g., Bromley, 1998; Ruttan, 1998; Ostrom et al., 1999; Kopelman et al., 2001; Richersonet al., 2001). A significant problem however is that the opportunities for cooperation can often be overwhelmed by other forces in local society, to the degree that the possibilities for such cooperation become significantly diminished (Kuney, 1994). Conflict, and particularly armed conflict, can be one of the most overwhelming forces in society, and directly militates against cooperation.

While the ability to overcome commons problems can have much to do with the perceived costs of deriving, monitoring and enforcing specific rules arrangements, versus the costs of not deriving these (Ostrom, 1990; Dietz et al., 2001; Stern et al., 2001), what can be added to the latter in armed confrontation scenarios are the very high costs of continued violence. Such costs can extend to impact much more than just commons issues, to the degree that they can be the prevailing social themes in affected societies. Where combat over commons resources is frequent and severe over time, resulting in high costs (personal, social, political, environmental, economic) there can be strong latent incentives to deriving legitimate institutions for more effective management. Such incentives have a greater probability of being operationalized if the right facilitating contextual fundamentals are in place. While the state is arguably in the best position to provide such fundamentals, donors and non-governmental organizations (NGOs) can play a significant, if inadvertent, role. The contexts discussed here include recognition and support in specific forms, and the timely presence of an appropriate catalyst.

## The Ethiopian pastoral commons

### *Areas of pastoral occupation*

The pastoral areas of Ethiopia (constituting 60% of the national territory) are occupied by distinct ethnic and culture groups whose 10 million people employ transhumant and nomadic pastoralism as their primary mode of livelihood and land resource use (Gadmadu, 1994; IRIN, 2004). These areas occupy the lowlands of Ethiopia and cross internal and international boundaries (Figure 1). In all areas processes of dispossession, marginalization, and influx of outsiders are underway which make pastoral management of grazing commons increasingly difficult – such that traditional institutions for resolving disputes over access and use of commons are proving problematic, eroded, or unworkable (Gebre-Mariam, 1994; Ocan, 1994; Unruh, 1995b). Such processes are widely reflected in pastoral areas of Africa, leading to pronounced disruption of livelihoods, marginalization, and resource degradation (Markakis, 1993; Galaty, 1994; Galaty et al., 1994; Lane, 1994; Salzman, 1994; Salih et al.,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Gulf of Aden
INDIAN OCEAN
Port Sudan
Sawâkin
Al Qunfudhah
Abhā
Jīzān
'Atbarah
Khartoum
Kassala
Nak'fa
Keren
Āk'ordat
Asmara
Massawa
Teseney
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Sanaa
Al Hudaydah
Al Baydā
Ta'izz
Mocha
Aden
Aseb
Bab el Mandeb
Djibouti
Wad Madanī
Al Qadārif
Kūstī
Al Jabalayn
Ad Damazīn
Himora
Āksum
Ādīgrat
Mek'elē
Gonder
T'ana Hāyk
Debre Tabor
Bahir Dar
Weldiya
Asayita
Desē
Debre Mark'os
Kurmuk
Āsosa
Debre Birhan
Dirē Dawa
Hārer
Jijiga
Hargeysa
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Goba
K'ebrī Dehar
Werdēr
Galcaio
Pibor Post
Ārba Minch'
Kibre Mengist
Negēlē
Imī
Godē
Provisional Administrative Line
Hobyo (Obbia)
Beledweyne
Ceelbuur
Kapoeta
Administrative Boundary
Kelem
Lokichokio
Lake Rudolf
Dolo Odo
Luuq (Lugh Ganana)
Baidoa
Moyalē
Moyale
Lodwar
Gulu
Moroto
Marsabit
Soroti
Wajir
Baardheere (Bardera)
Mogadishu
Merca
Boundary representation is not necessarily authoritative.

*Figure 1.* Location of the Afar, Somali, and Karamojong Cluster Areas in Ethiopia and Adjoining States. *Source*: Perry-Castañeda Library CIA Map Collection, University of Texas–Austin.

2001). Confrontation over grazing commons in the context of armed conflict is very common in the examples presented here, to the extent that they constitute the prevailing approach to commons exclusion, and are a primary force in local society. Thus these examples provide a valuable opportunity to examine the role of violent confrontation in the context of the 'exclusion problem' in the management of CPRs.

With the change in government in Ethiopia in 1991, the country has pursued an 'ethnic federalism' approach to governance whereby administrative boundaries (Regions) were redrawn along broad ethnic lines (Figure 2) (Gadmadu, 1994). While the current Ethiopian Constitution indicates that all land belongs to the state, much power has been given to these ethnic regions to govern their own affairs (Gadmadu, 1994; Michaelson, 1999a, b). Article 78 (5) and Article 34 (5) of the constitution now accord full recognition to customary and religious courts of law, and their legal guarantee is ensured (USAID, 2000a; b). The constitution also gives the regions the power to recognize customary dispute resolution mechanisms (Gadamu, 1994; USAID, 2000b). While there is some debate over the advantages and disadvantages of this ethnic federalism (e.g., Gadamu, 1994; Henze, 1998; Joseph, 1998), there is evidence that the arrangement may provide important ingredients for operationalizing latent opportunities in the conflictive pastoral commons. The three examples described here illustrate how such ingredients intersect with the effects of armed confrontation to produce different opportunities for rule-making regarding access and use of grazing commons.

