"Re-claiming" Land in The Gambia: Gendered Property Rights and Environmental Intervention

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By definition, land reclamation programs render marginally productive land resources more valuable to a broader set of users. The question of who gets access to rejuvenated lands is often highly political, however. Environmental managers "reclaim" land resources by rehabilitating them, but they simultaneously reanimate struggles over property rights in the process, allowing specific groups of resource users to literally and figuratively "re-claim" the land. Relying on data gathered during fourteen months of field work between 1989 and 1995, this paper analyzes the openings created by environmental policy reforms introduced over the past two decades along The Gambia River Basin, and the tactics and strategies rural Gambians have developed to manipulate these policies for personal gain. Specifically, I demonstrate how women market gardeners pressed "secondary" usufruct rights to great advantage to ease the economic impact of persistent drought conditions for the better part of a decade, only to have male lineage heads and community leaders "re-claim" the resources in question through donor-generated agroforestry and soil and water management projects. This is thus a study of the responses different community groups have made to a shifting international development agenda centered on environmental goals. It is simultaneously an analysis of those environmental policies and practices and their impact on gendered patterns of resource access and control within a set of critical rural livelihood systems. Key Words: land reclamation, gender, agroforestry, political ecology, resource tenure, environmental intervention.

weeping territorial claims in the name of natural resource conservation have a long history in Africa. Colonial powers intervened repeatedly throughout the first half of this century to force soil, water, forest, and wildlife conservation techniques on rural cultivators and pastoralists (Beinart 1984; Peters 1987; Anderson and Grove 1987; Bonner 1993; Bassett 1993; Neumann 1992, 1995b; Leach 1994; Hodgson 1995). These initiatives, carried out during the early stages of capitalist development on the continent, were frequently premised on changing natural resource tenure systems. In some areas, resident groups were pushed off the land altogether to make way for parks and protected areas or settler farms. In others, colonial administrators allowed Africans to remain on the land, but encouraged them to privatize resources in the hopes of encouraging deeper market incursions. At virtually every turn, however, nature-society relations were fundamentally reorganized to accommodate conservation and development objectives.

Since the drought and famine years of the 1970s and early 1980s, managers of the UN, the World Bank, and the wealthy bilateral donor agencies have viewed Africa's environmental problems with increasing alarm (Watts 1989). On the one hand, the perceived crisis of food production in many parts of the continent, epitomized by the Ethiopian famine of 1982–1986, reinforced donor impressions that African production systems were fragile and in need of repair. On the other hand, the broad and deep-seated economic problems of many African states were a reflection of the failure of past development efforts in the region. In 1986, with the Ethiopian famine as a backdrop, the UN Secretary-General was forced to acknowledge that Africa was "the only continent where standards of living ha[d] declined in the past decade. . . " (UN 1986, 33).

In order to come to grips with this "failure," and to address problems of environmental degradation, donor agencies: (1) sharply increased capital investment directed at securing "sustained" economic and ecological change in the region, and (2) implemented a range of some-

times contradictory approaches to environmental rehabilitation. Between 1987 and 1993, for example, the U.S. Agency for International Development (USAID) committed more than \$350 million in support of environmental programs in Africa (USAID 1994). Over roughly the same period (1990-1994), the World Bank collaborated on environmental projects in eighteen African countries totaling more than \$1 billion (Greve et al. 1995). At the same time, private and nongovernmental interests greatly extended their involvement in natural resource management in the region. As of 1990, the major nongovernmental organization (NGO) engaged in environmental programs in Africa, the World Wildlife Fund, had an annual budget of \$15 million for project activity on the continent (Adams and McShane 1992). Simultaneously, private business concerns became deeply involved in nature tourism. In a flurry of financial activity between 1990 and 1993, development banks and private donors committed more than \$80 million to tourist infrastructure development projects in Tanzania alone (Neumann 1995a). These figures provide only a partial picture of recent donor and commercial activity, vet they make it abundantly clear that environmental initiatives have become one of the major forms of foreign intervention in contemporary African affairs.

The extensive investments donors have made in Natural Resource Management (NRM) programs have given rise to a range of new development paradigms and practices, not all of which have been mutually compatible or consistent. This paper analyzes how local groups along The Gambian River Basin have absorbed and inter-

preted the policy shifts introduced in conjunction with environmental initiatives over the past two decades. It explores how competing groups of potential project beneficiaries in rural Gambian communities have vied among themselves to exploit the inconsistencies of the various NRM projects at the local level, and how they have used these opportunities to open up new avenues for the accumulation of wealth, power, and prestige. I draw particular attention to initiatives directed at "land reclamation." By definition, the renewal of soil quality through reclamation programs renders marginally productive land resources more valuable to a broader set of users. This can open up the existing land-tenure norms for renegotiation as interested parties seek to reposition themselves with respect to particular resources. Viewed from this perspective, "reclamation" has a double meaning: environmental managers "reclaim" land resources by rehabilitating them, but in so doing, they often erase old property rights and advance new ones—they literally and figuratively "re-claim" the land.

In order to explore the implications of such shifts, I detail attempts by women horticulturalists in The Gambia to occupy, convert, and maintain control over low-lying land in the face of increasing local and international pressures favoring soil and water "reclamation." I document how, in the early 1980s, groups of women gardeners along The Gambia's North Bank (Figure 1) successfully parlayed the financial support of developers into usufruct rights to valuable land and groundwater reserves. For the better part of a decade, these gardeners deepened their involvement in market gardening and gradually ex-

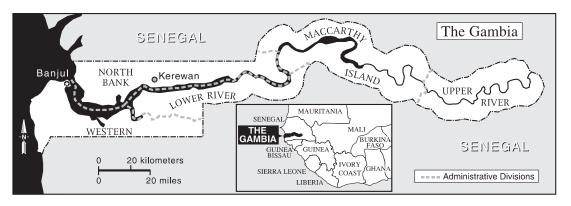


Figure 1. The Gambia. A classic creation of colonial powers, The Gambia stands today as testimony to British efforts to block consolidation of French West Africa during the colonial period. Completely surrounded by the former French colony of Senegal, the country is less than 60 km wide at its widest. The River Gambia itself is saline and tidal for the first 100 km of its length.

panded their land use rights, only to have male lineage heads "re-claim" the land resources in question through NRM-related agroforestry and soil and water management projects. In sum, this is a study of the different responses of community groups to a shifting international development agenda. The analysis lays bare both the structural constraints developers have introduced and the tactics and strategies rural Gambians have developed to manipulate these structures for personal gain.

