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Environmental Conflict Between Refugee and Host Communities*

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Much of the existing environmental security literature examines the causal linkages between environmental scarcity and violent conflict. Such research is clearly useful for exploring the causes of violence but less useful for exploring the causes of peace. This article adopts a theoretical approach to the environment–conflict nexus that considers a range of local variables that shape the ways in which actors socially construct resource use competition. The basic approach is to accept that any resource use competition can be constructed in ways that engender either cooperative solutions or unproductive forms of conflict, including violence. The local variables that shape actors' constructions of conflicts are, therefore, viewed as the determinants of the kind of outcomes that result from a resource use conflict. This theoretical approach is developed with reference to environmental conflicts in areas hosting refugees. The variable of resource management regimes is explored in more detail, illustrated by a case study from an Ethiopian refugee camp. The article finds theoretical and empirical evidence to support the view that participatory and inclusive resource management regimes may enable communities to construct resource use conflicts in ways that help to prevent unproductive conflict. Such forms of governance can potentially be initiated in places where the state is failing to mitigate conflict through its own institutional resources. Thus, there may be an opportunity to respond to the 'ingenuity gap' that Homer-Dixon identifies as a key linkage between scarcity and conflict.

For all that has been said and written, little has been done to investigate potentially important linkages between environmental conflict and environmental cooperation.

(Conca, 2002: 4)

The next breakthrough in environmental security research will be achieved by seeking and developing linkages between research on environmental causes of violent conflict and research on the emergence of cooperative solutions.

(Page, 2002: 40)

Introduction

Since the mid-1950s, the majority of violent conflicts have been intrastate, relatively small in scale and located in developing countries (Gleditsch et al., 2002). The 1990s saw a growing concern that at least some of these conflicts may be linked to environmental issues. The evidence for this linkage is heavily contested. Much of the evidence comes from case studies (e.g. Homer-Dixon, 1999), and this has been criticized for sample bias: cases were selected because they were characterized by both armed conflict and environmental degradation (Baechler, 1999; Stalley, 2003). Large-N statistical testing for relationships between environmental variables and conflict

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has sought to avoid such bias. However, these tests have tended to produce contradictory findings (Esty et al., 1999; Hauge & Ellingsen, 2001). Stalley (2003) has found for interstate conflict what Hauge & Ellingsen (2001) found for intrastate conflict: land degradation renders a country more prone to conflict. However, both these studies use the Global Assessment of Soil Degradation (GLASOD), a data source that is highly problematic, for example because it extrapolates small plot studies to present large area classifications (see e.g. Keeley & Scoones, 2003).

Despite the methodological difficulties faced by those seeking evidence of an environment–conflict nexus, we should not ignore the fact that there are at least forty case studies in which environmental resource scarcity has been cited as a factor contributing to violent conflict. Worryingly, some of the basic characteristics of these cases match the very type of violent conflict that now occurs most frequently: they are mainly intrastate, small scale and with a context of poverty (Baechler, 1999; Homer-Dixon, 1994, 1999; Esty et al., 1999). The dominant narrative explaining this possible association is that issues of resource scarcity interplay with social processes, stimulating well-known triggers of violence (Goldstone, 2001; Baechler, 1999). In other words, environmental scarcity acts as an indirect cause of conflict by amplifying/triggering traditional causes of conflict such as ethnic difference. Such amplification of existing social fault-lines is associated with institutional failure that is linked to scarcity and poverty (Homer-Dixon, 1999). Scarcity can lead to institutional dysfunction and overwhelm attempts by states to undertake constructive reform; scarcity fosters an 'ingenuity gap' (Homer-Dixon, 1999).

While much of the environmental security literature has sought to describe and evaluate the causal connection between environmental scarcity and violent conflict (e.g. Homer-Dixon, 1994, 1999), there has been hardly any attempt to learn about why, in the majority of cases, environmental scarcity is managed in peaceful ways (Gleditsch, 1998; Conca, 2002; Matthew, Gaulin & McDonald, 2003). One of the objectives of this article is to address this neglect. It is proposed that if we can develop a better understanding of how a range of variables can contribute to the ways in which resource use conflicts are perceived and acted upon locally, we will be in a better position to identify responses that might help to provide the conditions under which competition for scarce resources is resolved peacefully. At local levels, such responses may be possible even where the mechanisms of the state are failing, thus offering ways of reacting to Homer-Dixon's 'ingenuity gap'.

Peaceful responses to resource scarcity are commonplace. Environmental scarcity and resource use competition are part of the everyday politics of life. Most of us face resource use conflict on a daily basis, whether we are competing for space in Europe's crowded cities or competing for access to subsistence resources in rural Ethiopia. There are a host of variables that determine the pathways along which such conflicts develop. The most usual outcomes are peaceful ones, where broadly accepted rules lead to cooperative outcomes of one kind or another. Thus, theoretically at least, resource use conflict can form part of a virtuous circle, in which cooperative responses contribute to social capital, thus encouraging robust institutions and future cooperation (Pretty, 2002; Dolsak & Ostrom, 2003; Adger, 2003). In the most constructive scenario, material scarcity actually brings different groups closer together, encouraging cooperation and building forms of social capital that may then be drawn upon to deal with other, perhaps more difficult, problems. For example, an alternative to the once popular

'water wars' discourse (e.g. Bulloch & Darwish, 1993) is the view that the necessity to deal cooperatively with issues of water scarcity could actually help develop the mutual trust required to make progress with broader security issues. Wolf (1999) finds no incidence of a war fought over water resources but thousands of incidences of cooperation over water management.

