

The Role of 'Critical Resource' Tenure in the Post-Conflict Recovery of African Agriculture: the Case of Southern Somalia

Jon D. Unruh

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Abstract

Large scale dislocation of African populations due to conflict and famine will have profound impacts on future agricultural potential and security over large areas. The disruption of resource use and access arrangements for large numbers of rural inhabitants compromises rational use of resources and the productive capacity of these. Post-conflict recovery of many subsistence producers will begin with a dependence on locations where fertile land, perennial water supplies, infrastructure, and refugee services can be utilized--especially where these exist within the more arid parts of the continent. In Somalia, reliance on such spatially limited 'critical resource' areas in the course of recovery will take place as competing claims are made on valuable resources, and participants in different modes of resource use are concentrated into these areas. These, together with land degradation, and periodic drought, will affect rates of recovery for individuals, households and production systems--with repercussions on the productivity of land resources. The formation and efficacy of tenure dispute resolution mechanisms will play a large role in the utilization of critical resource areas for recovery, as well as for future tenure security and food security. Development and rehabilitation efforts can embrace the emerging amalgam of local notions concerning dispute resolution, tenure security, and land use, in the implementation of 'recovery tenure' arrangements for critical resource areas. Such arrangements might subsequently be considered in the construction of a national tenure system.

Introduction

The devastation wrought on many African populations as a result of multiple occurrences of conflict and famine have in recent years occurred at such a severity and extent as to profoundly disrupt human ecologies for millions of people over very large areas. Such disruptions will play an important role in future intra- and inter-state confrontation, food security, vulnerability, and large scale environmental change; as the forces of conflict, famine and resource degradation operate in mutual reinforcement. Recovery of populations that have been dislocated from established and accepted resource use arrangements existing within a wide variety of cultural and state contexts, can involve a convulsive period as such arrangements are reconfigured--with high attendant risks to the productive capacity of critical resources. Examples range from collapsed states such as Rwanda, Somalia, and Liberia, to conflict and famine situations in regions within states, to areas in neighboring countries affected by large refugee concentrations. Like the complex and difficult histories involving resource use and access that are part of conflict and famine scenarios, the re-establishment of use and access rights for those affected will likewise be complicated and problematic. This article considers the case of Somalia, and examines the role that spatially limited critical resource areas, and the resource use and access issues operational within these, play in the process of reconciliation and recovery. This role is discussed within two broad contexts: multiple claims on critical resources, and the concentration of different production systems and land uses into critical resource zones. These contexts are then related to the potential development of a usable frame of reference for a state tenure system.

SOMALIA

Dislocation and Resource Tenure

The magnitude of the disruption of food producing activities in much of Somalia as a result of the conflict and famine in the early 1990s poses complicated problems in the country's rehabilitation. Recovering from "the most acute humanitarian crisis in the world" (1) where the death rate was "among the highest ever documented...among famine-affected civilians" (1) will not be an easy or short-term task. Food security needs to be achieved at individual, local, regional, and national levels for both rural and urban populations; refugees will return from abroad and internal displacement; rural cultivators will need to re-engage in agriculture; and pastoralists will need to restock herds. This will occur within the framework of land resource degradation brought on by over-exploitation, conflict, and recurring drought. The analysis presented here is a result of observations and data obtained from 1987 to 1989 while the author was resident in the Lower Shabelle region of Somalia investigating land and water resource tenure issues. As one of the most agriculturally advantaged parts of the country, the Lower Shebelle was part of the breadbasket of Somalia, and played a major role in the production of crops for export, and urban and local consumption.

The dislocation problem in Somalia as a result of the conflict and ensuing famine in the late 1980s and early 1990s is considerable. At least two million people were internally displaced, and an additional one million crossed borders into Ethiopia, Kenya, Djibouti, and Yemen (1). As the number of displaced was approximately half of the estimated Somali population, the future of Somalia's agricultural potential would seem to a significant degree to be tied to the successful re-settlement of rural producers.

But as Somalis return to home areas or are settled in new locations, resource tenure considerations will come to the fore. While these may be addressed in a fairly straightforward fashion in less populated areas or more marginal agricultural locations in which ownership, access, and use of land is commonly acknowledged, in areas containing 'critical' resources, or what Scoones (2) calls "key" resources, and Ibrahim (3) calls "central places", this will be much more complicated. This may be especially so in areas where previous state ownership and control played a large role, and where resource access were and continue to be part of the larger conflict.