The paper consists of five sections. In the first, I briefly describe three successive waves of development intervention growing out of two decades of political ecological change in the Mandinkaspeaking community of Kerewan. In the second, I outline and review the basic principles of land tenure on the western half of the North Bank, and present results from a 1991 survey of the transmission histories of 274 garden plots.² These data demonstrate the gradual erosion of male landholding privileges during a boom in women's market gardening. The third section details the backlash that took place in the mid-1980s as male landholders, using the openings created by government and NGO-sponsored agroforestry projects, reclaimed some of the land they had "lost" to gardens and regained the initiative in controlling developmental largesse generated in the name of environmental stabilization. The fourth section describes soil and water reclamation efforts focused on salt-damaged rice fields, the basis of most staple food production in the area. The construction of antisalinity dikes restored land that had been lost to rice production for several decades because of salt intrusion and temporarily increased food production. But the projects simultaneously threatened to further undermine the garden boom when senior male community members insisted that the rice crop be favored over vegetable production. In the concluding section, I inspect the seemingly well-intentioned arguments in favor of each of these land reclamation programs and show how they break down under careful political ecological scrutiny.

Three Waves of Land Reclamation

In the early 1980s, after a decade dominated by an average 25 percent shortfall in annual rainfall accumulations, rural families along The Gambia's North Bank found themselves in dire circumstances. Rice production levels were in steep decline (Kinteh 1990), imports of this principal staple were growing rapidly, and its consumer price was up sharply (Jabara 1990). The official price for imported rice doubled between 1980–1981 and 1984–1985, and more than doubled again in the four years following implementation of the national Economic Recovery Program (ERP) in 1985–1986 (Jabara 1990). The price for groundnuts (peanuts), the principal export crop produced in The Gambia River Basin, was extremely low due to negative terms of trade on the international vegetable oils market (Jabara 1990; von Braun et al. 1990). At the same time, the effects of "recovery" via the ERP dramatically altered production costs for groundnut growers. Between 1984 and 1987, in real terms, fertilizer prices increased 11 percent, groundnut seed nearly doubled in cost, and the price of hired labor and draft animals rose by almost a third (John 1990; Puetz and von Braun 1990). The net effect of these changes was severe: a sharp decline in fertilizer usage, lower earnings for groundnut producers (primarily male farmers), and a general withdrawal of labor from groundnut production, which was the source of as much as 90 percent of the country's foreign exchange throughout the period.

On the North Bank, these changes set the stage for the emergence of three competing development initiatives, one involving small-scale market gardens managed by women, a second centered on fruit tree orchards largely controlled by men, and a third emphasizing rice plots managed by women for joint family consumption purposes. The first of these to emerge in the North Bank research site, the community of Kerewan, was women's horticulture. The slumping groundnut economy in the 1980s meant that male farmers encountered increasing difficulty in meeting their customary household budget obligations. The costs of supplemental grain, clothing, and various religious and social ceremonies, once primarily the responsibility of male heads of household, were consequently shifted, by default (and, at times, by design—see Schroeder 1996a), to women. To meet the challenge of supporting themselves and their dependents, women began converting low-lying land rendered marginally productive by drought conditions into lucrative, hand-irrigated vegetable gardens. Aided by small grants from agencies interested in "Women in Development" (WID) issues (Schroeder 1996a), and by the efforts of the state, NGOs, and voluntary agencies to diversify the rural economy in

response to drought, a full-scale, albeit geographically uneven, market-garden boom was soon underway. In the Kerewan area alone, some 15–20 projects were funded over the course of two decades beginning in the mid-1970s, while on the national scale, women's garden groups in several hundred communities benefited from donor support.

The second wave of development initiatives targeting low-lying land and water resources on the North Bank came quickly on the heels of the first. Just as women before them had capitalized on funding sources generated in response to the UN's declaration of the WID decade, male landholders took advantage of a renewed developmental emphasis on environmental stabilization. Lineage heads and elders who controlled low-lying land were urged by Forestry Department extension agents, NGOs, missionary groups, and large-scale donors such as USAID and the European Community (EC), to establish orchards and woodlots in order to reverse deforestation and reap the economic benefits of fast-growing exotic fruit and firewood species. This approach, premised as it was on "natural" species succession and a related shift in focus from understory to tree crop, was doubly endowed with "green goodness" (Rocheleau and Ross 1995; Schroeder and Suryanata 1996), insofar as it was deemed an environmentally sustainable practice that also generated much needed cash revenues. Largely obscured from this picture, however, was the fact that projects were either superimposed on top of women's existing garden sites or established on new sites where women were only granted access to land if they watered landholders' trees and vacated their plots when the trees matured. Thus the projects took maximum advantage of the newly productive landscapes created by the garden boom. The "natural" succession of species produced political shifts in labor claims and property rights, privileging the older claims of male landholders over the more recent and less secure usufruct claims of women gardeners. In effect, they allowed male landholders to resume control over territory they once controlled more exclusively (see further discussion in Schroeder 1993, 1995).

