The Spaces of Conservation and Development around Lake Nakuru National Park, Kenya

Robert Daniels and Thomas J. Bassett
University of Illinois

Geographically or sociologically defined resource management units, such as buffer zones or community resource management territories, seek to harmonize local land-use practices with protected-area management objectives. The geographically restricted nature of these models often results in simplistic representations of society-nature relations over time and space. Conservation areas are misrepresented as ecologically and socially homogeneous, as well as politically neutral. This study examines the limits of a spatially defined conservation and development project designed around the physical geographical unit of the watershed at Lake Nakuru National Park, Kenya. It argues that politically motivated violence that has plagued the area since the early 1990s has severely undermined the suitability of such narrowly defined conservation territories. Specifically, the case study points to the permeability of the Lake Nakuru watershed to national and regional political forces that ultimately constrain participation in conservation activities. The spaces of conservation and development must be enlarged to include these extralocal arenas and processes if environmental problems are to be effectively addressed. Key Words: conservation territories, ethnic violence, Kenya, political ecology, scale.

Introduction

A hallmark of historical and contemporary approaches to people/park management is the prominence of spatially defined conservation units. Buffer zones, wildlife corridors, community resource management territories, biodiversity zones, and other geographically or sociologically defined units seek to harmonize local land-use practices with park or environmental management objectives. Designed to regulate patterns of resource use bordering protected areas, these sociospatial approaches also focus heavily upon the involvement of local populations in the long-term management of natural resources. However, serious questions are being raised about the adequacy of these new spaces of conservation to accommodate the wide range of political and ecological processes affecting land and resource use that transcend the boundaries of these discrete management zones (Stevens 1997; Zimmerer 2000). The geographically restricted nature of these models results in simplistic representations of society-nature relations over time and space. Conservation areas are misrepresented as ecologically and socially homogeneous, as well as politically neutral. As a result, these new spatial approaches mask broader, more complex sociopolitical and ecological processes that operate through multispatial and temporal scales that strongly influence the utilization of natural resources at the household level.

Given the emphasis on both space and scale in natural-resource management plans, geographers have an important contribution to make to current debates, not only in geography, but also in development studies on the political ecology of conservation and development territories (Little 1994; Peters 1994; Batterbury 1998; Neumann 1998; Leach, Mearns, and Scoones 1999; Ribot 1999; Schroeder 1999). This study examines the limitations of a spatially defined conservation and development project designed around the physical geographical unit of the watershed at Lake Nakuru National Park, Kenya (Figure 1). It argues that politically motivated violence and considerable geographical variation in the adoption of conservation practices within the watershed demonstrate the unsuitability of narrowly defined conservation territories. In sharp contrast to the methods and approach of project officials, which assume a homogeneous and geographically bounded landscape (the watershed), this research suggests a more heterogeneous,
fragmented, and politicized space where the adoption of conservation measures is determined by multiple factors operating at a variety of spatial scales.

Our focus on the politics of resource access, control, and management is informed by two complementary approaches in Third World political ecological studies. The first approach puts politics first to show how power relations mediate human-environmental interactions at diverse scales (Moore 1996; Peet and Watts 1996; Bryant and Bailey 1997). This includes the micropolitics within and among households at the community level, the politics of production in the workplace, and national-level politics linked to policy-making and electoral politics. This emphasis on the political seeks to enlarge our understanding of how decision-making around resource access and management is influenced by contestation and negotiation in these political arenas, or what Bryant and Bailey (27–47) call the “politicized environment.” The primacy of politics in land and resource use is evident in the environmental conflicts and resources struggles between men and women in The Gambia (Carney 1996; Schroeder 1999), between the state, conservationists, and local land users in eastern and southern Africa (Moore 1996; Neumann 1998), and in the politics of peasant associations around a host of environment and development issues in Latin America (Zimmerer 1993; Bebbington 1997; Coomes and Barham 1997). The case of the Lake Nakuru Conservation and Development Project shows how national-level politics intrude into the watershed in ways that undermine the conservation goals and programs of the World-Wide Fund for Nature. Specifically, the violence surrounding the attempts of President Daniel Arap Moi to consolidate his political base in the central Rift Valley districts controlled by opposition parties has created considerable insecurity among many landholders in the Lake Nakuru area. Faced with the possibility of land expulsion or death, it is not surprising that some farmers are reluctant to invest time and resources in the conservation programs promoted by the WWF.
The second approach in Third World political ecology that informs this article focuses on the sociospatial frameworks of areas designated as conservation zones. The often arbitrary delimitation of what Zimmerer (2000, 358) calls “conservation territories” has important implications for land users, such as pastoralists, whose livelihoods depend on their access to spatially and temporally dispersed resources (Scoones 1995; Neumann 1998; Turner 1999; Zimmerer 2000). These authors argue that the standard designs for conservation territories (watersheds, buffer zones) need to be rethought in light of the land- and resource-use patterns of local peoples and the ecological and social dynamics influencing resource management that commonly transcend these rigid boundaries. Our case study points to the permeability of the Lake Nakuru watershed to national and regional political forces. We argue that the spaces of conservation and development must be enlarged to include these extra-local arenas and processes if environmental problems are to be effectively addressed.