### *Afar region*

The vast area occupied by the Afar includes the northeastern Ethiopian lowlands, the eastern third of Eritrea, and northern and central Djibouti (Figure 1). The area is extremely arid, and is primarily comprised of stone and sand desert interspersed with salt lakes and lava streams, with some cultivation along the Awash River (Lewis, 1998). The Awash river is important to the Afar in the southern part of Afar Regional State, constituting the only permanent source of water in the Region other than wells, and providing dry season grazing (Markakis, 2003). The Afar are nomadic pastoralists and keep large herds of camel, sheep, and goats, with some cattle. Herds are moved considerable distance from the Awash river during the wet season, and return to riverine areas during the dry season. The environment requires far-ranging grazing patterns, from Awash National Park in the south of the Region, to the foothills of the Amharan highlands in the west, and the hills in the southeast of the Region that form a boundary between the Afar and the Somali (Markakis, 2003). International borders play a significant role in Afar resource access, due to different national policies regarding the Afar. Clans generally co-operate on issues of common interest, including access to each other's land and resources (Kassa, 1997). In-depth treatment of Afar society, history, and land use practices are available in Markakis (2003), Getachew (2001), Milas and Latif (2000), Lewis (1998), Said (1994), and Pankhurst (1986).

In the past several decades there has been significant change in grazing resource use and access in Afar

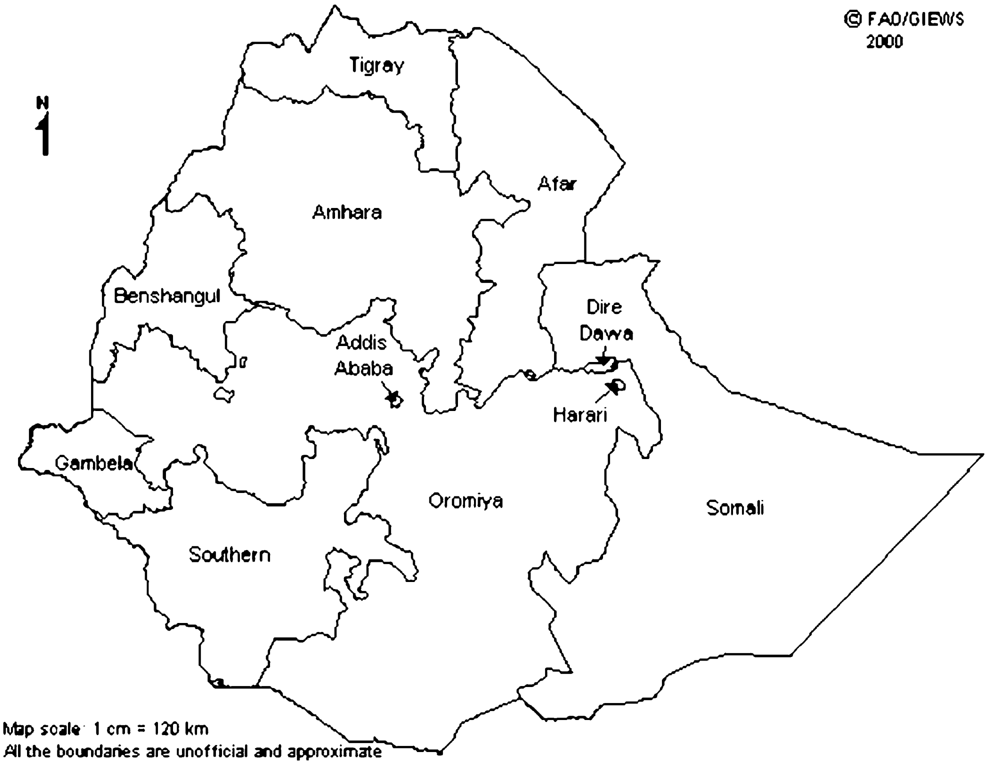

*Figure 2.* Ethnic federalism in Ethiopia. *Source*: FAO/GIEWS (2000).

territory (Markakis, 2003; Gamaladin, 1987; Gebre-Mariam, 1994; Said, 1994). The establishment of a dam and irrigation schemes on the Awash river, the designation of a large national park, widespread bush encroachment, in-migration of non-Afar populations, the pervasive presence of light weapons, proximity of insurgences, and changing national policies toward the people and land resources of Afar inhabited areas in Ethiopia, Eritrea, and Djibouti have all altered resource access, especially in the dry season and drought grazing commons (Gadamu, 1994; Gebre-Mariam, 1994; Michaelson, 2000; Gebre, 2001; Kassa, 2001; Markakis, 2003). These developments have changed the legitimacy, spatial applicability and ultimately the utility of traditional resource management and dispute resolution institutions for the Afar. This has led to a significant increase in unresolved conflict between Afar clans and sub clans, between the Afar and other pastoralist and agricultural groups, but most problematically between the Afar and the neighboring Issa ethnic group, aggravating longstanding conflicts over access to grazing resources (Gebre-Mariam, 1994; Said, 1994).