A third set of claims to garden lands were morally derived, insofar as they sought to impose a higher "communal" good—the securing of food stocks—over and above the individual and collective needs of gardeners. A series of soil and water management projects were implemented with the aim of reversing the degrading effects of salt intrusion into rice fields through the construction of freshwater retention dikes and the liming of plots. The key actors in these projects included the Soil and Water Management Unit (SWMU), a branch of the Gambian Department of Agriculture created and funded in large part by grants from USAID, and the NGO, Save the Children, which contracted the SWMU to construct the dikes in 1994. Despite being hampered by maintenance problems, these projects were nonetheless successful in improving rice yields over the short run. They received praise from men and women alike in the garden districts and gave rise to claims by development agencies that food self-sufficiency had been restored in several communities. The catch for women, who do virtually all the labor on the rice crop and who provided most of the labor during the intensive phase of dike construction, was the revitalization of a discourse that stressed the central importance of rice over all other forms of production, including their gardens.

The Nature of Usufruct: Ransoming Garden Land

The three sets of competing claims to low-lying land resources in the Mandinka-speaking community of Kerewan grew out of a tenure system that until only recently centered on rice and groundnut/millet cultivation. The system existing prior to the garden boom (Table 1) involved a single intensive period of cultivation during the rainy season, and preserved for men most of the important opportunities for earning cash from agriculture. The tenure domains were fairly

Table 1. Division of Labor before the Garden Boom, North Bank, The Gambia, ca. 1970

Season	Cash crops	Food crops	Cash crops	Food crops
	grown by men	grown by men	grown by women	grown by women
Rainy	Groundnuts	Millet/sorghum	_	Rice
Dry	—	—		Vegetables

sharply divided in spatial terms. Upland areas cultivated by men in a groundnut/millet rotation were known locally as *boraa banko*, or "land of the beard." So named, according to one informant, because it is "something a woman will never have," *boraa banko* was inherited along patrilineal lines. By contrast, most of the swampland lying along the main river and its tributaries was controlled by women rice growers (Figure 2).³ As such, it fell under the classification of *kono banko*, "land of the [pregnant] belly," and was transferred directly from mother to daughter.

Typically, a narrow band of low-lying land formed a boundary between these two zones (Figure 2). Technically *boraa banko* in most cases, the soils were at once too heavy for groundnut production and too dry to support a rice crop, especially in drought years. It was in this zone that women requested parcels of land for gardening

purposes from the small group of male elders who controlled their respective lineages (Figure 3).4 Before the 1970s, production on these plots rarely exceeded local demand. Most women worked single plots that were individually fenced. Outside assistance in obtaining tools, fences, and wells was minimal. Seed suppliers were not yet operating on a significant scale, and petty commodity sales were largely confined to tomatoes, chili peppers, and onions. The market season, accordingly, stretched only a few weeks, and outlets on the North Bank were all but nonexistent. Most produce was sold directly to end-users in the nearby villages by women who transported their fresh vegetables by horse or donkey cart and then toted them door-to-door on their heads (a practice known as kankulaaroo).

Throughout the late 1970s and early 1980s, however, economic and ecological pressures com-

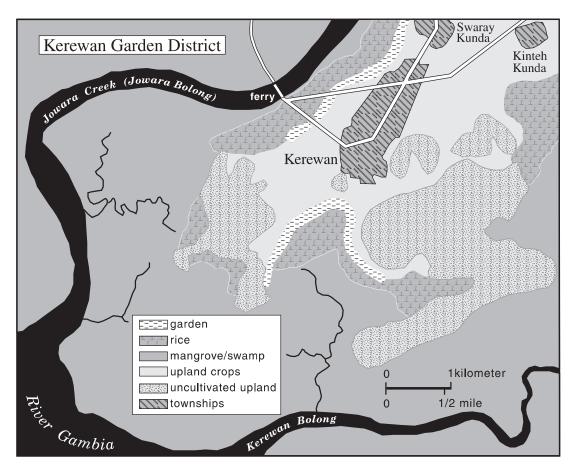


Figure 2. Kerewan garden district. Land-use patterns in Mandinka-speaking areas of the North Bank maintain a fairly sharp distinction between male and female production domains. Women farmers exploit the lowlands for rice cultivation and gardening purposes, and men grow peanuts and coarse grains on the uplands.



Figure 3. Garden usufruct. Women market gardeners typically cultivate their plots on the basis of temporary usufruct grants acquired from male landholders.

pelled women to intensify efforts to reclaim marginal land for gardening purposes, and the number of women engaged in commercial production rose precipitously. Data from Kerewan illustrate the trend: the pool of women gardeners grew from 30 selected to take part in a pilot onion project in the mid-1970s to more than 400 registered during an expansion project in 1984, to some 540 recorded in my 1991 census. The arrival of consignments of tools and construction materials for fencing and wells in this community in 1978 initiated an expansion period that saw the area under cultivation more than triple in size, growing from 5.0 ha to 16.2 ha in ten years. Between 1987 and 1995, a second wave of enclosures nearly doubled that area again. Meanwhile, more than a dozen separate projects were funded by international NGOs and voluntary agencies. setting in place thousands of meters of fence line and dozens of irrigation wells. As a result, aggregate community returns from vegetable sales reached roughly \$80,000, this in an area where per capita annual income was in the range of \$250 (Figure 4).⁵

In sum, between 1973 and 1991, the Kerewan garden district developed into one of the most intensive vegetable producing enclaves in the country. In at least two key respects, the garden boom recentered the Mandinka cropping system

around vegetable production, as many women began working in their gardens year round, including during the height of the rice growing season, and as vegetable sales began yielding more cash than peanuts (the main source of income for rural men) in nearly half of all households.

Virtually all of the eleven communal garden sites analyzed in this paper operated on the basis of usufruct land grants issued by senior male members of founding lineages in garden communities. Although the gardens, which ranged in size from a fraction of a hectare to nearly 5 ha were often sited on boraa banko land named after male landholders, the degree of authority these men retained with respect to land-use practices in the gardens eroded markedly following the onset of the boom. Despite nominal male oversight, the planning and supervision of the day-to-day operations were gradually assumed by leaders of the women's groups who worked the land. It was they who organized regular maintenance functions such as fence repairs and seasonal land-clearing operations, and they who levied fines against group members for offenses such as failing to prevent livestock from entering the gardens. The full extent of the control women asserted over their gardens on both individual and collective bases must, however, be assessed with reference to three additional aspects of garden tenure:



Figure 4. Market-garden surplus. The market for fresh vegetables has grown so large that women's cash crop incomes have outstripped their husbands' in many areas.

rights of plot transmission, rights of development, and rights to tree planting.