The resource tenure dynamics underway during the process of recovery will be very different from those that prevail otherwise. The overall tenure organization during much of this period will not only be insufficiently cohesive to mitigate the effects of land degradation, but will very likely actively aggravate serious resource competition, resulting in a 'fast forwarding' of the destruction of critical resources necessary for agricultural recovery. The impact on these resources can be greater than that which takes place due simply to increasing demographic pressure. This is due to the effect that tenure confusion, land use, ethnic rivalries, large refugee numbers and a context of conflict have on overall resource use and access.

Multiple Claims in Critical Resource Areas

Figure 1 shows that the majority of the areas under cultivation and the location of agricultural development projects in southern Somalia were clustered around the only two perennial rivers, the Shabelle and the Jubba. While these spatially limited areas were, and will be, important to crop cultivation, they will also be crucial to a wider post-famine recovery. The existence of fertile land, water, fuelwood, relief services, and infrastructure in these areas have drawn large concentrations of dislocatees who will be attempting re-acquire the assets necessary to return to home areas or proceed to settle elsewhere. Migration to the river valleys was frequently the last resort among the coping options available to both pastoralists and agriculturalists fleeing conflict and food shortage. As well, prior to and during the conflict both the government and clan-militia leaders stationed forces in these areas so that they could feed themselves by living off the land (4). Figure 2 illustrates for southern Somalia that some of the most intense conflict was along the Shabelle river valley, the most agronomically endowed region in the country. Scoones (2) also notes the occurrence of violent conflict over access to "key" resources elsewhere in the continent.

Perception of Claims

Perception of rights to land and water in the better areas can originate in different situations at different points in time. And exercising such rights will not happen all at once, but over time, as claimants return or migrate to these areas from different conflict and famine conditions and locations. Such claims can include:

1. Previous customary arrangements, involving both permanent (agriculturalists) and transient (pastoralists) rights of access on untitled land.

2. Colonial land transfer.

3. State title under the previous government.

4. Individual and/or group gains as a result of the conflict, famine, and ensuing dislocation can take several forms. Land can be left unoccupied by dislocatees who do not return for a variety of reasons, permitting others both within and outside local communities to perceive themselves to be in a position to claim this land. And, in such cases it is unlikely that only one claim will be made. As well individuals and groups can 'liberate' land from other clans, or from those who held it under government title (5, 6). And, some groups can take advantage of the land confusion and repatriation process to engage in land grabbing. This can have a domino affect as such claims are fueled by the knowledge that land previously belonging to a certain group has been taken over by another (7).

5. Individual or group inheritance, transfer, and rental of land, previously largely prohibited by the government and now operating freely.

6. Those relieved of land under government, who feel they can justifiably retake land they previously occupied under customary arrangements.

7. Those squatting on land during the period of instability, who feel that their occupation of land gives them legitimate claim.

8. Potential international claims to land previously under plantation agriculture.

9. A host of potential claims as a new government mandates, and/or the UN along with international donor organizations urge that land be set aside for the settlement of refugees, development projects, and land concessions as part of political settlements.

These competing claims may or may not agree with or be a part of the shifting of alliances among clans and constituent units thereof that are one of the more important hallmarks of Somali pastoral clan politics (8). Rights of access to land and water for individual households in Somalia can be based on lineage membership, meaning that agreements between clan units can play a decisive role in local resource access. At the same time changes in local level land use and access that stem from development activities, refugee settlement, land degradation, and conflict can provide a context, or partial context for the shifting of alliances as clan units seek access to sufficient land and water.

Competing Claims and Land Degradation

Resolving competing claims will involve the use of mutually agreed upon approaches if this is to be done peaceably. However the eventual establishment or re-establishment of tenure dispute resolution mechanisms, while perhaps more straightforward within single tenure systems, will be more problematic for claims from dissimilar systems, as different systems both operate in distinct ways and allow different types of rights to resource users. But even within single systems the re-establishment of dispute resolution may be difficult, as resource users abandon the features of tenure systems they previously participated in because demographic pressures and conflict have made them unworkable, or they believe there to be little point in adhering to rules that others are not following. Such a lack of tenure security for the large numbers of subsistence farmers and pastoralists not only complicates the formation of dispute resolution constructs, but encourages resource mining and subsequent land degradation as there may be little to be gained by rationally using resources. This can lead to still more intense competition, especially over scarce resources, with users coming to regard each other as potential enemies competing for the same means (9, 10). And as frequently occurs when use of resources is usurped, previous users can over-exploit what was formerly theirs, believing that it is better that they continue to benefit as long as possible rather than have others profit (11). Many small-scale cultivators (especially those belonging to minority groups) will not be able to regain access to previously held land due to emerging political inequities. These farmers must then pursue cultivation wherever they can in competition with others attempting the same. In a number of high potential areas, especially along the Shebelle and Jubba rivers, tenure difficulties stemming from multiple claims to land involving different tenure regimes was a severe problem with land degradation repercussions even prior to the downfall of the Somali government (3, 12, 13, 14, 15).