The Lake Nakuru Conservation and Development Project

Project Setting

Lake Nakuru lies at an altitude of over 1,700 m on the floor of the Great Rift Valley in Kenya. The lake itself represents the sink of a much larger watershed encompassing some 1,800 square kilometers (Figure 1). Ever since Joseph Thomson first brought the lake’s existence to the attention of Europeans, Western naturalists and tourists have marveled at its beauty, particularly its wildlife. Lake Nakuru is periodically home to some 1.5 million flamingos as well as a further 450 species of birds, making Lake Nakuru National Park one of the premier bird-viewing areas in the world. The park also supports approximately fifty other species of mammals, including the endangered black rhinoceros, and has been an important relocation and holding facility for many species, such as the Rothschild giraffe and the white rhinoceros. This abundance of wildlife in a relatively small area (providing excellent viewing opportunities), along with the lake’s close proximity to the capital city of Nairobi, has made Lake Nakuru one of the most visited parks in the country.

Rapid land-use changes in the watershed over the past thirty years have sparked considerable concern for the long-term survival of the park and its wildlife. Estimates made from land-use maps of 1970 and 1986 show that land under forest and natural vegetation decreased from 47 percent to 26 percent of the watershed area during that time, and that small farms grew from insignificant numbers to occupy over 35 percent of the area in the same period (Thampy 1995). Such dramatic changes in land use and land cover have caught the attention of conservationists and land-use planners. Concern over deforestation, charcoal-making, land erosion, and fluctuating flamingo populations have fueled the discourse of environmental crisis emanating from conservation organizations such as the WWF. As a result, Lake Nakuru and its surrounding watershed are widely viewed as a globally significant zone of biodiversity that has come under threat from uncontrolled population growth, locally induced land degradation, and inadequate planning (WWF 1989; Chelang’a 1995; Ngesu 1996).

In 1988, the WWF, with funding from the U.K.’s Overseas Development Administration, implemented the Lake Nakuru Conservation and Development Project (LNCDP). The WWF’s involvement with conservation in the area dates from 1972, when it provided funds to extend the park’s boundary through land purchase. This latest project represents the WWF’s continued involvement with the park, its wildlife, and the neighboring peoples. A broad-based project with numerous goals, the LNCDP seeks to (1) demonstrate to local land users the benefits of sound environmental conservation measures, (2) involve groups and networks in conservation and development activities, and (3) create public awareness and local support for the project.

The project’s activities are focused at the watershed level. Given that Lake Nakuru sits at the sink of its own watershed, the WWF bases its approach upon the premise that land-use changes within the watershed have a direct influence upon the ecological conditions of the lake itself. For instance, WWF project managers believe that the recent drying of the lake, which has resulted in the temporary migration of flamingos, is partly a result of increased siltation due to forest removal and subsequent soil erosion throughout the watershed. Project
activities, therefore, focus upon modifying farmer practices in outlying areas in order to preserve the ecological integrity of the watershed, particularly the national park. The specifics of the project—such as reafforestation, soil conservation, and water management—aim to alleviate the impacts of past land-use change in the watershed. The survival of Lake Nakuru National Park, therefore, is considered to be dependent upon the activities and agricultural practices of those farmers residing outside of its limits.