Whereas the fence perimeters were managed communally as described above, most women worked their own land allotments (avg. 300 m²⁾ individually, or with a small group of female relatives. Two key questions, then, in understanding the tenure dynamics of the garden districts, are how each woman came by her plot rights originally, and whether she was free to transfer those rights to her daughter or other female relatives. In 1991, I compiled the history of tenure change

in 274 plots located in 11 communal garden perimeters, including the origins of usufruct claims (Table 2) and all transfers of cultivation rights to subsequent users. I also interviewed the landholder on each site to determine what conditions, if any, were placed on access to plots. The results of these surveys indicate that the pattern of plot acquisition changed considerably over the course of the garden boom, and that many of the plots were acquired in direct contravention of conditions stipulated by landholders. Findings show that small groups of gardeners were granted

Table 2. Source of Women Gardeners' Land-Use Rights, Kerewan, The Gambia, 1991

Category	No. of Plots	Percent
Preexisting claims to rice land	5	2
Gifts from landholding male relatives	6	2
Temporary loans from other gardeners	17	6
Claim payments paid to landholders	128	47
Unauthorized gifts from female relatives	64	23
Plots created through site expansion	54	20
Total	274	100

Source: field survey by author, 1991.

use rights to plots by virtue of preexisting claims to rice land,⁶ as gifts from landholders who were related by birth or marriage, or as temporary loans from other gardeners. The histories of the vast majority of plots, however, mark more substantive shifts in the nature of landholding and usufruct claims in the garden districts. Three types of acquisition—via claim payment, unauthorized gifts from female relatives, or the exploitation of openings created when existing gardens expanded—bear closer scrutiny.

The most common means of access to land was via a one-time cash payment to landholders. The local term, kumakaalu (pl.; sing., kumakaa), once meant the ransom payments made to free family members stolen or captured into slavery or bail payments to free someone from jail.8 These payments were commonly assessed by landholders early in the garden boom when many of the area's horticultural perimeters were founded. The nature of the tenure hold granted under kumakaaroo (the practice of granting kumakaalu) was disputed by my informants. Most landholders saw the transfer of use rights to women under kumakaaroo as a temporary arrangement. As one landholder put it: "When he asked whether I sold the [garden] land to [the women]... I replied that I lent the land to the people to work" (interview; Kerewan, March 1991). Landholders maintained that the money collected was used to help pay for fence repairs or to defray other expenses incidental to the garden's upkeep. By contrast, gardeners claimed that funds paid to join garden groups were routinely diverted to the landholder's personal use, and that kumakaalu thus constituted lease payments. In the words of one woman: "As for garden land, we hire that from the landholder" (interview; Kerewan, April 1991). This interpretive dispute notwithstanding, it is clear that land transactions in the early stage of the garden boom were widely monetized, and that kumakaa payments constituted a form of disguised rent as land was "ransomed" for gardening purposes.

The *kumakaaroo* claim system included the proviso that each time a plot was vacated due to the death, retirement, or relocation (due to marital-status change) of its original occupant, it had to be returned to the landholder before reallocation. This condition was set in order to give the landholder a chance to exact a new *kumakaa* payment from any prospective gardener before granting her leave to put the plot into production. In addition to the financial windfall, this resumption of plot control was meant to symbolically

underscore the landholder's residual land claims. This stipulation notwithstanding, the detailed plot histories gathered for North Bank gardens in 1991 reveal that, in practice, women often flouted this convention. In the survey, each plot holder was asked to indicate whether she was an "original" plot holder or whether her plot had changed hands since the site's enclosure. She was then asked whether she had been required to pay a kumakaa before beginning cultivation. Results were sorted by location and compared with the tenure conditions landholders claimed to be enforcing in each site. Of the 274 plots in the survey, 160 remained in the hands of their original claimants. Of the remaining 114 plots changing hands since the onset of the boom, only 33 reverted to the control of the landholder before being parceled out a second time, and only 27 of these were ultimately reallocated on the basis of a second kumakaa payment (six were awarded by landholders to family members free of charge). Thus, the vast majority of the plots changing hands (81 of 114 or 71 percent) were passed directly from one woman to another, without any form of direct compensation for the exchange of use rights.

This group of plots needs to be differentiated further in order to get a clear picture of the property dynamics in play. First, many plots (17 of 81) were allocated on a temporary basis. Women gardeners who were pregnant, caring for a newborn, or simply too ill to work occasionally loaned plots to relatives or close friends. In most cases these were seasonal loans, but they could also be longer-term, in which case the likelihood that they would eventually result in full transfers was high. A second group of plots (25 of 81) changed hands in the one large garden site in my study where such transactions were not proscribed. This garden differed from other sites in that landholders ceded all forms of control to the women's group leaders shortly after the site was founded. Thus the whole garden—a 3.5 ha site, or more than 10 percent of the total enclosed land area under garden production in Kerewan—was removed from male control. Finally, and perhaps most telling, is the fact that 39 permanent transfers, or roughly one-third of all transfers of plots in the research sample between 1973 and 1991 (39 of 114), took place surreptitiously, i.e., without being explicitly sanctioned by the landholder in question.

That surreptitious transfers of plot rights could take place in such a small community (pop. est. 2,500) might seem unlikely but for two factors.