The overall reaction of the Afar to the emergence of resource degradation, reduction of access, and the presence of outsiders seeking to occupy and use grazing commons, together with an erosion in their ability to effectively apply rules of exclusion (particularly to non-Afars), has resulted in a response that holds armed confrontation to be the prevailing approach in attempts to exclude (Gebre-Mariam, 1994; Michaelson, 2000; Kassa, 2001; Markakis, 2003). In this regard the Afar do not intend to allow themselves to get into a situation of open access commons use and further degradation. Armed confrontation however comes with significant cost to the Afar. Loss of people, land access, livestock, and possessions over time are devastating to Afari communities and individuals, and can make preservation of a way of life problematic. As well, fatigue and exhaustion regarding the high ongoing costs of conflict, and the realization that "we were destroying ourselves" as an Issa elder claimed (Michaelson, 2000: 5) has played a large role in the emergence of incentives for deriving conflict mitigation institutions between the Afar and the Issa.

With the definition of administrative boundaries along ethnic lines and decentralization of certain powers and responsibilities regarding the creation and use of regional to local institutions, the Ethiopian state has provided the Afar with realistic opportunities to attempt new approaches which fit changing circumstances occurring inside their administrative areas (Gadamu, 1994). Afar traditional authority and customary law (*Afar-madaa*) have revived significantly with the recognition afforded by the Ethiopian government and the subsequent establishment of Afar Regional state in 1991 – whereas under previous policies the state appointed non-Afar administrators to govern areas occupied by the Afar (Kassa, 1997). According to the Afar themselves, the high costs associated with armed conflict together with this recognition by the state are to a large degree responsible for Afari attempts to derive workable rules aimed at resolving conflict over grazing commons with the Issa. One important aspect of such recognition has been that regional administrative officials and Afar ethnic elders are often now the same people, or have very close connections. Within this construct the Afar approached the Ethiopian prime minister's office to request conflict resolution assistance with the Issa, and the government responded in the form of an objective facilitator (federal judge). With this assistance the Afar initiated meetings with Issa elders in 2000 (Michaelson, 2000).

Two large meetings of Afar and Issa leaders, as well as representatives from the Afar regional government and the central government, were held in the towns of Awash and Dire Dawa, Ethiopia in December 1998. The purpose of the meetings was to discuss root causes of conflicts and establish both joint committees at several administrative levels, and technical aspects of conflict resolution involving courts, evidence, enforcement, and very importantly, time (Michelson, 2000). With regard to the latter, Afar and Issa elders decided that the Awash meeting would serve as a symbolic cutoff point regarding accountability. All conflict cases prior to the meeting would be forgiven, and all occurrences after the meeting would be examined and punished according to the new rules (Michaelson, 2000). A system of courts was established at different administrative levels (regional, district, zonal) for hearing disputes between the Afar and outsiders. Radio communication was highlighted as a needed addition to the court system, enabling quicker notification of transgressions, and avoiding problematic violent responses to rule infractions. Plans were made for non-Afar, non-Issa judges and officials to be used to facilitate dispute resolution and enforcement. Penalties for violating rules and resolution decisions were derived that involve both traditional blood price payments of cattle and camels, as well as (state) prison terms. The fact that the local elders, local and regional officials, and federal authorities are to work in tandem, has lent the process and resulting institutions considerable legitimacy (Michaelson, 2000).

The creation of institutions legitimate to the Afar and the state (and hence applicable to outsiders), also has considerable utility to the state. This occurs as both the federal and regional administrations have an avenue to institutions considered legitimate to the Afar, which can be used to assist the government to resolve its problems and pursue its agendas and programs (e.g., health clinics, schools, donor programs). The future of the arrangements the Afar have pursued regarding rule-making remain to be seen. Nonetheless what is noteworthy are the ingredients that facilitate rule-making in the context of armed conflict over commons resources, and in particular the willingness on the part of the state and the Afar to take advantage of experimentation involving a mix of customary and state constructs.

*Somali Region*

Although Somali Region resides in eastern Ethiopia (Figure 1), ethnic Somalis inhabit the large tip of the Horn of Africa, including eastern Ethiopia, all of Somalia, southern portions of Djibouti, and territory in northeastern Kenya. Biophysically this arid land includes stony deserts with low thorn scrub, riverine vegetation, extensive areas of bush vegetation, and high-grass savanna (Lewis, 1998). Nomadic pastoralism is a primary economic and land use activity for the Somali, with camel pastoralism prevalent in the north, and cattle pastoralism based in the south of the general Somali inhabited area, and these are complemented in both areas by large herds of sheep and goats (Lewis, 1998).