The role that the establishment of such mechanisms has on reconciliation and rehabilitation should not be underestimated. That such conflict resolution happens quickly in critical areas is important to the secure re-engagement of populations in familiar land uses, agricultural production and food security, and agricultural contributions to economic recovery. That it happens in ways that are seen as just by all or most claimants is important because disenfranchisement of local populations from land and water rights is a major factor contributing to continuing conflict and instability (11). This is especially relevant during recovery because refugees while in exile often develop political awareness (16). Such that upon their return to home areas, perceived tenure injustices can be placed in the context of the larger political dynamic. Resolution will be particularly important when different production systems (and ethnic groups from opposing sides in the conflict) focus agricultural activities onto the same spatially limited areas. Certain individuals and groups have the military means to prevent peace from returning, and will exercise this option if tenure disputes are not resolved in ways that are, at the very least, widely respected (5).

Multiple Land Use

The debilitating impact that the conflict and famine has had on rural production systems means that participants in these will in many cases need to re-acquire the assets (land, seeds, livestock, etc.) that will allow them to re-engage in rural production. When this happens on a large scale then production systems themselves can recover. But for this to occur, many rural producers will out of necessity need to first temporarily reside in the critical resource zones where access to fertile land, water, relief services, and wage labor opportunities provide better possibilities to survive and recover assets. The larger scale significance of many rural producers pursuing different production systems and land uses within these zones, will be to effectively concentrate these at locations and proximities that would not otherwise occur. To the degree that the different uses and users of resources in these areas are seen as competitive, and not as complementary, and function separately as opposed to integratively, the probability of dislocation, land degradation, conflict, and declines in yields, increases (17, 18). The following subsections briefly describe some of the production systems and land uses dependent on critical resource areas for recovery, the relationship between these, and the role of periodic drought.

Crop Cultivation

Participants in small holder agriculture and agropastoralism resident in critical resource areas can be divided into two groups. Those who feel they have legitimate claims to permanent occupation of riverine areas, and those who previously inhabited more interior regions, but presently reside in critical resource zones while attempting to re-acquire the means that will enable them to return to home areas. High concentrations of agriculturalists will mean that fallow periods in many locations will be compromised, with subsequent declines in yields, and a potential slowing in rates of recovery.

Reconstitution of large-scale plantation agriculture will likely not take place in the early stages of recovery, as this requires both a stable government who will back rights to land and water, and capital investments made in a relatively secure environment. However when plantation agriculture is re-established, almost certainly on the most fertile and well irrigated land, dislocation of small holders will occur; necessitating their settlement elsewhere even if they are compensated. While this may contribute to small holder land problems, the loss of access to crop remnant forage resources for nomadic pastoralists on small holder land--a common relationship in Somalia's river valleys (19)--may contribute to overgrazing as well.

The re-establishment of large farms in the critical resource areas will occur before plantations, and in many cases will begin with land acquired through force by "liberators" (5, 6) and by individuals able to convince the political reconciliation process to acknowledge claims to land. The amount of land involved in this process will again influence small holder dislocation and seasonal access by pastoralists.

Pastoralism

Transhumant pastoralism, the production system that the majority of Somalis participate in, requires seasonal access to dry season and drought grazing and water resources; which are by definition located in the critical resource zones. Figure 3 illustrates the dry season livestock migrations into the irrigated area just inland from Merca, one of the most agriculturally endowed parts of the country. If access to these resources is denied in one part of yearly nomadic migrations this can have disastrous ecological effects on other larger areas, as pastoralists have little choice but to use other range resources that are already marginal (3, 20, 21, 22).

Use of critical resource areas by pastoralists during a period of recovery will involve three distinct groups: those with herds large enough to maintain a transhumant lifestyle, those with a much reduced herd size seeking to increase animal numbers but who must reside in critical resource areas year around while engaged in crop cultivation, and completely stockless pastoralists as refugees who also farm these areas year around as they attempt to re-acquire animals. And a percentage will opt not to return to pastoralism at all.