However, it is also true that resource use competition is accompanied by governance failure, leading to what will here be described as 'unproductive conflicts'. This is where conflict leads to non-cooperative outcomes, often entailing the kind of aggregate dysfunction characterized in the 'tragedy of the commons', in which the majority would have wished for a better outcome (e.g. Hardin, 1968). The contexts that foster unproductive conflict are far from clear. Poverty may be a factor, but it is certainly not a compelling causal force. For example, many of Ostrom's (1990) examples of cooperative self-organization to manage scarce resources are from developing countries. Indeed, poorer people are often more dependent on natural resources (Cavendish, 2000), and such dependence has, in some studies, been found to be a condition favouring cooperative, collective action (e.g. Chambers, Saxena & Shah, 1989). In an attempt to clarify the role of poverty, some analyses have focused on particular dimensions of poverty, especially a lack of social capital.[1] But recent research by Mosse (2003) into the management of shared water resources in southern India considerably complicates this view, suggesting that the ability to maintain quite stable forms of resource management, even in the face of shortage, can be supported as much by unequal and undemocratic power relationships as by conventional notions of social capital. A key lesson that Mosse delivers is that cases are highly specific and generalization is hard. He finds a different basis for collective action than Wade (1988). Both studied local cooperation to manage water resources in southern India, but different ecological and social histories determined very different findings.

[1] Social capital is here defined as the relationships of trust and reciprocity that bind people together within a society and reduce the transaction costs of collective action.

Refugees, Environment and Conflict

Refugee movements are generally the result of conflict but can also be a cause of conflict. In January 2003, the number of people 'of concern' to the United Nations High Commissioner for Refugees stood at 20.6 million, or about 1 in 300 of the world's population (UNHCR, 2003). Incidents of forced migration are likely to present a continued and growing challenge, because the causes of population displacement appear unlikely to diminish in the foreseeable future. The number of armed conflicts[2] has risen since 1950, reaching a peak of 55 in 1992. The post-Cold War years have seen a reduced number of armed conflicts, but even for 2003, there were 29 active armed conflicts (Eriksson & Wallensteen, 2004). The global human population is likely to increase by around two and a half billion people over the next 50 years (UNFPA, 2003). In the same time-frame, global climate change will further impact on agricultural productivity, greater populations will be exposed to flood and drought, and even the viability of some island societies will be threatened (IPCC, 2001; Barnett, 2003; DfID, 2003). Furthermore, these current and potential causes of (forced) migration are predicted to impact most on developing countries: most recent armed conflicts have been located within and between developing countries (Gleditsch

[2] Armed conflict is here defined with a lower threshold of 25 annual battle-deaths, as used in the Uppsala dataset (Gleditsch et al., 2002; datasets available at http://www.prio.no/cwp/datasets).

et al., 2002; Stewart, 2002); 90% of population growth is expected to occur in developing countries (UNFPA, 2003); and climate change is expected to have the most detrimental impacts in developing countries (DfID, 2003; Pelling, 2003). As discussed, some authors have also proposed that conflict is most likely to occur in areas where various dimensions of poverty undermine the capability to adapt in more strategic and productive ways (Homer-Dixon, 1999; Goldstone, 2001).

Refugee settlements provide case-study situations in which theoretical preconditions for environmental conflict develop quickly and often in extreme ways. This provides an opportunity for ex ante studies of environmental conflict, breaking with the tradition of only studying ex post cases, where violent conflict has already resulted. It is widely accepted that influxes of refugees into an area can place considerable stresses on natural resources, leading to both environmental and social impacts (e.g. UNHCR, 1996, 1998; Black & Sessay, 1997; Bisset, 2001; Adisa, 1996). Resource demand can dramatically increase following the creation of settlements, leading to accelerated conversion of forest to agricultural land, collection of firewood, extraction of surface and ground waters, fishing and hunting. At the same time, the assimilative capacity of environments can be stretched by the additional wastes produced, and this can exacerbate threats to human health. The UNHCR's (1996) *Environmental Guidelines* identifies six categories of environmental impact: natural resource degradation; irreversible impacts on natural resources; impacts on health; impacts on social conditions; social impacts on local populations; and economic impacts. This list highlights the view that environmental impacts are always accompanied by social impacts of some kind and often by health impacts, cultural impacts and economic impacts. Moreover, certain sections of local populations can suffer as much as, if not more than, refugee populations.