In Somalia six major clan-families and their subgroups navigate the particulars of the environment and retain access to most land. Clan territories are not distinct, instead they constitute general areas and home wells associated with particular groups. Land traditionally is not alienated from the clan. If a pastoralist from a neighboring clan is allowed to use grazing resources, the person becomes allied with the local clan, rather than land being removed from the clan's territory. There exists a dynamic overlap in the territorial orbit of different clans in terms of access to grazing and watering resources. This overlap increases in times of drought as members of one clan may intrude into another clan's territory when its own grazing and watering resources become scarce, provoking mutual hostilities, which in some cases have resulted in clan wars. While such a cycle of resource scarcity and territorial intrusion and confrontation among clans and segments thereof have always been a part of Somali pastoralism, such conflicts and wars have increased in recent decades due to declining ecological conditions and increased in-access to traditional resources (Unruh, 1995a). Substantial study has been made of Somali history, ecology, pastoralism, and contemporary land use problems (e.g. Samatar, 1989, 1993; Unruh, 1995a, b; Lewis, 1998).

Lineage membership is the primary organizing framework of the Somali social system. The arrangement is characterized by changing allegiance between clans and their further segmented units, in order to access spatially changing grazing and watering resources. The reigning situation of alliance between the various units then defines rights and obligations (Bennett, 1993; Unruh, 1995a). Making and remaking agreements between clan units is important in preventing land degradation and guaranteeing long-term rangeland productivity (Samatar, 1989; af Ornas, 1990; Poulsen, 1990). In a commons management context the Somali approach has historically worked to effectively manage access to grazing resources in Somali inhabited areas (Unruh, 1995a). Affiliation by clan, and the idea of collective (clan) guilt as opposed to individual guilt and responsibility for infractions, along with the threat of punishment and retaliation by opposing clans, deterred intrusion into grazing areas by opposing clans for the duration of an alliance (FEWS, 1997; Unruh, 1995a). Thus the rule-making aspect of pastoral commons management for Somalis is not lacking. The purpose of forming alliances stems from the need to operationalize rules to exclude others from a grazing area for a period of time. However influences from a changing world have impacted on the approach to significantly compromise its effectiveness.

Traditional seasonal grazing patterns in Somali Region of Ethiopia have become increasingly constrained with an increase in the number of water points, the spread of grazing enclosures operated by sedentary Somali, an increase in the number of fixed settlements, crop cultivation in areas previously reserved for dry season grazing, and insecurity and the resulting refugee flows from Somalia (Unruh, 1991, 1993a, b, 1995b; Gadamu, 1994; Sugule and Walker, 1998). As well, outside economic forces have encouraged a shift in modes of pastoralism, from drought resistant camels to drought vulnerable cattle, placing many pastoralists in an increasingly vulnerable food security situation (Gadamu, 1994; FEWS, 1997). Land tenure policies in place with previous Ethiopian governments have contributed to animosity between the state and Somali pastoralists by attempting to replace customary tenure regimes with national tenure systems (Unruh, 1995a).

This combination of processes has made the effectiveness of traditional exclusionary rules regarding commons management significantly problematic. The overall result has been disruption of traditional nomadic migrations, disenfranchisement from traditional land and water rights, land degradation, and conflict (af Ornas, 1990; Hutchinson, 1991; Homer-Dixonet al., 1993; Unruh, 1993a, b, 1995b, 2001). In aggregate this has led to an increase in the fluidity of alliance-making, with agreements regarding access to land resources becoming increasingly confused, transitory, and less meaningful, particularly given the widespread availability of modern light weapons (Clark, 1993; Unruh, 1995a). As pastoralists have increasingly armed themselves for enforcement of clan alliances regarding commons exclusion, violent confrontation has become more frequent. With such instability, spatial and temporal disarray has meant that expected resource use options have had a much reduced probability (Unruh, 1995a). In such an environment the foundation for commons management in more stable contexts is compromised, as continued disorganization and confrontation over diminishing resources militates against the implementation of sound institutional arrangements (Samatar, 1989; Unruh, 1995a).

The costs associated with such armed confrontation are high for the Somali, particularly as conflict continues over time. Large areas of grazing resources are essentially off limits to use by pastoralists because they are hotly contested, and venturing into such areas means significant risk to life and livestock. As well, established trading networks are disrupted as travel, security of goods traded, and contact and contractual arrangements with others are disrupted.

Increased recognition of customary institutions by the Ethiopian state as national policy, has meant that the *Guurti*, a traditional council of Somali elders, is being instituted formally at different levels in regional government. To date, an official *Guurti* comprised of elders has been instituted at the regional level (36 members), at the zonal level (seven members), and at the smallest administrative unit, the *wareda* level (three members). These council members receive salaries from the government and are to advise on policy. There are varying opinions of this move from the larger Somali community in Ethiopia. Some local inhabitants believe this is an attempt by the Regional government to get more input from elders and more recognition of local customary institutions; while others believe that this is a way to co-opt the *Guurti* with salaries and positions in order to control communities. In reality the issues of recognition, co-opting, and erosion or not of local authority structures are likely to be constantly negotiated by government at different levels, the *Guurti*, and communities, depending on the context, issue at hand, and capability; with the topics and outcomes of such negotiation variable over the vast expanse of the Region.