For those engaged in rebuilding herds, the animals they acquire in many cases will stay with the household year around in the riverine areas, consuming forage and depleting this resource for the larger nomadic herds that utilize these areas seasonally. As resident herd size grows beyond what can be sustained on nearby farm fields, greater forage will be needed and this group will likely find itself engaged in more intense competition for and contention over scarce and likely degrading resources. Such a relationship between resident and nomadic herds existed even prior to the difficulties of the early 1990s. Presently however this problem will exist within a context of increased demographic pressures, unknown and confused dry season access rights, and conflict. And while it might be possible for year around residents to send some animals off to be managed in a transhumant fashion by relatives, as was common prior to the conflict, continued insecurity in many parts of the interior makes this less of an option. The much reduced forage can then mean that nomadic pastoralists spend the dry season moving their herds from place to place in search of access to sufficient forage while attempting to avoid conflict. The stress on these herds in terms of effects on mortality and reproduction can then manifest itself in reduced rates of recovery for pastoralist households.

Refugees

Certainly one of the more profound impacts on Somalia's critical resource areas will be the presence of large numbers of refugees--in camps, settlement schemes, and on their own (12, 17). Refugees are distinguished here from pastoralists or small-scale cultivators due to their complete or near complete destitution and the need for relief services.

As large numbers of refugees are concentrated on cultivable areas along the river valleys (Figure 4) conflicts, competition and incompatibilities in land use and resource tenure between refugees, and refugees and other populations, can result as demographic pressures are greatly increased and the composition of whole areas is profoundly altered. Similar scenarios are

repeated in numerous other locations on the continent, including historically in Somalia in response to the 1972-1975 drought (10, 23, 24, 25, 26, 27, 28, 29, 30). As well, settlement schemes which impose unfamiliar tenure systems on rural refugees can create tenure insecure situations, thereby undermining refugee agricultural production and progress toward self sufficiency. The success of resettlement efforts will depend on the degree to which resettlement land-use patterns can become integrated with, or reconciled with, other tenure arrangements and land-use ecologies taking shape in these areas (17), and operate within the context of problems (such as drought) known to frequent the area. The failure of resettlement schemes can have a direct impact on rural-urban migration (31) and the subsequent burden on cities and welfare of refugees (32).

A subset of the refugee group are demobilizing combatants who may, as groups within clans, have the ability to demand permanent settlement sites in the critical resource areas for themselves and fellow clan members as part of reconciliation. While the distinction between refugees and combatants can be blurred, such a situation can place the latter group on some of the most agriculturally favored land. The willingness of ex-combatants to allow multiple use of resources they have control over, can affect land degradation and recovery rates for other households and production systems.

Development

While the number of development projects and areas occupied during rehabilitation will not match that in place previously (Figure 1), for the most part these will again be concentrated in the two river valleys. Initial development efforts will likely focus on refugee relief and rehabilitation, and production of food for urban populations. How this land is acquired, and how occupants are included in, relieved of, and compensated (or not) for losses in access and use of resources will again have tenure and land degradation repercussions.

In addition, the implementation of a development project can attract claims--often competing, and often not verifiable--that would not otherwise have been pursued, as individuals hope for compensation, or to be included in the development effort. Such competition over land to be included in development projects was a very frequent and problematic occurrence along the Shabelle (33) and Jubba (13, 15) rivers in the 1980s.

Rates of Recovery

The necessary concentration of production systems, refugees and development projects, means that their interaction will affect respective rates of recovery. The manner of interaction, along with the recovery rates themselves will in many cases be incompatible. While complementarity in resource use holds considerable potential (17), in many cases such interaction will occur under intense competition and associated resource degradation. The subsequent aggravation of tenure claims can then feed back on increased competition, and hence further slow rates of recovery.

Conditions outside critical resource areas can also affect recovery. For example while the rehabilitation of pastoralism can depend on the ability to rebuild an adequate herd size while

engaged in farming, it can also be influenced by the biophysical recovery of the rangeland interior. Some Sahelian rangelands can take three to eight years to recover from drought and a too-early restocking and return to grazing and browsing can prevent rangeland recovery (34). As well the inability to graze herds belonging to different clans (due to insecurity) in common areas (4) can result in resource access difficulties and degradation. Wells and watering locations poisoned and destroyed during the conflict can likewise contribute to resource tenure and utilization problems. Recovery of small-scale cultivation can be slowed by changes in resource control taking shape in home areas in the interior, affected by those who stayed, and those who migrated to these locations; in many cases excluding or limiting rights of access to those attempting to return. And while adequate rainfall and an increased need for labor in the fields can pull people from displacement locations back to home areas, if food is unavailable until crops are harvested, the return can be temporary or much diminished (35). Moving food from surplus to deficit areas for this purpose will be difficult in many locations due to limited access to markets caused by insecurity and destroyed infrastructure (35). As well the large number of land mines deposited in many interior locations will affect utilization of these areas for some time, and hence the ability of returnees to sustain themselves, with continued dependency on critical resource areas.