The LNCDP seeks to reverse current land-use practices through four major programs. Its environmental education program aims to enhance environmental awareness amongst watershed residents through the generation and dissemination of educational materials such as slides, publications, videos, and wildlife clubs. The environmental assessment program seeks to develop and deploy a water quality and quantity assessment system for the lake and its surrounding areas. The primary objective of the environmental planning program is to integrate environmental considerations into the planning and development of the watershed as a whole. Activities include the siting and construction of waste collection points, the detailed mapping of Nakuru town, and an active involvement in producing and implementing regional development plans in conjunction with local authorities. Finally, the environmental conservation program seeks to promote the conservation and sustainable utilization of natural resources throughout the watershed. This program’s activities comprise the primary focus for this study. The environmental conservation program strives to meet its goals through the provision of appropriate technical and material support to residents and institutions in ten target areas situated throughout the watershed. Activities include the planting of trees, the development and maintenance of tree nurseries, terracing, the promotion of fuel-efficient stoves, the construction of earth dams, and farmer training in sustainable agricultural practices at a local college.

The WWF measures the success of its conservation initiatives in simple quantitative terms. Since 1988, over five hundred farmers have been trained in sustainable agricultural practices, over 450,000 meters of terracing have been constructed, nearly half a million trees have been sold at tree nurseries around the watershed, and over two thousand fuel-efficient mud-liner stoves have been introduced into rural homes (WWF 1997). However, the extent to which these numbers represent success is unclear. Is resource degradation being reduced? How sustainable are current conservation activities? How does the climate of insecurity characterized by violence and dispossession threaten to undermine WWF initiatives?

While the WWF views land degradation in the Lake Nakuru watershed as purely a human ecological problem—one in which poor land-use practices within a predefined ecological unit (the watershed) are leading to the degradation of habitat within the national park—we argue here that any question of environmental change should be considered in a much wider political-ecological context that emphasizes spatial differentiation, political conflict, the uneven distribution of resources, and the importance of historical events. These issues raise important questions that pertain to the WWF’s current emphasis on “one watershed, one approach.”

Ethnic Clashes in the Kenyan Rift Valley: Implications for Conservation and Environmental Degradation

Technically oriented approaches that measure success by the number of conservation practices adopted often mask broader political-economic processes that constrain conservation activities (Rocheleau, Steinburg, and Benjamin 1995; Scoones 1997). The politically motivated ethnic violence that has engulfed the entire Rift Valley area over the past few years is a case in point. These conflicts—and, more importantly, the feeling of insecurity that accompanies them—have significant implications for the investment of capital and labor into long-term conservation measures.

The Historical Legacy of Kenyan Politics, Colonial Land Policies, and Settlement in Postindependence Kenya

The two dominant ethnic groups in the area reflect historical patterns of migration and settlement. While information for individual divisions is not available, data collected at the district level show that the Kikuyu and Kalenjin make up some 60 percent and 15 percent of the total population, respectively. Prior to the
colonial period the area was occupied primarily by pastoral nomadic groups, including the Kalenjin, Maasai, Samburu, and Turkana peoples. However, colonial rule had a dramatic effect upon land ownership and ethnic composition throughout the Rift Valley (Bates 1989; Berman and Lonsdale 1992; Ahluwalia 1996). Colonial administrators reserved much of the best land for white settlers, while instituting policies that barred land ownership and use by groups that had previously enjoyed customary land rights. While the interests of the white settlers were still protected in the postindependence period, arrangements were made to allow the transfer of land from Europeans to Africans throughout the Rift Valley area. Under policies guided by this arrangement, Kenyans were allowed to purchase land through schemes and collectives such as cooperative societies and companies (Odingo 1985; Miller and Yeager 1994). With intense population pressure in neighboring Central Province and assistance from Jomo Kenyatta’s Kikuyu-dominated government, Kikuyus were keen to settle and take advantage of the opening up of the highlands (Kahl 1998). As a result, the Rift Valley Province attracted many migrants from neighboring Central, Nyanza, and Western provinces (Kahl). This strong ethnic component within the settlement history of the Rift Valley, along with more recent political strategies by the ruling government, led to increasing tensions between ethnic groups in the study area.