In parts of the Region there is now significant interaction between local customary dispute resolution institutions regarding access to commons, and regional and state authorities. In a large part this has to do with the local state authorities being from the area and connected locally, and hence they have an understanding and interest in customary institutions. This is quite variable across the Region however and is dependent as much as anything on the disposition of local actors. In parts of southern Somali Region, most community members, elders and local government officials agreed that the elders are given first opportunity to resolve conflicts, and they then report what they do to local government authorities, and may get local government involved if stronger backing is needed or if their assistance is needed in resolving issues. Overall, local communities in the south assert that the traditional dispute resolution institutions and decisions regarding disputes are effectively backed up by district and zonal administrations (Frank, 2000). However some local opinion holds that interaction between customary and state institutions in effect undermines local traditional conflict resolution institutions because local government personnel can be much younger than elders, and can be political appointees with agendas different than to support local elders on decisions. Thus while the greater recognition afforded by the state has resulted in some opportunities for rule-making and conflict resolution, the overall effect is extremely variable across the Region, and in general the state has not been as supportive as in Afar Region – perhaps due in-part to this variation, but perhaps as well due to a lack of requests for support by Somali elders.

### *The Karamojong Cluster*

The Karamojong Cluster was defined by Dyson-Hudson (1966) as a set of several related ethnic groups inhabiting the border areas of southwest Ethiopia, northeast Uganda, southeast Sudan, and northwest Kenya (Figure 1). The Ethiopian portion resides within the Southern Nations and Nationalities Peoples Region (SNNPR). Dietz (1987), Oloka-Onyango et al. (1993), and Dyson–Hudson (1966, 1985) have looked at the history, economy, and contemporary issues of peoples within the Cluster. This semi-arid area is used for transhumant cattle pastoralism together with some dryland agriculture where soils and water are favorable. As well, gold panning and other forms of mining exist together with some mirra harvesting. Due to resource variability over the area animals traditionally are moved to take advantage of the spatial and temporal availability of resources and resource access. However pastoralists also have permanent settlements and permanent claims to lands. Community members not involved in herding generally stay in the permanent settlement. Transhumance in the cluster involving both mobility and permanent settlements allows pastoral production and reproduction, and access to land for crop cultivation (Ocan, 1994). This combination is an important production strategy in response to a specific biophysical environment. The strategy also provides for regeneration of grazing lands, and together with the manipulation of herd composition and size, provides for continuous supply of livestock products (Ocan, 1994). Seasonal environmental conditions can also influence conflict, in that decreases in precipitation can contribute to competition and confrontation over grazing resources (CEWARN, 2004). Drought and animal disease outbreaks are common and frequently whole herds can be wiped out resulting in significant food insecurity (OAU/IBAR, 1999a; Waithaka, 2001).

Livestock raids by neighboring groups within the Cluster, historically limited to a ‘light violence’ activity by youth and controlled by elders, has, with the prevalence of modern light weapons, neighboring wars and insurgencies, the influx of refugees, international border problems, the creation of national parks, the spread of crop cultivation, ranching, and food security problems, developed since the late 1950s into frequent heavy violence (Gadamu, 1994; OAU/IBAR, 1999a, b; Ocan, 1994). The result has been the development of significant emnity between groups, and disruption of land resource access arrangements and the overall pastoralist economy (Ocan, 1994; OAU/IBAR, 1999a, b; Muhereza, 2001; Waithaka, 2001).

Traditionally, effective communication and rules of interaction among elders of the different groups allowed for conflicts over land and cattle to be effectively dealt with through customary institutions (Ocan, 1994). However currently, traditional sanctions and controls have been ignored as pastoralists no longer obey regulations for use of grazing commons (Ocan, 1994; OAU/

IBAR, 1999c). Instead, armed confrontation over access to common grazing resources has become the prevailing approach to exclusion, with responses by governments often inappropriate and inadequate (Ocan, 1994; Frank and Paz-Castillo, 1999).

The impact of such confrontation is significant. Pastoralists complain that livestock diseases have spread uncontrollably because animal health workers are not able to work in the area; and many traditional grazing areas are off limits due to fear of attacks (Frank, 1999). As well land degradation has occurred as mistrust among groups of pastoralists alters ecologically sound grazing patterns to favor more ecologically destructive patterns that focus on avoiding confrontation. This occurs both as pastoralist households and their livestock cluster together due to insecurity, and as pastoralists scramble for access to the remaining secure land (also Frank, 1999; OAU/IBAR, 1999b, d). Market opportunities cease as pastoralists find themselves cut off from market centers, international borders close periodically due to insecurity, and traders frequently find the area too unstable for business (Ocan, 1994; Frank, 1999; OAU/IBAR, 1999b, d). Likewise development activities and food relief can be extremely difficult in the area (UNDP-EUE, 1997; OAU/IBAR, 1999a). Additional costs of conflict, as noted by elders in the area, include: livestock losses in raiding, human deaths and retribution, an increase in poverty and food insecurity, and a decrease in wildlife as food insecurity leads to alternative food use (Frank, 1999).