Drought and Tenure

In Somalia the relationship between recurring drought and tenure is and has been a central and active one, especially in the fertile, perennially watered areas. While resource tenure changes due to drought in the past were instrumental to the ability to survive drought, the present and near-term heavy dependence of people and production systems on critical resource areas will likely create a new relationship between drought and tenure for those both in and outside of these zones. Previously, production systems in Somalia employed numerous drought strategies that necessitated spatial and temporal modifications in access to and use of resources. This was accomplished by retaining a flexible system of access that held the boundaries of outright resource ownership purposefully indistinct over space and time (5). While traditional attempts at tenure modification during drought will be attempted by some, these will operate within greatly heightened contention over resources. Perhaps the most profound change will be the great decrease in security and predictability of outcomes. The difference between those presently able to pursue flexibility of resource access as part of a drought mitigation strategy, and those unable to do this, will be based primarily on military strength and clan affiliation. Those groups without the means to accomplish this will likely end up in more marginal areas, with associated increases in vulnerability. A significant percentage of those unable to successfully engage in drought mitigation will be added to the numbers dependent on the critical resource zones as part of the larger recovery. That this is more likely to happen under present conditions is almost certain, given the now increased vulnerability of many groups at the start of drought events.

Probability graphs produced by the FAO estimate that partial or complete failure of rainfed crops due to inadequate precipitation is likely to occur as frequently as two years in five in southern Somalia (36). Thus a number of 'mini-recoveries' will likely occur within the larger recovery, with each type influencing the other. The effect on the larger recovery will be to slow rates of rehabilitation for households and production systems, and to destroy or reconfigure some tenure arrangements that might have to some degree been sorted out.

Tenure Security and Food Security

Generally greater tenure security is thought to encourage investment in agriculture and thus result eventually in greater agricultural production, with improvement in food security. Where features of a state tenure system are problematic--as they will be in Somalia for some time--local, customary tenure forms may be at least as and maybe more effective in providing tenure security than the formal title associated with the state (37). Customary tenure regimes are not static (38). Traditional systems usually provide security of tenure in culturally relevant ways that are understood locally, and evolve in ways that extends greater security and allows for adaptation (39). However in Somalia, customary tenure regimes in the critical resource areas have been largely disrupted. Therefore what will likely result in these areas before rules of access and use become formalized at the state level, will be an amalgam of notions concerning tenure security, derived from aspects of differing pre-existing tenure regimes, and the reigning situation. How these different aspects are reconciled or not and whether or not they are incorporated into a national tenure system able to equitably handle dispute resolution, will impact on tenure security, and food security.

That tenure security in a future state tenure system be built upon, or at least embrace local notions of tenure security is worth considering, because actual security is based upon much more than labels and artifacts of a system such as documented title. Lemel (37) describes how tenure security is seldom contingent on the land itself, but on how secure is access to other elements that influence agricultural production, use, and sale of the results of the mix of soil and human activity. Thus security in this sense is the security of the future expectation of obtaining certain advantages through access and use of resources (37, 40, 41). Such expectation in turn depends on a number of factors intimately tied up with the ecological, historical, social and political contexts and realities of a given location, within which rights to resources are variable with power and technology within a society (37, 42, 43, 44). Exercising such rights are thus contingent not only upon the recognized possession of rights, but upon the interconnecting network of "customs and controls" within which rights are exercised (45). In a Somalia recovering from conflict and famine, such "customs and controls" will be disrupted, variable, and not easily knowable, especially for small-scale cultivators and pastoralists in crowded critical resource areas. Likewise the influence that the conflict and famine as social realities will have on how resource tenure rules are eventually sorted out, and the influence of attempts by an emerging state to insert an

official tenure system into current contexts, will be extremely difficult to predict. Thus an approach with some potential might be to utilize this amalgam of notions concerning resource access, use, and tenure security, as a starting point in the formulation of Somali generated ideas about how a state tenure system should operate.