There has been some debate as to why refugees cause environmental problems. Chief amongst these is the mere fact of numbers. Population increase, especially when it occurs so rapidly, places additional stresses on local resources. For example, it is rare for refugees to be provided with construction materials or fuel for cooking, and these resources will often by necessity be collected from local environments. There has also been a tendency to perceive refugees as having an impact beyond their numbers. This perception of refugees as 'exceptional resource users' is still popular, although it has been convincingly refuted by Kibreab (1997) and Black (1998). One of the key arguments in defence of the 'exceptional resource users' thesis is that refugees make resource use decisions that are influenced by a high time preference for current consumption over future consumption. The theories underpinning this are (1) that refugees are temporary users of an area and have little stake in future income flows from its resources and (2) that, regardless of perceived length of tenure, poverty itself forces short-term environmental decisionmaking. The first of these arguments is somewhat persuasive; the second is less so. This view of the poverty–environmental degradation nexus is propagated in influential reports such as the Brundtland Report (WCED, 1987) and the World Bank's World Development Reports (e.g. World Bank, 1992). These are well-meaning observations, but their assumptions have come under recent critical scrutiny, with evidence that poor people can actually display exceptionally low time preferences for resource use (Devereux & Maxwell, 2001; Moseley, 2001) and, despite higher dependence on natural resources, actually use less of them than wealthier people in the same vicinity (Cavendish, 2000).

In sub-Saharan Africa, refugee settlements typically exhibit environmental trends that are widely believed to be contributory factors for triggering unproductive environmental conflict. Foremost amongst these is rapid population expansion and poverty, but also deforestation, water scarcity, soil erosion, land shortage and violation of sacred sites. Furthermore, refugee situations nearly always bring together different groups of people to share local subsistence resources. There is a growing concern that scarcity-induced insecurities can contribute to an amplification of the perceived significance of ethnic differences and inequalities, creating the conditions for unproductive conflict. Ek & Karadawi (1991) found that refugees in Sudan were increasingly perceived as a burden, following the deepening of economic recession and as relief agencies were seen to prioritize refugees over host communities. Adisa (1996) makes similar observations about refugee–host relationships in the Great Lakes region. In such cases, perceptions of resource use conflict and perceptions of inequity are mutually reinforcing. In the worst scenarios, conflict following refugee settlement leads to further population displacement, aggravating the very problem to which such settlements are a response.

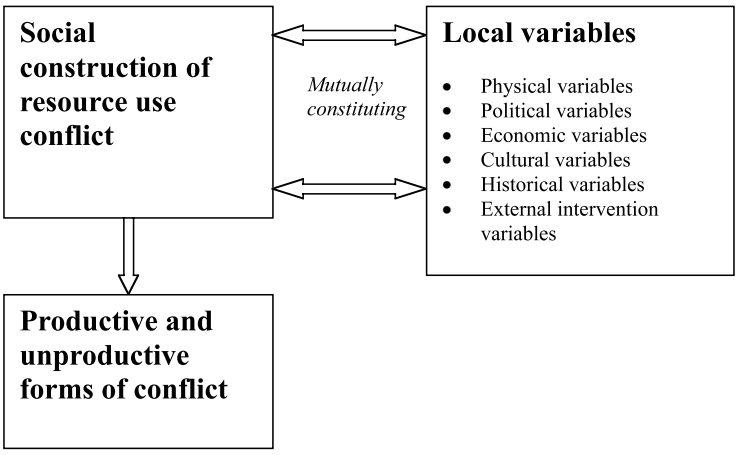
Rethinking Environment–Conflict Relations

In this section, I draw on contributions from anthropology, development studies, social psychology, common property resource and other literatures that have made contributions to the study of environmental conflict. In doing so, the intent is to develop a synthesis of the 'best available' understanding of the linkage between environment and conflict. In the following section, this generic approach is applied to a specific context, using a case study of Bonga camp in Ethiopia. The purpose of the case study is to ask whether this reworking of our present knowledge about environment and conflict linkages presents us with entry points for improving the likelihood that communities are able to respond cooperatively and constructively to rapid environmental change. In other words, given preconditions of rapid environmental change, together with a context of poverty and mass immigration, are there ways of privileging cooperative forms of adaptation over conflictive ones?

The starting point for developing an understanding of environment–conflict linkages is Homer-Dixon's (1999) argument that where environmental change contributes to conflict development, it does so through indirect mechanisms. It is a contributory factor that is mediated by a host of social, cultural and economic variables (Baechler, 1999; Kahl, 1998). Competition for resources can be mapped onto existing perceptions of inequality, resulting in a hardening of group identities and providing a catalyst for hostility towards out-groups. Whether, and to what extent, such a society–nature dynamic occurs is dependent on a range of intervening variables that determine whether resource use conflict develops along productive or unproductive pathways. Where unproductive intergroup conflicts occur, they tend to manifest themselves as conflicts over ethnicity, class and other existing social fault-lines.

Developments in a number of disciplinary areas broadly support this conceptualization of environment–conflict linkage. Resource economics and politics have long recognized that there are intervening conditions (or variables) that determine whether everyday resource scarcity leads to competitive or cooperative actions (e.g. Ostrom, 1990). Research in the political economy of natural disasters finds that sudden environmental stress can, under certain social conditions, be a catalyst for

Figure 1. Pathways to Conflict



deepening social segmentation and intensified intergroup competition and conflict (Drury & Olson, 1998; Kreps, 1998). The social psychology of intergroup conflict suggests that social identity groups become less permeable (communities become more deeply segmented) under conditions that foster perceptions of relative deprivation and threats to self-esteem. Where these conditions exist, quite trivial differences can be instrumentalized, fuelling hostility towards outgroups (Hewstone & Greenland, 2000; Jackson & Smith, 1999). In anthropology, there is work that suggests that the surface manifestations of 'ethnic conflict' frequently obscure underlying causes that have motivated the 'instrumentalization' of ethnicity: popular notions of collective identities are manipulated for strategic purposes (Schierup, 1999; Timura, 2001).