While the costs of conflict vary across the Cluster, of primary importance to communities and pastoralism is the inability of veterinary workers to access and vaccinate livestock. The Inter-African Bureau for Animal Resources (IBAR) of the (then named) Organization for African Unity (OAU) had been working through its Pan African Rinderpest Campaign Partners to develop coordinated animal health services for the past 12 years in the Karamojong Cluster rangelands, including the development of community-based animal health delivery systems in southern Sudan, northeast Uganda, and southwest Ethiopia (OAU/IBAR, 1999a). These programs have experienced significant success and are quite popular (OAU/IBAR, 1999a). Through this overall effort, OAU/IBAR and its Participatory Community-Based Vaccination and Animal Health (PARC-VAC) project held, over a period of 6 months in 1999, a series of cross border meetings between elders of pastoral communities for the purpose of making the process of livestock sector development as participatory as possible (OAU/IBAR, 1999a; Grace, 2001; Waithaka, 2001 Minear, 2002). In these meetings the issue of violent conflict over grazing commons and cattle raiding, and the impact these have on pastoralism were raised repeatedly by elders, to the degree that a subsequent set of meetings was initiated to look specifically at the issue of violent conflict (Frank, 1999; OAU/IBAR, 1999a). These conflict meetings, initially called the ‘Expanded Border Harmonization Meetings’ and organized by PARC-VAC, included elders from different pastoral communities in Ethiopia, Sudan, Kenya, and Uganda, as well as government officials from Ethiopia, Uganda, and Kenya, and representatives from development agencies, as well as local community and political leaders. These and subsequent meetings developed to be called ‘peace and reconciliation meetings’ by the pastoralist communities, to the degree that the PARC-VAC vets were labeled ‘peacemakers’ (OAU/IBAR, 1999a, b; Grace, 2001; Waithaka, 2001; Minear, 2002). In these meetings OAU/IBAR emphasized that its interest in conflict mitigation stemmed from their desire to have successful animal disease programs in the area (Frank, 1999; Grace, 2001; Waithaka, 2001; Minear, 2002). Other donors were concerned about food insecurity in the area and the provision of food aid. Several of these meetings resulted in the resolution of specific conflicts between particular groups (OAU/IBAR, 1999b). For the meetings on the Ethiopian and Kenyan sides of the border, recognition and support was expressed by both governments in the conflict resolution process (Frank, 1999).

During the meetings it was acknowledged by the elders that it is the conflicts themselves, their repercussions, and high associated costs which stimulated them to engage in attempts at rule-making and conflict resolution over grazing lands access and management (Frank, 1999; OAU/IBAR, 1999b; Grace, 2001; Waithaka, 2001; Minear, 2002). The elders mentioned that the most important issue related to difficulty in accessing pasture and water resources was the lack of cooperation among elders and pastoralist associations and the resulting armed conflicts (OAU/IBAR, 1999b). As well the elders acknowledged that they need to share common grazing resources and that they have to derive a way to do this peacefully if they are to survive (OAU/IBAR, 1999e; Grace, 2001; Waithaka, 2001; Minear, 2002).

The outcomes of the meetings resulted in the elders agreeing to adopt the following: (a) the establishment of rules between groups involved in armed conflicts regarding when to use specific range resources and who can use them; (b) the derivation of ways of improving access to drought reserves in their common areas; (c) to encourage communication and dissemination of agreements and conflict resolution decisions among community members, and improve overall information flow; (d) to conduct smaller peace meetings with immediate neighbors with the objective of working out land access and cattle stealing issues, followed by larger meetings with representatives of national governments, churches, NGOs, and international agencies in order to witness acceptance of new rules, and to have conflict settlements formally recorded; and (e) to disseminate the results of meetings with their respective communities (OAU/IBAR, 1999b, d, e).

Additional less formal recommendations also emerged. It was suggested by an official in the Kenyan government that village committees be formed to regularly review the situation and deal with any problems, and that an NGO should be encouraged to pay a small incentive when committees meet in order to keep the affair separate from either the Ethiopian or the Kenyan governments (OAU/IBAR, 1999d). Another suggestion was to provide elders with radio communication equipment, allowing them to communicate when tensions or other issues arose (Frank, 1999). A further suggestion recommended that a committee of elders be constituted to reintroduce forms of controlled grazing, including the protection of dry season grazing (OAU/IBAR, 1999d). As well the elders outlined what they would like from national governments in order to effectively deal with conflicts over grazing commons. These included: (a) civil authority enforcement of infractions in addition to enforcement by local communities; (b) the institution or reinstitution of group sanction by government; (c) significantly improved interaction between states and local communities; (d) greater interaction between state authorities and pastoral communities prior to state organized migration of outsiders into pastoral areas; and (e) a larger role of the state, NGOs, and churches in the derivation of cooperative approaches to grazing on common rangelands (OAU/IBAR, 1999b, d).