Ethnic Clashes in the Rift Valley in the 1990s

The clashes, which broke out on 29 October 1991 at Metetei Farm in Tinderet, Nandi District, on the border of the Rift Valley, Nyanza, and Western provinces, were first portrayed by the government as a result of long-standing conflict over land. The clashes pitted the Kalenjin and other aligned ethnic minorities, such as the Massai, Turkana, and Samburu groups, against the Kikuyu, Kisii, Luhya, and Luo communities, all of which were associated with opposition political parties (Human Rights Watch 1993). This initial clash at Metetei Farm, a cooperative similar to many others throughout the Rift Valley, erupted after Kalenjin members of the collective, seemingly with the encouragement of local administrators and politicians, claimed sole ownership of the land and went about expelling all non-Kalenjins. Those who refused to leave either were killed or had their property destroyed (Ndegwa 1997).

These events occurred at a time when political tensions were at their highest since independence. Both during and preceding these events, Kalenjin and Maasai politicians, mostly within the ruling Kenya African National Union (KANU) party, had been calling for the introduction of the majimbo system (a system that proposed that groups indigenous to any particular region would control that region’s affairs) first proposed at independence. If introduced, the majimbo system would legitimate the expulsion of millions from the Rift Valley, except for those pastoralist groups that were on the land prior to colonialism. This would see the removal of several ethnic groups who had settled in the Rift Valley since the 1920s and who had legally purchased land under various schemes since the 1950s. Not surprisingly, the ethnic groups that majimboism proponents argued should be removed from the Rift Valley came predominantly from groups perceived to be supporters of the opposition—the Kikuyu, Luhya, and Luo.

Tensions in the area heightened when political rallies, organized by politicians who publicly supported and advocated the majimbo system, took on a hostile and provocative nature. It was not uncommon for members of parliament (MPs) to incite violence and increase tensions between the opposing ethnic groups. At one such rally, Kalenjin MP Joseph Misoi declared that the government and the ruling KANU party would be protected by any means necessary, and that “outsiders” in the Rift Valley would be required to go back to their “motherland” (Human Rights Watch 1993). Furthermore, those attending the meeting emphasized that KANU youthwingers, known for their “indiscriminate violence, thuggery and extortion” (Africa Watch 1991, 14), “were ready to fight to the last person to protect the Government of President Moi . . . using any weapons at their disposal,” and that members of the Forum for the Restoration of Democracy (FORD—an opposition party) would be “crushed to serve as a lesson to other would-be dissenters” (Republic of Kenya 1992, 9–10). Such incendiary talk greatly contributed toward the growing ethnic tensions throughout the Rift Valley.

After the initial clashes at Metetei Farm, the violence quickly spread to other areas
those instigating the attacks increasingly singled out the Kikuyu. Repeated claims by the government that it had deployed security forces were offset by the continuing violence, as well as a failure to censure any Kalenjin MPs for making inflammatory statements (Human Rights Watch 1993). Indeed, many saw the violence as a means to a particular political end. One report noted that “[T]he main objective . . . was to achieve through violence what was not achieved in the political platform, i.e., forcing MAJIMBOISM on the Kenyan people” (NCCK 1992, 1). The alleged use of government vehicles in mobilizing groups of “warriors” further suggested strong government involvement and motivation in the clashes (NCCK; Republic of Kenya 1992).