First, women's groups so thoroughly dominated gardens in the 1980s that the space enclosed within the fences became a kind of terra incognita for men. Even putative landholders were rarely seen within the fence perimeters because of the discomfort they felt in the midst of such a clearly defined women's space. Thus, the determination of who was actually cultivating a given plot was sometimes difficult to make. The situation was made more complex by the fact that as many as a third of the work units in the sample revolved around mother-daughter tandems (Figure 5). Younger women often assisted their mothers with their gardens, and were thus in a position to gradually assume practical control over plots over the course of several years. Use rights were accordingly established on a de facto basis, kumakaa "ransom" payments were not required, and challenges to the younger women's claims were highly unlikely. In sum, land that was once clearly malecontrolled (boraa banko land) had been taken over by female vegetable growers, and was being managed as though it were part of a kono banko legacy, a step that women felt was amply justified:

A woman has the right to give her garden land to her daughter.... Suppose I spent a lot on my garden, and after growing old, I don't have the energy to continue the work. Then in all fairness my daughter should continue to benefit from what I spent. That is no problem, since I toiled for it, and I also spent money on it, my daughter can have it. That is no problem. (Interview; Kerewan, April, 1991)

The final means of establishing access to garden land involved openings created when an existing garden site was expanded. For several years in the 1980s, garden projects dominated the activities of NGOs and voluntary agencies working in rural Gambia. The generally industrious attitude of women's groups, coupled with the prospects of simultaneously addressing goals of income generation and nutritional enhancement, made gardens attractive investment targets. Not only did the gardens quickly yield profits, they also helped NGOs address deep-seated social inequities. They were therefore prime targets for funds generated under WID initiatives. The intense focus on horticulture during this period meant that women's groups were often in a position to leverage successive grants to support their horticultural efforts. Whenever a new grant resulted in expanded fence perimeters, women already active in the gardens awarded themselves "expansion plots" (lafaa rangolu),9 extending



Figure 5. Mother-daughter work tandem. The social organization of market-garden production into mother-daughter work units has facilitated inter-generational land transfers. These arrangements have allowed gardeners to avoid lease payments, thereby eroding male landholding privilege.

their use rights without paying additional *ku-makaalu*. ¹⁰ Such expansion came at the expense of *boraa banko* land use and accounted for 20 percent (54 of 274) of all plots in the sample.

The lack of opposition by Kerewan landholders to such arrangements marked the fact that the community's "moral economy" (cf. Scott 1976)—the fluctuating sentiments of community members regarding notions of communal benefit and well-being—had shifted in favor of gardening. After initial resistance, most men in the garden districts had "seen the benefit" [nafaa] of gardens in the form of cash gifts and other financial support from their wives, and became firm supporters of the garden enclaves (Schroeder 1996a). Moreover, the offer of material assistance

by NGOs and expatriate volunteers helped shore up the gardeners' claims. In theory, land-holders might conceivably have refused individual requests from women to expand their plots, but the stakes for the community as a whole were high. Refusal to extend the women's usufruct rights would have meant denying gardeners access to additional donor assistance. Thus, for the most part, the few relatively senior men who controlled low-lying land were initially hesitant to block expansion, despite the loss of power and prestige accompanying the loss of territorial control.

To sum up, the practice of kumakaaroo, which was nearly universal in Kerewan in the early stages of the garden boom, was only upheld in 24 percent (27 of 114) of the land transfers that occurred during the 18 years covered by my survev. More than 70 percent (81 of 114) of the cases of plot transmissions had been negotiated directly between women, often without the knowledge of landholders. At the same time, rights to a fifth of all plots under cultivation were effectively leveraged through the intercession of NGOs promoting the expansion of existing garden projects. This was a striking loss of privilege for men who were accustomed to controlling the distribution of benefits generated by development interventions and who now found themselves virtually frozen out of development altogether. Some sort of backlash was virtually inevitable.

Branching into Old Territory: Agroforestry Reclamation

The critical break point surrounding the expansion of usufruct rights came in 1984, when a local landholder challenged the efforts of Gambian extension agents and an expatriate volunteer to secure funds to redevelop a garden site on boraa banko land he controlled. In spite of, or perhaps because of, a new alliance between state functionaries, foreign donors, and sympathetic male villagers in favor of gardening, the landholder blocked expansion. Subsequently, three female garden leaders who tried to press ahead with redevelopment plans were detained by police. This action prompted a heated public demonstration by hundreds of gardeners, and resulted in an emotionally charged court case that received attention from the highest levels of the government (Schroeder 1993; Schroeder and Watts 1991). The significance of these events for

my present purposes lies in what they tell us about the changing character of landholding privilege and usufruct rights during the garden boom.

Over the course of this controversial year, the landholder, a senior member of one of the town's founding lineages, was forced to claim and defend several specific rights to land he purportedly controlled under boraa banko conventions. By constantly shifting tactics, he was able to probe the pro-garden alliance, testing the resolve of the various actors to see whether he might forge alternative ties that would allow him to reassert control over the newly valuable land resources. Several of the claims he raised—e.g., that he should have decision-making authority over the location of wells and fences and the allocation and withdrawal of plot-use rights—were consistent with boraa banko rights practiced prior to the garden boom (cf. Mackenzie 1994). That he was forced to defend them at all is indicative of the extent to which his landholding status had changed since the early stage of the garden boom. Loss of practical control over production decisions was not the only issue raised in the landholder's complaint, however. Other claims, such as the right to sign quasi-legal land use agreements with NGOs and state agencies on behalf of the gardening group, the right to store construction materials intended for use in fence repairs and well-digging in his own family compound, and the ability to personally award well-digging subcontracts, reflected fears that his ability to exact real and disguised rent payments from the gardens would be greatly diminished. If he did not resist the gardeners' efforts to establish direct ties with the NGO funding community, his own ability to convert lineage rights—best understood perhaps as a kind of stewardship responsibility held on behalf of his kin-into the equivalent of private property rights, would be threatened. His expectation that he should be free to control development largesse, extract rent from developers and garden groups, and channel benefits to family members and friends was born of several decades of development interventions that operated in precisely that fashion (Carney and Watts 1991). When extension agents in the Department of Community Development and the expatriate volunteer coordinating USAID support for the project refused to release funds and construction materials to him directly, and proscribed many of the rent-taking mechanisms he had previously employed, the landholder balked, threatening violence and vowing to evict the gardeners

altogether (see Schroeder 1993, and Schroeder and Watts 1991 for further details).