It was acknowledged by elders that customary conflict resolution institutions were lacking or weak, and that they needed formal state institutions to back up customary institutions (Frank, 1999). The elders also pointed out the very important need for governments to recognize how the pastoralists live and that they survive by mobility and accessing lands used by a number of communities, and as such should be allowed freedom of movement with their livestock both within countries and across international borders (OAU/IBAR, 1999b).

Government policy efforts on the Ethiopian side of the Cluster can vary over time. Government officials at times can work closely with local communities to mitigate conflict so as to secure votes in elections at local and regional levels (CEWARN, 2004). As well local government officials can collaborate with community elders in enforcement of elder decisions to recover and return livestock taken in raids (CEWARN, 2004). At other times however there can be an inadequate response by local officials to deter tensions and reconcile differences between communities (CEWARN, 2004). The IGAD Conflict Early Warning and Response Mechanism (CEWARN) notes improvements in access to health and other social services can provide structural support to conflict mitigation (CEWARN, 2004). Ethiopian pastoralist policy nationally however tends to support sedentarization and support of agropastoralism (UNCTE, 2004).

## Changing institutions for grazing commons

### *Confrontation*

Armed confrontations in the cases presented here are to a significant degree reactions to the prospect of moving from what Ostrom et al. (1999) articulate as 'group property' management of commons, in which a group (via rules) is able to exclude others, to an 'open access' arrangement lacking in enforceable rules. In each case the reaction to changing circumstances, and the inability of traditional rules and institutions to effectively deal with exclusion in new contexts, has been significant armed confrontation. Such confrontation inflicts high social and economic costs in addition to those normally associated with not cooperating in the management of commons (e.g., resource degradation). As well, neighboring groups, government, donor, and NGO actors can all experience significant costs associated with violent conflict over grazing commons. In aggregate, such costs (particularly when they are high over time) can, but do not always, create a significant incentive to experiment with approaches for rule-making. However such experimentation is generally not possible without a broader facilitating context (also Ostrom et al., 1999); and the approach of the Ethiopian government to the regions appears to variably supply such a context.

### *Recognition and responsibility*

In each of the cases examined the role of state recognition in the derivation of institutions occurs to varying degrees in two interrelated aspects: (a) recognition of customary authority structures and the legitimacy of their jurisdiction over CPRs; and (b) the facilitation and support of emerging, and largely experimental, alternatives. One theme that has surfaced as an important issue subsequent to this recognition is responsibility. Local customary leaders in their position as administrative officials now have the responsibility for administering their regions in a state context (Gadamu, 1994). In the attempt to derive workable institutions, local efforts have reacted in different ways to this new responsibility to engage state structures in ways that support local desires. In the case of the Afar in particular, recognition has meant that Afari elders and local government officials are often the same people, thereby enhancing considerably the legitimacy of locally derived institutions and how these intersect with the state. In this regard Afari officials have used their new responsibility to rigorously pursue rule-making, and have asked the state to serve as a facilitator in deriving conflict resolution arrangements with other groups – and the state appears to have responded in a timely and effective manner. The resulting (several) institutions appear to have served the Afar well so far, in an arrangement that continues to evolve.

In Somali Region, state recognition continues to develop with attempts at incorporation of specific traditional Somali institutions and bodies into regional government. The precise relationship between government and the adapted traditional institutions continues to be open to vigorous negotiation and debate. In Somali Region, the response to increased responsibility subsequent to recognition has proved more problematic than for the Afar, due to a significant degree, to the way this responsibility intersects with operative aspects of the Somali clan structure, and the historical relationship between the Somali and the Ethiopian state. Perhaps related to the way responsibility variably responds to recognition across the Region, local officials, while usually from the area, can often be political appointees. As well the state has not responded in the manner that it has in Afar Region, perhaps because the situation in Somali Region presents less of an opportunity for effective involvement. In any case the effectiveness and broad legitimacy of institutions appear much lower than in Afar Region.

In the Karamojong Cluster, greater recognition by neighboring states of pastoral problems and priorities, together with a desire for effective resolution of combative situations resulting from high conflict-related costs, has resulted in varied support of local elders in their use of a donor veterinary project. This project is able to operate as a catalyst for experimenting with the derivation of institutions for commons conflict management. Thus elders appear to have attempted to engage the responsibility aspect of recognition, by using the local presence of a donor project. The Karamojong Cluster provides a case where several state boundaries intersect significantly with a pastoral commons problem. Because four international borders come together in the Cluster, Ethiopian state recognition has less influence on the overall problem than in the other examples. Nevertheless three of the relevant governments reacted to the attempt by elders and OAU/IBAR in the 'harmonization meetings' by supporting the rule-making effort to varying degrees. That the role of the donor (OAU/IBAR) was so large in this example perhaps attests to the problematic international border environment of the Karamojong Cluster.