Tenure and the Process of Recovery

Recovery Tenure

For Somalia's critical resource zones, access arrangements required to facilitate the recovery of households and production systems will be different from those that would optimally benefit these same areas and production systems in a non-recovery period. This is because resource use and access needs will change as production systems progress through the various stages of recovery. Thus one possible approach to resource tenure in these areas might be as a 'tool' used to facilitate the recovery of production systems and ensure survival of these during frequent drought. If it is recognized that utilization of the high potential areas will be important to Somalia's rehabilitation, then resource tenure arrangements might be geared, initially at least, to facilitate recovery; as opposed to an emerging government along with development efforts attempting to impose resource use rules designed for export production, or rules more appropriate for times of normal functioning. Such a focus on recovery could have as one of its central priorities, the examination of various tenure dispute resolution mechanisms, along with the encouragement of ways that competing interests can become complementary or reconciled. Such an approach, could, theoretically at least, be assisted by relevant development programs.

The formulation of a national tenure system then, might include, or be based upon, lessons learned during the recovery period. As well, it would be worthwhile to consider how traditional and customary tenure arrangements, reinstated and sorted out to some degree during recovery, can be either incorporated into a larger system, or put in place in the operation of a number of systems, each legitimate at the local level and recognized at the national level. Pursuing initially some notion of 'recovery tenure' that takes into account aspects of customary systems in the formulation of a national tenure system is important for two reasons. First, aspects of customary arrangements will be re-established and operational before, and perhaps long before an emerging Somali state is in a position to formulate, implement, and enforce a national land tenure system. Such that when the latter does happen, both derivation and implementation of such a system will be more straightforward, and perhaps more successful if it incorporates aspects of what is already in place and learned during the process of recovery. This holds the possibility at least of creating fewer tenure disputes by implementing known tenure arrangements, as opposed to introducing new tenure rules that can be poorly understood; as happened under the previous government. The second reason is that both farmers and pastoralists will have very little confidence in a new tenure regime established by a Somali state that will almost certainly be viewed as fragile, especially in its early stages, given post-colonial Somali history.

Possible Tenure Constructs

In defining the complexities of tenure titling environments Lemel (37) notes that "[m]ost complex" are areas involving "multiple-phase settlement with layer upon layer of superimposed claims based on different conceptions of property rights." However the tenure environment in the agronomically critical zones of Somalia could potentially be even more complex. In addition to there being layers of superimposed claims (made at different dates) the dislocation problem together with the conflict, famine, presence of refugees, and the lack of state authority, creates a situation where the backing to such claims will be extremely variable. Strategies to deal with this complexity will not be easily derived. Such intricacy highlights the priority that should be given to Somali generated tenure arrangements, because knowledgeable Somalis will have the greatest understanding of this complexity.

Possible broad brush approaches that might be considered include titling, or acknowledging rights at the group level as opposed to the individual level, with greater self regulation at the community level (46). As well, the history, climate, and fragile economies of many locations in arid Africa strongly suggest against dividing resource use and access up into fixed parcels to be used exclusively by a particular person or set of persons with defined resource boundaries (20). This may be especially so where other economic opportunities are lacking-- which will certainly be the case in a recovering Somalia. Overlapping resource utilizations are common in Africa, especially among transient users. Transient rights of access to resources can be backed either by law, or by what Riddell (20) calls subjectively valued, time-honored rights, or "law-in-action". In other words, what is in place are the "ad hoc arrangements that develop to meet the variety of situations in which people find themselves" (20). It is these preferential behaviors that outline the rules of resource use that are actually in operation, and which can precede formal law (20). In Somalia, recognition and legitimization of these behaviors during the period of recovery could then be used in formalizing a subsequent national tenure system.

To the extent that outside assistance plays a role in the process of sorting out the resource use and access problems of the critical resource areas, these would perhaps best contribute by facilitating the process of deriving a Somali generated tenure system capable of dealing with the land use issues in these zones.

How competing claims are resolved will translate into impacts on land degradation, famine vulnerability, food security, conflict, and the reconciliation and reconstruction necessary to the rebuilding of a Somali state.

References and Notes

1. USCR (U.S. Committee for Refugees) 1993. World Refugee Survey. U.S. Committee for Refugees, Washington D.C.
2. Scoones, I. 1991. Wetlands in drylands: key resources for agricultural and pastoral production in Africa. *Ambio* 20, 366-371.