The courtroom deliberations that temporarily settled the dispute eventually came to rest heavily on a set of claims that were not at issue when the dispute began—namely, the landholder's contention that women in his garden were planting trees in their plots against his will. Tree-planting rights are widely acknowledged in the tenure literature to lie outside the bounds of "secondary" usufruct rights such as those pertaining in Gambian garden perimeters (Freudenberger 1994; Fortmann and Bruce 1988; Raintree 1987). Landholders typically refuse to grant tree planting rights to "secondary" tenure holders, because they fear the longevity of trees will negate the possibility of alternative land uses. Part of the sensitivity of the landholder in the Kerewan case stemmed from the fact that, in Mandinka areas, customary law clearly maintains the partibility of tree and landholding rights (Osborn 1989).11 While most tree planting is done by individuals on land that they control, this does not preclude entirely the prospect of planting elsewhere.

This principle was clearly illustrated in the new market gardens where, despite boraa banko constraints, 83 percent of the women in my research sample had incorporated trees into their crop mix¹² (Figure 6). Until the 1984 court case, such unilateral extension of usufruct rights went largely unchallenged in Kerewan; women were unimpeded from developing complex agroforestry practices geared toward maximizing returns from small plots and extending the market season for fresh garden produce. In the 1984 court case, however, when the landholder found himself stymied on other fronts, he sought to shore up his eroded land claims by asserting his right to block "unauthorized" tree planting, and the court upheld his case. Almost immediately, the landholder proceeded to uproot dozens of trees women had planted on his site. Moreover, he enlisted the technical support of the Forestry Department in planting several dozen trees on the site himself. This effort set a precedent of sorts for a practice that landholders in many communities in The Gambia would use effectively over the next several years to reclaim the initiative in developing low-lying boraa banko land "lost" to garden projects (see Norton-Staal 1991; Carney 1992; Lawry 1988).

The small group of male landholders who intervened in gardens initially were primarily interested in appropriating subsidies that were either directly or indirectly generated by gardeners. Garden projects founded under the auspices of WID initiatives in the 1980s (Carney 1992; Barrett and Browne 1991) immensely increased the value of low-lying land through the addition of concrete wells and wire fences. At the same time, individual gardeners made extensive soil improvements and constructed thousands of unlined "local" wells in their garden sites. As Thoma notes: "the attraction of free wells, subsidized fencing, subsidized seedlings and the like [was] virtually too irresistible not to take advantage of, even if [male] farmers already [knew] how to plant and grow trees and women already propagate[d] fruit trees on their own" (Thoma 1989: 41). Having invested hundreds of hours of personal labor in extensive soil improvements and, in some cases, having planted perennial tree crops, gardeners had also become more "rooted" in place. This allowed landholders to "capture" their labor to water trees, manure plots, guard against livestock incursions, repair fences, and maintain wells, all to the *end* benefit of the overlying tree crop.

The production conditions available in many garden sites were also seen as ideal from the standpoint of agroforestry extension agents

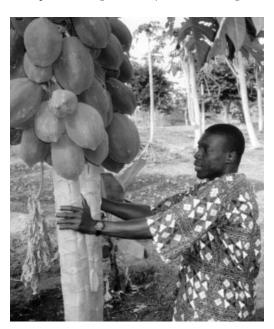


Figure 6. Women's tree planting. Women market gardeners frequently incorporated papaya trees into their crop mix in order to vary the seasonality of garden incomes. This unilateral extension of usufruct rights was subsequently challenged by male landholders seeking to plant their own trees on garden sites.

(Figure 7). The Gambian Forestry Department was obviously interested in taking advantage of any opportunity to plant trees and see them protected against bush fire and grazing pressures from livestock. The Methodist Mission Agricultural Program, under the direction of an agricultural officer who was deeply invested in seeing treeplanting practices expand on the Sahel (see Mann 1990), mounted a vigorous program of well digging, tree nursery establishment, and seedling distribution across The Gambia. At the same time, NGOs such as Save the Children and Action Aid, and voluntary organizations like the Peace Corps and the British volunteer group, Voluntary Service Overseas (VSO), were in the midst of a significant shift in emphasis away from the gender equity programs of the early 1980s and toward environmental rehabilitation projects.

The reasons for these policy changes are not hard to trace. The specter of the Sahelian droughts of the 1970s continued to haunt the region, and most of the small development agencies working in The Gambia remained generally sympathetic toward the need to address environmental problems. Moreover, many implementing

agencies derived substantial portions of their operating budgets from agencies that had thrown their full financial weight behind environmental objectives, such as USAID and the UN programs. With so much money flowing into the environmental sector, small-scale NGOs and volunteer groups came under a great deal of pressure to demonstrate success in environmental management in order to preserve some sense of institutional legitimacy in their donors' eyes (Schroeder 1995).

With the infrastructure supporting garden sites already in place, and a boom in horticulture well underway, forestry extension agents very quickly made the garden sector a key site of reforestation activity. Two different spatial strategies facilitated this approach. The first involved reasserting control over existing garden spaces. Extension agents encouraged landholders to plant trees directly within garden plots in order to take advantage of the water that women delivered to their vegetable crops, a strategy that was entirely deliberate. As one developer put it in a recent interview, "Women are reportedly not good at watering the trees unless they are located directly in the garden



Figure 7. Agroforestry extension effort. Beginning in the mid-1980s, NGOs and voluntary agencies became increasingly involved in environmental rehabilitation efforts directed at reforestation and soil and water management. Hundreds of expatriate volunteers and NGO personnel have been brought to The Gambia to help promote these objectives in rural areas.

and receive water indirectly when the vegetables are watered" (quoted in Norton-Staal 1991; see

further discussion in Schroeder 1995) (Figure 8). The second spatial strategy employed by forestry