The Human Rights Watch estimated that between 1991 and 1993 some 1,500 people were killed in the clashes, and that a further 300,000 people were displaced. The toll upon personal property has also been high: a government investigation into the violence put the value of property destroyed at some 209 million Kenyan shillings (Kshs) (about U.S.$3.5 million). In addition over 9,400 houses were destroyed and over 3,300 livestock lost (Republic of Kenya 1992). However, such numbers do not convey the amount of land illegally transferred from one owner to another. Abandonment of land by Kikuyu and Luo landowners and its subsequent seizure by Kalenjin attackers was common throughout the conflict zone. The unrest also had significant impact upon other areas: voter disruption prior to the elections, illegal land seizure, the consolidation of political power by the KANU party, the destruction of communities, the creation of food shortages, and the deepening of ethnic hatred have all been cited as consequences of the
politically motivated violence (Human Rights Watch 1993).

Many observers link the violence to the ruling party’s strategy to extend its political power into an opposition-party stronghold. Evidence to support this claim is threefold: (1) the attacks have been centered around those areas that have most recently been associated with strong support for the opposition party; (2) the perpetrators of the violence have focused their aggression on ethnic groups associated with the opposition; and (3) the conflicts have intensified at times around national elections.

Ethnic Clashes in Nakuru District
Nakuru District has been at the center of the conflict zone. The area was affected by the initial clashes in 1991–1993 and then again during the early part of 1998 (Figure 3). Evidence collected for Nakuru District by the Parliamentary Select Committee (Republic of Kenya 1992) attributes 114 deaths and 100 injuries to the clashes, with a further 13,000 displaced. Human Rights Watch (1993), however, puts the figure of displaced persons much higher, at 40,000, most of whom were Kikuyu. The parliamentary report (Republic of Kenya 1992) also estimates that over Kshs 87 million (approximately U.S.$1.5 million) of property—among the highest costs in the Rift Valley—was lost, burnt, or destroyed during the clashes of 1997 and 1998. The city of Nakuru itself has not been left untouched by the politically motivated violence: May 1993 saw Nakuru hit with four days of rioting after police had demolished 600 kiosks that housed predominantly Kikuyu street hawkers. Many saw this as an extension of the ethnic clashes and yet another way for the government to intimidate the Kikuyu population (Human Rights Watch 1993).

Figure 3  Divisions affected by ethnic clashes in Nakuru District, 1991–1993 and 1998.
When violence erupted in early 1998, just a few weeks after Moi had returned to office in the 1997 elections, Nakuru and its surrounding environs were again at the center of politically inspired land expulsions and Kikuyu were again the targets of well-organized attacks by men armed with homemade guns and poisoned arrows. According to the general secretary of the National Council of Churches for Kenya (NCCK), the evidence “point[s] to the government’s complicity in the killings in Laikipia District as well as Njoro [in Nakuru District]” (Weekly Review 1998a, 5). The state’s failure to curb the violence prompted many reporters to point to the Moi government’s involvement in the clashes (Daily Nation 1998a; Weekly Review 1998b). The renewed violence eventually claimed over 100 lives in the Laikipia and Nakuru districts, especially in the Njoro, Mau Narok and Molo areas. In one case, houses at both Mwariki and Baruti—two areas associated with the WWF’s project—were torched during a “looting orgy” as “the exodus of survivors continued” (Daily Nation 1998b, 2). That these areas were the center of the violence is not so incidental when one consults the results of the 1997 election. While most of the Rift Valley represents a stronghold for the KANU party, Laikipia West, Laikipia East, Naivasha, Nakuru Town, and Molo—all areas affected by the 1998 clashes—were all lost to opposition MPs in the Democratic party. KANU support was significantly lower in these areas than in other Rift Valley seats.

Violence and Environmental Conservation

The violence that erupted in the Rift Valley has had significant implications for conservation initiatives throughout the Lake Nakuru watershed. The state of insecurity prevailing within the area has directly influenced farmer decisions to implement conservation practices. Unless farmers expect to benefit directly from conservation initiatives, they have little or no incentive to undertake them. Not only will farmer insecurity affect the desire to adopt new initiatives, it also greatly increases the chance that past conservation activities will fall into disrepair. In addition, improvements made to land may be damaged or destroyed by the perpetrators of the violence. Not surprisingly, some farmers have fled the area, while others only tend to their farms periodically. Some have reluctantly sold their farms at prices below their market value, while others had their land illegally occupied by attackers (Republic of Kenya 1992).