3. Ibrahim, F. 1993. A reassessment of the human dimension of desertification. *GeoJournal* 31, 5-10.
4. Page, M. 1994. ActionAid Seminar. *Journal of the Anglo-Somali Society*. Spring, 36-42.
5. Africa Watch 1993. Land tenure, the creation of famine and prospects for peace in Somalia. *Africa Watch Discussion Paper No. 2*.
6. Cassanelli, L. (in press) Explaining the Somali crisis. In: *Politics and Production in Southern Somalia*. Besteman, C., Cassanelli, L., Menkhaus, K. (eds.), Westview Press.
7. Prendergast, J. 1994. The bones of our children our not yet buried: the looming spectre of famine and massive human rights abuse in Somalia. Center of Concern, Washington D.C.
8. Samatar, S.S. 1993. The society and its environment. In *Somalia a Country Study*, Metz, H.C. (ed.) Federal Research Division, Library of Congress, US Government Printing Office, Washington, D.C.
9. Homer-Dixon, T.F. 1990. Environmental change and violent conflict, *Occasional Paper No. 4*, International Security Studies Program, American Academy of Arts and Sciences, Cambridge, MA, USA.
10. Betts, T.F. 1984. Evolution and promotion of the Integrated Rural Development approach to refugee policy in Africa, *Africa Today*, 31, 7-24.
11. Hutchinson, R.A. 1991. *Fighting for Survival: Insecurity, People and the Environment on the Horn of Africa*. Based on a study by Spooner BS, and Walsh N, IUCN Gland, Switzerland.
12. Unruh, J.D. 1993a. Restocking refugee pastoralists on the Horn of Africa. *Disasters* 17,305-320.
13. Besteman, C. (in press) Local land use strategies and outsider politics: title registration in the middle Jubba valley. In *Politics and Production in Southern Somalia*. Besteman, C., Cassanelli, L., Menkhaus K (eds.) Westview Press.
14. Craven, K. (in press) The impact of state agricultural enterprises on resource tenure in the lower Jubba. In *Politics and Production in Southern Somalia*. Besteman, C., Cassanelli, L., Menkhaus, K. (eds.) Westview Press.
15. Menkhaus, K. (in press) From feast to famine; land, social identity, and the state in Somalia's lower Jubba valley. In *Politics and Production in Southern Somalia*. Besteman, C., Cassanelli, L., Menkhaus, K. (eds.) Westview Press.
16. Ek, R. and Karadawi, A. 1991. Implications of refugee flows

on political stability in the Sudan, *Ambio* 20, 196-203.

17. Unruh, J.D. 1993b. Refugee resettlement on the Horn of Africa: the integration of host and refugee land use patterns. *Land Use Policy* 10,49-66.
18. Hitchcock, R., and Hussein, H. 1987. Agricultural and non-agricultural settlements for drought afflicted pastoralists in Somalia. *Disasters* 30-39.
19. Unruh, J.D. 1991. Nomadic pastoralism and irrigated agriculture in Somalia: utilization of existing land-use patterns in designs for multiple access of 'high potential' areas of semi-arid Africa *GeoJournal* 25, 91-108.
20. Riddell, J.C. 1982. Land tenure issues in west African livestock and range development projects. Land Tenure Center Research Paper No. 77. Land Tenure Center, Madison, Wisconsin.
21. Box, T.W. 1968. Range resources of Somalia. *Journal of Range Management* 21, 388-392.
22. Box, T.W. 1971. Nomadism and land use in Somalia. *Economic Development and Cultural Change* 19, 222-228.
23. Lewis, I.M. 1975. Abaar: the Somali drought. International African Institute, Emergency Report 1, Oxford University Press.
24. Torry, W.I. 1984. Social science research on famine: a critical evaluation, *Human Ecology* 12,227-252.
25. Yeld, R. 1968. The resettlement of refugees, In: *Land Settlement and Rural Development in Africa*, Apthorpe, R. (ed.) Transition Books, Kampala, Uganda.
26. Toulmin, C. 1985. Livestock losses and post-drought rehabilitation in sub-Saharan Africa LPU Working Paper No. 9, International Livestock Center for Africa, Addis Ababa.
27. Campbell, D.J. 1981. Land-use competition at the margins of the rangelands: an issue in development strategies for semi-arid areas. In *Planning African Development*, Norcliffe, G., and Pinfold, T. (eds.), Westview Press, Boulder, Colorado.
28. Evangelou, P. 1991. *Livestock Development in Kenya's Maasailand*, Westview Press, Boulder, CO, USA.
29. Little, P.D. 1987. Land use conflicts in the agricultural/pastoral borderland: the case of Kenya, In *Lands at Risk in the Third World: Local Level Perspectives*, Little, P.D., Horowitz, A.E., Nyerges, A.E. (eds.), Westview Press, London.