While environmental change is a physical reality with the capacity for causality that this entails, there is an emerging consensus that our interpretation of such change is socially constructed, dependent on a range of variables that characterize the complex social contexts in which we perceive the environment. One simple illustration of this is that the physical magnitude of an environmental issue does not appear to be a good predictor of the level of social response. On the one hand, an apparently minor resource use conflict may be socially significant and lead to intense and unproductive conflict, as described in Roy's (1994) account of the repercussions of one person's cow eating another's crop. On the other hand, apparently more significant events are frequently resolved peaceably, such as where communities respond to livelihood-threatening water scarcity through communal action. Roy's study of conflict in a Bangladeshi village should remind us that the physical characteristics of an environmental issue can, in some cases, be fairly peripheral to understanding subsequent conflict. Local socioeconomic conditions combine to determine the way in which the environmental issue is socially constructed (Figure 1). For example, local leaders may intentionally rally people around a certain understanding of a resource use conflict as a means of achieving political ends.

To begin to understand any linkages between environmental change and conflict/cooperation, therefore, we need to examine those factors that influence the ways in which people construct their understanding

Table I. Types of Socio-economic Variables that Frame Social Constructions of Environmental Scarcity

Category	*Variables*	*Studies*
Political	Leadership, formal and informal institutions and rules, including property and resource management systems	Schmidtz (2000)
Economic	Poverty and inequality	de Soysa & Gleditsch (1999)
	Economic interdependence	Neumayer (2002)
	Resource dependence	Martin & Lemon (2001)
Cultural	Family structures, religion, ethnicity	Baechler (1999)
Historical	Memories of economic change	Stewart (2002)
	Memories of local politics	Kurimoto (2002)
External intervention	Domestic and international development assistance	Suliman (1999)

of environmental change. Pathways to different types of conflict are determined by actors' *perceptions* of conflict situations, rather than simple causal linkages between contributory factors and outcomes (Dokken, 2001; Timura, 2001). The range of variables that frame individual and social constructions of resource use competition appears to be very wide (Table I). Goldstone (2001) finds that poverty and inequality are the strongest influencing factors that serve to increase the likelihood that a conflict will become unproductive. Kahl (1998) proposes that the ambitions of a state elite amount to a critical intervening variable: the elite instrumentalize resource scarcity, deliberately engineering violent outcomes that advance their parochial interests. Neumayer (2002) and Esty et al. (1999) find some evidence that high levels of economic interdependency influence weakly in favour of cooperative outcomes. Stewart (2002: 344) suggests that histories of conflict can be the most powerful variable because 'mobilising people by calling on group memories is more effective if there is a history of conflict'. Suliman's (1999) comparative case studies of environmental stress found that the ability of local people to frame solutions, within their own cultural approach to rights of resource access, was the key to a peaceful and cooperative outcome. In contrast, where external interventions led to the imposition of outsiders' attitudes towards resource tenure, common ground could not be found and violence prevailed.

Case Study of Bonga Camp, Ethiopia

The case study that follows is used to test the usefulness of the framework identified above, in terms of whether it contributes to understanding the causes of conflict, and whether it helps to identify entry points for transforming potential conflict situations. I begin by briefly summarizing the physical environmental change around Bonga camp and the views expressed about this by host and refugee populations. I then describe two sets of variables that were considered particularly important in the context of this location: political–historical variables and external intervention variables. In doing so, there is an emphasis on seeking to identify how such variables can individually frame local constructions of environmental issues, and how they can act in combination.

Environmental Change

Bonga refugee camp is located on the Baro river, 15 km to the east of Gambella town,

in the Gambella region of western Ethiopia. Most of Ethiopia's remaining 3% forest cover lies in this western lowland. The camp is bounded to the north by the river Baro, the existing settlement of Bonga to the south, forested hills to the east and forested lowlands to the west. Site selection did not anticipate long-term settlement, and one of the key difficulties is the lack of land allocated for agricultural production. There are 450 hectares of farming land within the camp, but the Uduk people have little choice but to supplement their meagre rations by also farming and hunting outside of the camp boundaries. An estimated 800 hectares is currently farmed illegally, and forest resources are collected from a much wider area. Fire is widely used by people in this area, for clearing land, for hunting and for symbolic purposes.

There is a convincing weight of anecdotal evidence of unsustainable resource use practices, but there has been a dearth of systematic monitoring and evaluation. UNHCR's FRAME programme (Framework for Assessing, Monitoring and Evaluating the Environment), currently under development by the Engineering and Environmental Services Section, is seeking to improve this situation, with indicator-based systems for settlement-level monitoring (UNHCR, 2002) and expanded use of remote sensing programmes. The most obvious environmental impact of the refugee camp is deforestation, although this was already occurring before the refugees arrived in 1993. Between 1990 and 1997, nearly 3,000 hectares of forest land were lost (EMA-UNHCR, 1998), and field observation in late 2002 suggests that this trend continues. The biggest cause is the expansion of slash and burn agriculture into the nearby hillsides, mainly for growing sorghum. This is frequently leaving land bare during the rainy season and, on hillsides, providing conditions for gully and sheet erosion. While refugees have been able to rent some existing cropland from the Anyuak people, they rely mainly on forest clearance for temporary cultivation. Both refugee and host peoples also rely on wood for fuel and construction, and there are high levels of hunting with traditional weapons and dogs. Many of the camp's men leave the camp early in the morning, often spending days away from the camp, travelling further and further in search of bushmeat.