Evidence suggests that recent deforestation in the Lake Nakuru watershed is linked to the tensions related to land and politics in the Rift Valley. Between 1994 and 1997, the WWF reported that as much as 150 km$^2$ of forest in both the Likia and the Eastern Mau forests had been de-gazzetted and distributed to landless people (WWF 1997). It seemed that the settlement had bypassed legal procedure, as neither local residents nor local government officials were aware of the action. The extent to which recent deforestation and subsequent settlement represent attempts to influence the ethnic composition of the area is unclear. However, farmers in the nearby area demonstrated a reluctance to express their concern about the loss of forest reserves, citing the perception that the people were from Moi’s ethnic group and that any action would meet either stiff opposition or apathy.

Several households in the Mau Narok and Naishi areas expressed alarm over these clashes. Some had been forced to temporarily abandon their farms to seek refuge because of threats towards them. In fact, during the period of fieldwork for this article, several people were murdered, one of them in Naishi. The ability of the WWF to either comment or act upon threats to the lives and property of those with whom it works is problematic, given its position as an invited nongovernmental organization (NGO) in Kenya. The WWF recognizes these problems, but it has been forced to become an involuntary observer of the clashes. While political instability and the reluctance of the state to uphold rights to private property are allowed to continue, the ability of farmers to engage in long-term conservation practices remains severely restricted.

**Conclusion:** The Disconnected Scales of Conservation

As currently implemented, spatially oriented approaches to conservation tend to restrict the scope of nature-society interactions to highly circumscribed areas. We argue that the adoption of conservation activities is shown to be the result of a multitude of environmental, social, and political considerations that often
transcend project-delimited conservation spaces. This case study of the LNCDP shows that the WWF’s approach to environmental conservation is undermined by important political geographic dynamics taking place at the national and regional levels that have transformed its conservation territory—the watershed—into a highly politicized environment. One cannot separate land and resource use in the Lake Nakuru area without reference to the politically motivated violence that has repeatedly swept through the Rift Valley. We argue that the high state of insecurity faced by the majority of rural (Kikuyu) households in the Lake Nakuru area severely limits their participation in WWF conservation programs.

This case study suggests that the current management strategy of “one watershed, one approach” is inadequate to address the historical and sociospatial relationships specific to this area. One might ask whether the WWF’s approach would be any more successful outside of the conflict zone or at a time of comparative peace. Indeed, the fact that conflict undermines the ability of farmers to undertake conservation techniques is not surprising. The point we wish to make is that political-economic processes—whether they take the form of politically motivated violence, low commodity prices on world markets, or structural adjustment policies that deepen rural poverty—can and will influence how natural resources are managed (Bryant and Baily 1997; Mortimore 1998; Bassett 2001). In short, an NGO’s ability to implement conservation programs is greatly restricted by the government’s weak ability to control basic livelihood issues. In the case of Kenya, the WWF’s conservation work is hampered by the government’s weak commitment to constitutional law and its unwillingness to uphold the rights to private property.

By drawing attention to the connections between conservation activities and historical and political forces at multiple scales, our goal is to underscore both the conceptual limitations and the practical problems of confining conservation-with-development projects to single scales like the watershed. Our case study suggests that the boundaries of conservation areas are highly permeable to extralocal political processes. The lesson of the Lake Nakuru Conservation and Development Project is that spaces of development are not mere containers of land and resource use. They are arenas in which natural resource management is shaped by the interplay of social, political, and ecological dynamics at multiple scales.

**Literature Cited**


ROBERT DANIELS is a Ph.D. student at the University of Illinois, Urbana-Champaign, IL 61801. E-mail: geog101@hotmail.com. His doctoral research utilizes a political ecology perspective to address issues of land use, land rights, environmental history, and natural-resource management in the United States.

THOMAS J. BASSETT is an Associate Professor of Geography at the University of Illinois, Urbana-Champaign, IL 61801. E-mail: bassettt@uiuc.edu. He has conducted longitudinal research on agricultural intensification, Fulbe pastoralism, and land-rights systems in northern Côte d’Ivoire since 1981.