30. Zumer-Linder, M. 1986. Constraints to implementation of wood and forage production in an arid, pastoral part of Africa: a case study of a revegetation programme in Turkana, Reclamation and Revegetation Research 5, 435-450.
31. Rogge, J.R. 1985. Africa's displaced population: dependency or self-sufficiency? In Population and Development Projects in Africa, Clark, J.I., Khogali, M., Kosinski, L.A. (eds.), Cambridge University Press, Cambridge.
32. Sabot, R.H. 1979. Economic Development and Urban Migration: Tanzania 1900-1971, Clarendon Press, Oxford.
33. Unruh, J. (in press) Resource sharing: smallholders and pastoralists in Shalambood, Lower Shabelle valley. In Politics and Production in Southern Somalia. Besteman, C., Cassanelli, L., Menkhaus, K. (eds.) Westview, in press.
34. Warshall, P. 1991. Cash sows and camels: the fate of livestock in African disasters. In Famine Mitigation: Proceedings of Workshops Held in Tucson AZ and Berkeley Springs, WV. Office of Arid Lands Studies, The University of Arizona.
35. Famine Early Warning System (FEWS) 1994. Somalia update: positive agricultural developments and ongoing civil strife. FEWS Bulletin, May 10. Tulane/Pragma Group, Arlington, VA, USA.
36. Young, L. 1985. A general assessment of the environmental impact of refugees in Somalia with attention to the refugee agricultural programme. Disasters 9, 122-133.
37. Lemel, H. 1988. Land titling: conceptual, empirical and policy issues. Land Use Policy 5, 273-290.
38. Lawry, S.W. 1989. Tenure policy and natural resource management in Sahelian west Africa, Land Tenure Center Paper No. 130, Land Tenure Center, University of Wisconsin, Madison.
39. Redclift, M. 1990. Developing sustainability: designating agroecological zones, Land Use Policy 7, 202.
40. Commons, J.R. 1961. Institutional Economics: Its Place in Political Economy. University of Wisconsin Press, Madison, WI, USA.
41. Dorner, P. (ed.) 1964. Land tenure, income distribution, and productivity interactions. Land Economics 40, p 248.
42. Goody, J., Thirsk, J., Thompson, E.P. (eds.) 1976. Family and Inheritance: Rural Society and in Western Europe, 1200-1800. Cambridge University Press, Cambridge UK.
43. Barraclough, S.L. 1973. Agrarian Structure in Latin America: A Resume of CIDA Land Tenure Studies. Lexington Books,

Toronto, Canada.

44. Raup, P.M. 1967. Land reform and agricultural development. In *Agricultural Development and Economic Growth*. Southworth, H.M., Johnston, B.F. (eds.) Cornell University Press, Ithaca NY, USA.
45. Thompson, E.P. 1976. The grid of inheritance: a comment. In *Family and Inheritance: Rural Society and in Western Europe, 1200-1800*. Goody, J., Thirsk, J., Thompson, E.P. (eds.) Cambridge University Press, Cambridge UK.
46. Thome, J.R. 1971. Improving land tenure security. In *Land Tenure Reform in Latin America: Issues and Cases*. Dorner P (ed) Land Economics Monograph Series No 3. Land Economics, Madison, WI, USA.
47. Prothero RM (1969) *A Geography of Africa: Regional Essays on Fundamental Characteristics, Issues and Problems*. Frederick A Praeger, Publishers, New York.
48. Land Resources Development Center (LRDC) 1985. *Land Use in Tsetse-Affected Areas of Southern Somalia*. Tolworth Tower, Tolworth, Surbiton, KT6 7DY, UK
49. Metz, H.C. (ed.) 1992. *Somalia: a Country Study*. Library of Congress of the United States, Federal Research Division, Washington.
50. This paper is a more developed version of a manuscript prepared for the Fifth International Congress of Somali Studies.

Figure Legends

Figure 1. Location of agriculture and development projects in southern Somalia. Adapted from Conze and Labahn (8), and Prothero (47).

Figure 2. Armed conflict and displacement in the early 1990s. Adapted from Hutchinson (11).

Figure 3. Dry season livestock movements into a critical resource area in southern Somalia. Adapted from LRDC (48).

Figure 4. Location of refugee concentrations in the early 1990s. Adapted from Metz (49).