Perceptions of Environmental Change

We carried out a series of Participatory Rural Appraisal exercises and focus groups with host and refugee populations. Initial meetings with host communities were held in the refugee camp, as they welcomed the opportunity to enter the camp, which is normally out of bounds. Subsequently, they selected venues within their own village. These exercises and conversations revealed both frustration and hostility relating to recent environmental change. Host communities, who are greatly outnumbered by the refugees, strongly expressed the view that life was considerably easier before the arrival of the camp. Resources such as land, forests and wildlife have now become much scarcer, and they blamed the refugees for this. They also complained about refugees stealing their crops and water, destroying their irrigation channels (by digging for rats in the banks), using illegal fishing methods and spoiling their traditional grazing lands. While a nearby refugee camp is clearly an economic asset in some respects (for example, the local market was buoyant and there were opportunities to let land), such benefits were not perceived to compensate for intensified resource scarcity. In fact, the lack of benefits accompanying the refugee camp was a specific source of dissatisfaction. When the camp was located here, UNHCR had apparently promised a number of benefits, including a new school in the village. These benefits

never materialized, and this has contributed to a view of events that places themselves as victims and refugees as privileged. As is common in sub-Saharan Africa, the location of a refugee camp actually attracted in-migration to Bonga, owing to the expectation of service delivery and economic opportunities. These new residents have not seen the benefits they expected from their proximity to a UNHCR camp.

Host communities are also alarmed at the growth in numbers of refugees. In 1993, 11,000 Uduk people were registered and settled in the camp. In November 2002, this number had swollen to 16,159. A very small number have continued to trickle in from Sudan, but most growth is a result of high birth rates amongst the existing population. In 2001, 868 births, and 68 deaths, were registered. Of the Uduk population, 66% are aged 17 and under, and 38% are 4 and under. For the Uduk, population growth has taken on huge significance as part of their fight for cultural survival. There are only very small numbers of Uduk left in Sudan, and Bonga camp therefore contains nearly the entire global population of this ethnic group.

The refugees (Uduk community) perceive any attempt to raise the profile of environmental issues with suspicion. They have been made aware of the ecological significance of the surrounding forests and view national and international concern over biodiversity conservation as yet another threat to their livelihoods. Rumours persist, for example, that the government is planning to develop the location as a tourism destination. Current livelihood strategies include hunting for bushmeat and shifting cultivation in the forests surrounding the camp. The concern that a conservation agenda will threaten the continuation of these activities is connected to cultural reproduction: a hunting and farming community must continue to hunt and farm if skills are to be transferred between generations.

Outside agencies continue to describe the Uduk refugees as living a peaceful coexistence with host communities. This view is partly correct, because Bonga has not suffered the overt outbreaks of communal violence suffered elsewhere in the region. Violence attributed to environmental resource use conflicts has recently occurred in Itang (in 2002), Gog (in 2001) and Abobo (in 2002) (Hedlund & Sewonet, 2002). In Fugnido camp, 160 km southwest of Bonga, 42 refugees were killed, and many more wounded, during ethnic clashes in November 2002, leading to the relocation of 531 refugees from Fugnido to Bonga in December 2002. Despite Bonga's reputation for peace, there is little doubt that relations between refugees and hosts are tense. Violence does occur, and both groups report the dangers they face from each other when they stray increasingly far into the bush to collect resources. There are accusations of beatings and rapes. In this climate of hostility, there has been absolutely no cooperation between different groups of resource users, and the surrounding area has become a de facto open access resource.

Historical and Political Variables

Gambella region borders Sudan and has been an arena for Cold War events, with the Stalinist Mengistu regime for a long time supporting the Sudanese People's Liberation Army (SPLA), at a time when the West offered support to the Sudanese government. Following the re-ignition of civil war in Sudan in 1983, the Blue Nile region, near the border with Ethiopia, became a site of fighting. By 1985, the SPLA had a base at Assossa, inside the Ethiopian border, and used this as a platform to infiltrate the Blue Nile region of Sudan. In 1986, the Sudanese Army began a campaign to counter this insurgency, and in early 1987, they were responsible for large-scale burning of villages in the area. The Uduk people were among