### *State recognition of customary institutions*

Ethiopia's ethnic federalism approach provides an important variation of state recognition of local customary institutions, and in this regard allows an examination of the operative aspects of such a policy. Foremost among these is that the nature of the actual recognition can vary markedly with the sub-national group concerned, depending on the state's priorities, capacity, and the relationship of the state to the group in question, along with the internal workings, requirements, and perspective of the group regarding the state. As well, the specific arrangements for interaction between groups, subgroups and government at different administrative levels will vary across groups and administrative units. Overlain on this is the reality that different groups within the country may require different forms of state recognition and support, whereas the state may have a single approach for all groups in mind. Finally, government at different levels can have different capacities and willingness to provide for different forms of recognition and support even if recognition is national policy. What results then in the context of state recognition of local institutions can be a wide array of differing specific arrangements which can change temporally and spatially. This can make pursuing a cohesive government policy regarding recognition significantly complicated. Nonetheless this policy has provided an important facilitating social context for the derivation of pastoral institutions aimed at moving beyond armed conflict over grazing commons, and as such can be regarded as encouraging. As the Ethiopian Government debates the pros and cons of sedentarization policy (IRIN, 2004), past successes can serve to inform the discussion.

## Lessons and questions for common property

Several general aspects of common property management are highlighted by the three Ethiopian examples presented. First, in all three cases the incentives for alternative approaches to rule-making have come about to a large degree because of the high social cost and fatigue associated with armed conflict – as opposed to trust and cooperation being the facilitating context. While this can align significantly with the 'neo-institutionalist' approach to commons management where changes in costs and benefits to individuals encourage more cooperative behavior (e.g., Bromley, 1992; Agrawal, 2001a, b), there exists as well much cultural and historical context important to social entities larger than the individual that are important to the emergence of CPR management institutions (McKay, 2001). Second, any government recognition, even existing as national policy, is unlikely to exist as a single effect across all groups. This is due to differing customary capacity at different administrative levels, and because different groups occupy particular situations with regard to a variety of variables, such that the effects of government recognition, and the opportunities that this implies for conflict resolution and CPR management will also be variable. This gets at an important point with regard to government recognition and support of local authority structures for conflict resolution and CPR management in a context of armed conflict. The degree to which governments are willing to operationalize recognition, and support local authority structures and customary institutions, can depend on the degree to which governments perceive they are able to benefit from the arrangement. What does government want that it would be able to obtain by recognizing and supporting local jurisdictions and institutions in combative situations? The examples looked at here illustrate that there can be significant, if variable, interest in bringing resolution to armed conflict within and across national borders. As well, local institutions can be accessed by government in pursuit of its policies and programs. This comes about as the state is able to access a locally legitimate administrative structure that can function over large areas. Such local structures are derived, implemented, staffed, maintained, and operated at little or no cost to the state; costs that many developing country governments would not be able to bear in any case. The Ethiopian government knows this and is seeking to maximize its benefit from such an arrangement. Associated with being able to take advantage of this benefit is an enhanced legitimacy of government from the perspective of local groups; thus recognition and legitimacy can work two ways.

Third, many groups in the developing world experience the prospect of moving from group commons to open access arrangements, particularly with the increasing presence and influence of outside actors (e.g., the state, commercial interests, international development and conservation efforts, migration, refugees, etc.) who are not beholden to pre-existing rules of exclusion. But what the Ethiopian cases illustrate is the strong pre-existing understanding of what happens to CPRs in open access situations, and the severity of repercussions for livelihoods and ways of life. This understanding, together with a profound reluctance to give up specific ways of life, has contributed to a reaction involving armed confrontation in attempts to continue to pursue exclusion from traditional grazing commons. Many CPR cases involving the possibility of open access do not involve such confrontation, but rather a dissolution of institutions and then resource degradation. Of course many groups experiencing such a prospect do not have the option of pursuing armed confrontation, perhaps due to a lack of weapons, or because the state has the ability to act quickly and effectively to stop such confrontation. But perhaps as well, the option is not available due to a different understanding as to the nature of the potential outcomes associated with commons resource degradation – particularly in cases where the resources involved are multiple, and their interaction with users more complex than a grazing resource.

Thus while armed conflict can appear to be particularly unsuited to deriving rules to manage CPRs due to the general inability of institutions to survive instability (Ostrom, 1999), the proximity of such conflict can be closer to effective rule derivation than initially thought. The broader ingredients of such a proximity include a concurrent association of (a) a significant cost associated with conflict, incurred over time; and (b) a facilitating approach by the state that affords both significant recognition of local customary jurisdictions and institutions, along with room provided for ongoing experimentation by customary actors seeking to engage current circumstances. The latter is particularly critical given that important traditional institutions (e.g. for conflict resolution) can dissolve over the course of resource competition and armed confrontation. Such an experimentation approach (allowing constructs of traditional institutions to be recast, reformulated, developed and put to utility as the customary – state interaction proceeds) is important given both that predictability of conflict resolution approaches in real cases is quite low without *in situ* testing (hence the failure of imported designs), and the only experimentation able to encompass the complexity of conflict is that which occurs in actual cases.

With the present threat to effective management of CPRs originating significantly from outside of groups which have traditionally managed them, more attention needs to be placed on the ways in which CPR management can encompass new, globalizing influences. This need is particularly acute where armed confrontation is viewed as a way to exclude, and where such confrontation then influences much more than CPR issues.

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