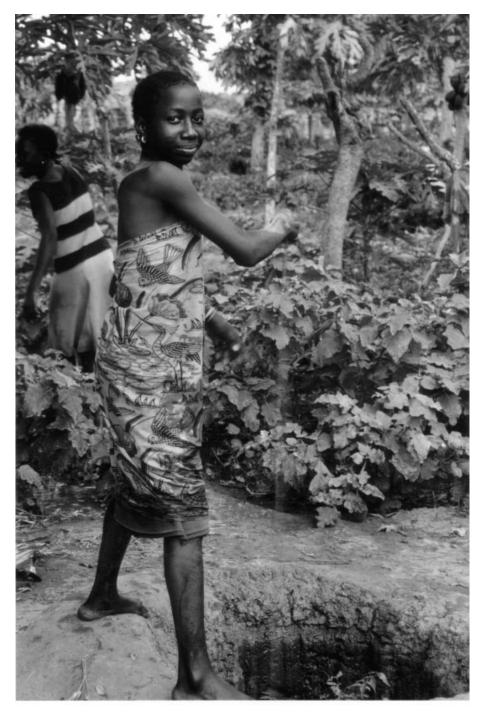


Figure 8. Hand irrigation from shallow wells. Access to women's labor has remained the central component of a succession of strategies developers have adopted to rehabilitate degraded natural resources along The Gambia River Basin. One development agency representative considered women's labor to be The Gambia's "most precious and vital local resource."

extension agents entailed founding new sites where gardeners would be given temporary access and their labor could be used to convert unused spaces into orchards. While the terms of access in such sites did not dispossess gardeners of previously held use rights outright, they did constitute a reassertion of landholding privilege. Most significantly, women gardeners who had successfully defended a fairly vulnerable position for more than a decade were no longer able to determine unilaterally the disposition of development aid directed at reclaiming low-lying land resources.

My own discussions with landholders opening up new orchards revealed that, in the dozen fence perimeters established in Kerewan between 1987 and 1995, kumakaa payments were eschewed altogether. In most cases, access to land was only granted under terms that required women to guarantee that they would: (1) water the tree crop as long as they stayed in the perimeter, and (2) leave their plots as soon as the trees reached maturity. With a wary eye trained on the prospect of women mounting competing claims to land or trees on moral economic grounds, the male landholders either provided fences and wells on their own account or built them with the assistance of donors interested in promoting agroforestry, many of whom had sponsored garden projects on the same sites several years earlier. In one garden destined for conversion into an orchard, a contract was signed between the landholder, the donor agency, and a garden group stipulating a five-year limit to the women's vegetable growing rights. In another, a project manager proposed a rule as a hedge against tenure erosion that would preclude anyone other than project participants and "one small daughter per grower" from working the plot. In a third site, garden gates were padlocked in recognition of full conversion to orchard production.

Would-be orchard owners have almost invariably chosen mangoes, which are relatively tall trees with broad shade canopies, as the primary species to be planted in their orchards (Schroeder 1993). Consequently, the tightening of tenure restrictions has had direct and dire consequences for vegetable growers. When gardeners controlled decisions over species selection, the location of trees, and rights of trimming or removal, they had less difficulty managing interspecies competition between vegetables and trees. As soon as landholders reclaimed their rights to tree cropping and land development, however,

these prerogatives were lost, and the requirements of the vegetable crop became a secondary consideration.

It is also important to understand that dispossession of women's garden land for orchard purposes often took place without direct confrontation. An interview conducted in 1995 revealed just how such dispossession occurred. The landholder in question established his orchard site in 1992 with the assistance of free tree seedlings and extension advice provided by the Forestry Department. Women were invited to work gardens on the site, but no kumakaa payments were solicited and none were paid. Moreover, no assistance was required of the women for site maintenance or protection. Since the landholder spent his days at the garden to ensure that no livestock damaged his trees, the only obligation gardeners had in exchange for use rights was to continue irrigating the landholders' trees as they watered their vegetable plots. After the landholder proudly provided a tour of his plot, I asked him what women gardeners sharing his land would do when his trees matured and a shade canopy closed over the site; would be drive (Mandinka: bai) the women out of the site, or would he let them stay on? His response was most telling: "I won't drive them. The trees will drive them. The trees. If not for the trees, they could stay

The landholder's claim that a "natural" species succession was responsible for driving women off the land, while perhaps consistent with a worldview that does not draw sharp distinctions between "natural" and human agencies, nonetheless masked his own explicit intention of displacing the gardeners when the orchard matured. Moreover, it obscured both the all-out attempt by NGOs and donors to colonize women's gardens and reproduce what they deemed to be improved land use practices and concerted efforts by Forestry Department extension agents to promote agroforestry under the direction of their superiors and donors. Indeed, the landholder's admission clearly revealed how tree cropping allowed landholders to reclaim lowlying land without directly evicting gardeners (compare Rocheleau and Ross 1995). In letting trees "drive" the women, landholders and their donor/sponsors followed the contours of a moral economy wrought by the garden boom, carefully avoiding the ill will of communities grown heavily dependent on garden income. In the process, two ostensibly worthwhile development agendas,

gender equity initiatives and environmental stabilization programs, were pitted against one another, undermining a market-garden livelihood strategy that helped thousands of rural Gambian families adjust to financial hardship.

Soil and Water Management: The Perils of Reclamation Redux?

In 1992, the scope for environmental interventions in The Gambia expanded greatly. The World Bank and its collaborators in the donor community, most notably perhaps USAID, initiated a regionwide effort to "mainstream the environment" (World Bank 1995) and rationalize environmental planning across the continent. These donors were greatly concerned that a long succession of development projects designed to reform the agricultural and natural resource management sectors in The Gambia had failed. Despite heavy programmatic investments, food-production levels remained static and environmental degradation worsened. Responding to donor concerns, The Gambian government (along with forty other African countries) developed a full-scale National Environmental Action Plan (NEAP) (GOTG 1992; see discussion of the NEAP planning process in Schroeder 1996b). USAID, in turn, launched a multiyear \$22.5-million Agriculture and Natural Resources (ANR) management program (USAID 1992) designed to meet many of the objectives the NEAP plan articulated.