the victims and were forced to flee into Ethiopia, where UNHCR, with support from the Mengistu government, opened a camp near the then SPLA stronghold of Assossa. In 1990, anti-Mengistu/SPLA forces moved south through Assossa, and the Uduk people, now linked to the fortunes of the SPLA, fled back to Sudan, taking shelter in the Yabus valley. Here they were bombed by the Sudanese air force and found themselves displaced yet again. They fled back into Ethiopia, taking refuge with the UNHCR at Itang. In 1991, following the fall of the Mengistu government, the SPLA, as well as Sudanese refugees under their control, were made to leave Ethiopia. The Uduk re-entered Sudan for a second time, settling at an SPLA camp at Nasir that was served by the UN's Operation Lifeline Sudan. Again, the Uduk found themselves the victims of civil war, and in 1992, the majority fled back to Ethiopia for a third time. Following six months in a transit camp at Karmi, during which time there was one violent clash with Nuer refugees, they were moved to a new camp at Bonga. They have lived in Bonga since 1993, coexisting relatively peacefully with the local population, including the Anyuak, who have historical claims to much of the surrounding land. By the time of writing, the Uduk had been in exile for 16 years, with no sign of an imminent return to their homelands. It is a dreadful story, and one that is richly and profoundly narrated in the works of the anthropologist Wendy James (1997, 2001, 2002; James et al., 2002).

The majority host population, the Anyuak, have also been much affected by the civil war/Cold War. Their chief rivals for land and other resources are the Nuer people, a struggle between two nilotic tribes that predates colonial border changes. This 'tribal' conflict is connected to wider geopolitical events, certainly to the extent that global and regional events serve to intensify group-distinction and associated rivalries with others. Intensification of Anyuak–Nuer hostilities occurred in the Gambella region after the 1974 fall of Haile Selassie and then after the fall of the Mengistu regime in 1991. Since this time, there has been sometimes bitter rivalry for control of the regional government.

This brief political–historical context helps illustrate that local resource use conflict between refugees and hosts always takes place within complex political–ecological landscapes of war. Actors' perceptions of conflicts are not only coloured by cultural attachments to places and ways of life, but also by major political events (Bryant & Bailey, 1997). 'New' resource use conflicts form part of the evolving fabric of old political and ecological landscapes. New threats to livelihood security form part of a social continuum, in which shared memories form the medium through which present events take on their significance (James, 2001). We cannot hope to fully understand the contexts within which local people frame their interpretations of resource use conflicts. What we can understand, with some confidence, is that there are situations in which recent and distant experiences render different population groups very susceptible to unproductive conflict (Stewart, 2002). One feature of such circumstances is a tendency to (1) intensify perceptions of group distinctness and (2) as part of the same process of social constitution, intensify perceptions of other groups as outsiders and rivals. The social history of Bonga helps to explain the inclination of individuals to think and behave in categorized ways (to frame their contact with each other in intergroup ways rather than in interpersonal ways). Social psychology identifies such a way of perceiving others as conducive to conflict rather than cooperation (e.g. Hewstone, Rubin & Willis, 2002). However, this research also offers an entry point for the

transformation of potential conflict situations, through improving both the quality and quantity of intergroup contact. Efforts to facilitate collective, participatory environmental management may offer a good way of beginning such a process (as discussed further below).

External Intervention Variables

Suliman's (1999) piece alerts us to the fact that relief agency and host government policy can unwittingly fuel the kind of conditions under which resource use conflict is likely to develop along pathways to violence. This can happen where imposed resource management regimes render societies less likely to construct perceptions of resource use conflict that embrace notions of mutuality and trust (Neefjes & David, 1996; Whitaker, 2002). In Bonga camp, both refugee and host communities are reliant on nearby forest resources: on the face of it, they have a mutual interest in sustaining this resource. However, there has been little opportunity for the communities to enter into dialogue that would recognize this mutuality because, officially, the refugees do not have access to any resources outside the camp boundary. Accordingly, this outsiders' view of land tenure, mapped onto resource management regimes, has led to a situation in which there is no political space for honest and open deliberation and little scope for cooperative agreements. This state of affairs has fostered divisive rather than mutual constructions of the resource use conflict, a situation that has been observed in other refugee settlements (Kaiser, 2000).

Participatory Environmental Management

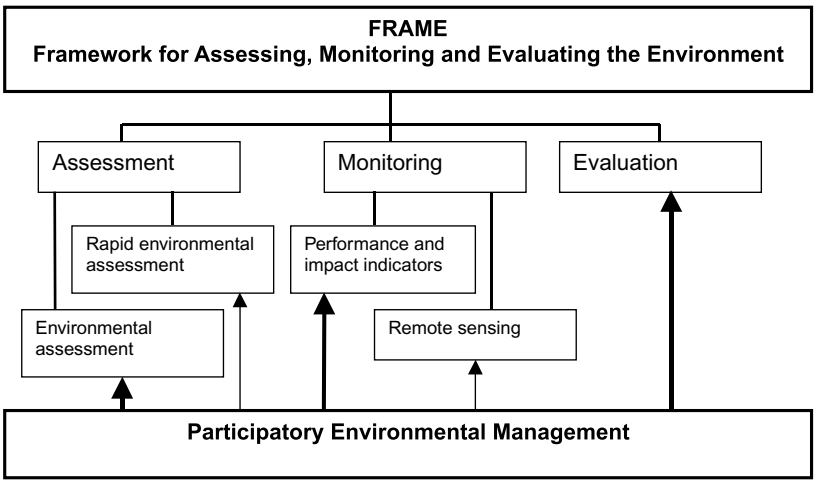
In the environmental conflict literature, there is a growing call for researchers to investigate the kind of resource management regimes that might favour cooperative outcomes (Baechler, 1999; Rogers, 1999; Barnett, 2001; Diehl, 2002). This call has not been taken up in a theoretical way within the refugee literature, but UNHCR has been testing the performance of participatory forms of environmental management for conflict resolution. For example, some success is reported from the Refugee-affected Areas Rehabilitation Programme in Nepal (UNHCR, 1998). Most recently, UNHCR has commissioned the development of methods for participatory environmental management (PEM) in order to support the FRAME programme (Biswas et al., 2002). FRAME is a three-pillared approach to managing the environment, based on assessment, monitoring and evaluation processes (Figure 2). It is intended that community participation will eventually permeate all three processes, partly to improve the effectiveness of environmental management, but equally as a strategy for alleviating refugee–host conflict. It is hoped that forms of co-management of resources, involving both refugee and host communities, can foster perceptions of mutuality that relieve the propensity of resource use competition to heighten consciousness of ethnic divisions, inequality and other triggers of violence.

Pilot Study

The design of the pilot study in Bonga aimed to follow principles established within social psychology of intergroup conflict. In particular, participatory environmental management processes were intended to meet well-established conditions for relieving intergroup conflict: intergroup contact characterized by shared goals, cooperation in pursuit of these goals, equal status within the setting and support from relevant authorities (Fiske, 2002; Hewstone & Greenland, 2000).

The following initiative was undertaken through the UNHCR's Engineering and

Figure 2. Participatory Environmental Management and FRAME



Environmental Services Section with fieldwork undertaken with a team of 15 Ethiopian refugee workers. Members of the team came from the UNHCR itself, from the Ethiopian government's Administration for Refugee and Returnee Affairs (ARRA) and from the NGO ZOA Refugee Care. Initially, a series of meetings were held with separate groups of hosts and refugees, in which environmental issues were identified and prioritized. We then organized a large meeting that brought representatives together to initiate a process of joint, face to face, environmental planning. Here the different groups of hosts and refugees presented the results of their previous meetings, including a summary of what they considered to be the main environmental issues that needed addressing. The collective meeting then undertook a process that led to the selection of a set of environmental issues that everybody was concerned about. Three shared priorities emerged: deforestation, land shortage/agricultural productivity and fire hazard. Subsequently, small, mixed groups then worked on one or more of these issues, brainstorming possible actions and then drawing up plans that could be taken by individual communities, through collective action and with agency support. It is not relevant to provide details of the ideas generated here, though some were clearly sophisticated and viable, such as collectively calling in government extension agents to learn how to construct buildings from mud bricks instead of forest resources (termites necessitate frequent replacement of wooden poles). What is important, and I think hopeful, is that people's constructions of resource use conflicts did appear to shift as a result of open, inclusive and deliberative processes of thinking through environmental problems. There was a demonstrated ability to identify shared objectives, mutually desirable ends, and ways in which the different communities could learn from each other.

The most dramatic example of this came towards the end of one of the initial sessions with local villagers. Much of the time had been spent on a series of participants venting their anger at the refugees, listing the various ways in which they threaten their livelihoods. But then a turning point emerged out of an exchange between two of the elders. It amounted to a sophisticated argument for a reconstruction of the way in which they

perceived their current livelihood problems. The elders argued that the root of their anger was that they had seen themselves reflected in the refugees and had not liked what they saw. In viewing the industriousness of the refugees, they saw reflected their own inadequacies: they stated their inability to develop themselves and their lack of interest in hard work. They saw the success with which the refugees had taken up agriculture and saw in this their own failures. For example, they were renting their own lands to refugees rather than working the soil themselves. The solution to our problems, they said, is not to blame the refugees but to look to ourselves. Another man agreed that they were in fact jealous of the refugees because of what they get from agriculture. He said that this was not entirely their own fault as the government and other agencies had overlooked them when it came to education and training. Nevertheless, what they should be looking for is closer relations with the refugees because they can learn from them.

Until this point, we had been nervous about bringing the host and refugee groups together. In the event, and perhaps because of this intervention by elders in the host community, things went quite smoothly. There were inevitable tensions and a few arguments, but there was also a surprisingly upbeat atmosphere, reflected also in the mood of some of the UNHCR, ARRA (government refugee agency) and ZOA (NGO) staff who were facilitating the process. The 15 local facilitators had been working with different breakout and plenary groups as part of the process and were pleasantly surprised by the progress.

At the end of this pilot project, it could be seen that inclusive and open processes can help, in the short term at least, to encourage constructions of resource use conflicts that favour productive rather than unproductive outcomes. There was much talk of common aims and many on both 'sides' reflected that cooperative action was the only way for anyone to benefit in the future. For the host communities, this change in attitude was strongly linked to the fact that they had been recognized as stakeholders by the various agencies involved. This enabled them to see an opportunity to move on from being the neglected minority and the victims of refugee settlement. They saw the opportunity to take greater advantage of the aid that flows to refugee camps: the education, agricultural extension, healthcare facilities and so on. From the refugees' perspective, the process to some extent legitimated their informal use of lands outside of the camp, enabling open communication about this.

Discussion and Conclusions

While initial field testing provided some evidence that PEM has the potential to positively influence perceptions of conflicts in refugee situations, this needs to be put in perspective. First, this is only a single case study, and it took place in a location which had a reputation for peaceful coexistence. The experience at other camps could prove to be much more difficult. Second, the initial progress that was made (the shift from unproductive towards productive responses to resource use conflict) was very fragile and could easily be reversed. It is rather premature to judge whether participatory environmental management processes can deliver on objectives to prevent and alleviate unproductive conflicts in refugee settlements.

The problematic elements of participatory processes are extensively documented elsewhere (e.g. Cooke & Kothari, 2001; Agarwal, 2001; Edmunds & Wollenberg, 2003). One of the major difficulties encountered in the field was the expectation of payments for participation in any activity. Our refusal to pay participants was out of line with their previous experience of working with development agencies and was

a cause for sometimes fractious debate and on one occasion even a walkout. Given this context, it appears unlikely that communities will participate to the extent of offering voluntary labour for environmental management activities. This is a problem for a participatory approach: if all solution activities end up taking place through a waged labour arrangement, it is difficult to ensure that there is real community ownership and commitment to the process. It also raises the issue of the economic and social sustainability of the process. This is a ubiquitous problem faced by agencies in Africa and requires further research.

A further limitation of the process is that it is time consuming and relies on great skills from local facilitators, who have to facilitate multilingual events under tense conditions. One of the skills required is to work with rather generic prescriptions of participatory methods, rendering them suitable for the institutional and cultural situations of particular locations. This questions the feasibility of scaling up PEM activities in refugee-affected locations. While it is a relatively simple thing to produce a generic handbook containing good practices that have been employed with success elsewhere, there remains a tension between the need to be sufficiently prescriptive for end-users to treat it as a manual and, on the other hand, to encourage the level of flexibility that enables end-users to tailor the process to fit the institutional, cultural and environmental context in which it is being used. To take one example, the participatory process needs to be embedded in local institutional structures, perhaps even through committees or groups that have membership rules, regular meetings and procedural norms. A generic handbook is not the place to include prescriptive guidelines about the composition and functioning of such local institutions. Such guidelines would not be capable of taking account of existing institutional structures and might overlook important local protocol (Martin & Lemon, 2001). In Gambella, for example, refugee camps already have environmental management institutions (Environmental Working Groups), and it is important that any process introduced from outside is sufficiently flexible to take advantage of such pre-existing institutional strength. This tension between imposing blueprints and encouraging bottom-up planning is another ubiquitous problem when producing guidelines for participatory processes that are to be adopted over a broad geographical scale. The importance is highlighted by Suliman's (1999) warning that imposing inappropriate frameworks can easily stimulate rather than prevent unproductive conflict.

The fact that refugees fall under the auspices of emergency relief also influences the extent to which external interventions seek to foster long-term relationships with host populations. Organizations that are specialized in dealing with emergencies find it difficult to broaden their remit to include long-term 'development' strategies (Kelly, 2001; Wilkinson, 2002; Kibreab, 1999; Whitaker, 2002). While there is an emerging consensus that long-term environmental management strategies should be integrated into relief efforts, this is hampered by a number of institutional factors. First, there is a lack of donor support for environmental management (Whitaker, 2002); second, there is institutional inertia characterized by relief agencies defining problems in terms of their existing institutional capabilities, rather than newly emerging needs of refugees and hosts; third, there is disagreement as to who should be responsible for environmental management (Wilkinson, 2002); and fourth, there has been a relative failure to integrate emergency relief and development assistance through interagency cooperation (Kibreab, 1999).

A final concern is that preliminary testing of a participatory management approach is,

by necessity, rather naive from a political ecology perspective. This work has not sought to address any of the wider structures of environmental management systems within which local issues are situated. Local participatory management efforts are too often frustrated by the limits set by external institutions: laws and constitutions that prevent the devolution of power, tensions between local and national conceptions of tenure, and so on (Martin & Lemon, 2001; Brown, 2002). Such issues relate to the relationship between different scales of policy and planning and the frequent contradictions that scupper attempts at local democratization. This issue poses a particular threat to interventions, such as PEM, that seek to overcome the 'ingenuity gap' by operating locally as a response to wider institutional failure.

The time and skill required for developing processes of participatory management are well known. So, too, are the difficulties of securing adequate representation and the potential for anti-democratic processes, such as elite capture of power. For these reasons, as well as concerns about effectiveness at meeting conservation outcomes, a number of authors have recently reported a backlash against community-based approaches to environmental management (Wilshusen et al., 2002; Brechin et al., 2002; Ribot, 2002). This 'backlash', which calls for a return to more authoritarian approaches to preserving ecosystems, is largely fuelled by the relative failures of Integrated Conservation and Development projects in the 1980s and 1990s (see e.g. Wells et al., 1999; Salafsky & Wollenberg, 2000). This article has suggested two reasons for rejecting this 'backlash' and for making renewed efforts to identify successful practices that will underpin new attempts to make participatory environmental management work. First, the recognition of a security dimension to resource use conflicts, together with a better understanding of how environment and conflict are related, provides a further theoretical justification for participation. Second, early findings from UNHCR initiatives are sufficiently positive to at least justify further field testing of approaches in refugee-affected areas.

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