One of the branches of government that featured prominently in these plans was the SWMU. Established with USAID funding in 1978, the SWMU was responsible for small-scale watershed management projects in seventy-eight Gambian communities over a twelve-year period (USAID 1992). Working toward the goal of enhancing food self-sufficiency at the village level, SWMU surveying teams constructed dozens of dike systems in low-lying areas along the River Gambia and its tributaries. These structures were designed to simultaneously halt salt intrusion into rice growing lands, stop erosion of uplands, and capture freshwater for recharging aquifers. They were particularly welcome in the western half of the country where riverine swamps are both tidal and saline.

In 1994, a SWMU project was designed to "reclaim" an estimated 50 ha of rice land south of

Kerewan, much of which had been lost to production for decades because of salt intrusion. Better water control made possible the reintroduction of long-duration rice varieties, which in turn brought higher yields that were universally welcomed by community members. At the same time, however, virtually overnight, demand was redoubled for women's agricultural labor during the rainy season. As a result, the politics of reclamation took on a new aspect centered on the seasonality of the agricultural calendar. What was not foreseen by community residents was that cultivation of longer-duration rice varieties would push rice harvests from September/early October into November, the peak month for plot clearing and seed-bed preparation in the gardens. This labor bottleneck created a dilemma for women who were faced with the choice of completing the rice harvest or getting their vegetables in the ground in a timely manner. A delay in garden preparation would cost them: both the yield potential and market value of their vegetable crops would decline precipitously if planting was postponed (Daniels 1988). On the other hand, losses in the rice fields due to delayed harvests—from bird damage or grain shattering—would cost their husbands, since it is incumbent upon them to buy supplementary grain for their families in the event family-grown stocks do not last the year.

It was this fear of rice-harvest losses that motivated an announcement issued in the town mosque in late September and early October, 1994. Couched in the moral economic terms of promoting food self-sufficiency for the community as a whole, the mosque leader enjoined women from planting their gardens before completely finishing the rice harvest. The issue was then taken up by members of the quasi-official Village Development Committee (VDC), who debated among themselves whether they should intervene to impose restrictions on garden preparation during the rice harvest. VDCs were established in rural communities throughout The Gambia in the 1980s by the Department of Community Development and the NGO community in an effort to democratize the development process. In theory, committee members worked on behalf of their communities to set priorities for community development needs and to communicate them to prospective donors. Typically, these committees were comprised of between eight and fifteen community members drawn from each sector of the community, including women's groups. Thus, at the meeting where the Kerewan

SWMU project was discussed, at least four women were present, and one of them posed a series of questions that I paraphrase here.¹⁵

The issue raised by the new-found productivity of rice fields was, as she saw it, who should shoulder the responsibility for securing the rice harvest. If the question was one of selecting rice varieties appropriate to specific soil types and other microecological conditions, then the men were right to rely on the women. If it involved the timing and execution of other skilled tasks such as weeding and transplanting, that too was the rightful domain of women. It was true: women possessed the localized technical knowledge and practical experience necessary for ensuring the best outcome for the crop. If, however, the question simply revolved around getting the rice in from the fields on time, then there was no a priori reason that women alone should be responsible. Harvesting rice is not a highly "skilled" task: a man can wield a sickle just as well as a woman can. Since everyone stood to gain from a secure supply of food, then everyone should mobilize around the harvest. Getting the vegetable crop in the ground was equally vital to community well-being as the rice crop. All the concern about rice was, therefore, nothing more than a red herring designed to obscure the fact that men were no longer willing to work to support their families.

The lengthy discussion in the VDC meeting sheds considerable light on what has become a protracted struggle up and down the River Basin over the obligations men and women bear towards each other and their families, and how these intrahousehold social relations intersect with concerns over ecological management (Carney 1988a, 1988b, 1996; Carney and Watts 1990, 1991; Barrett and Browne 1991; Norton-Staal 1991). These relations have at times become quite bitter, and women have frequently expressed considerable anger because they feel their husbands have neglected to shoulder their share of household budgetary obligations. As one garden leader put it, "Go to the hospital! You will see only women and children there who [have worked themselves] sick. You will see only women in hospital beds. You will never see men there Most of them are lazy and useless. They do not even work hard in their fields during the rainy season [i.e., when the rest of the community is wholly mobilized to secure the coming year's food stocks]." In the dispute over the soil and water management project, the anger expressed by the woman VDC member forced Kerewan's male community leaders to back down on their threats to restrain the economic activities of women gardeners. At the same time, however, the men refused to take up the challenge the woman issued to them to assist with the rice harvest, leaving gardeners to plant and harvest both rice and vegetables according to their own schedule. ¹⁶

The apparent resolution of the Kerewan SWMU project dispute notwithstanding, the issue of household obligation has remained central to negotiations between women and men over the opportunities and constraints embodied in development interventions. What the soil and water reclamation project accomplished in Kerewan was to enliven a discourse that gave priority to rice—a crop that benefits the "household"—over gardens controlled by women. The practices of developers promoting soil and water management interventions were thus very much in line with powerful moral and political economic arguments that have been made for ranking food crops over cash crops in importance (Bernstein et al. 1990). The reply of the woman VDC member, however, revealed how such arguments can obscure fundamental political realities. On The Gambia's North Bank in the early 1990s, the decision to favor rice over gardening had significant implications for intrahousehold labor relations and budgetary control. There was simply no a priori reason that completion of the harvest task, which, in the minds of developers and male community leaders, equated to food provisioning, should have hinged on women foregoing other economic opportunities. That female obligation to household and family as expressed in the rice harvesting task was so readily naturalized and reinforced by environmental rhetoric favoring resource reclamation raises serious questions as to the viability of ongoing attempts to improve environmental management practices up and down the River Basin.

Conclusion

In this paper, I have inspected three successive attempts to reclaim low-lying soil and water resources in a small town on the North Bank of the River Gambia. In the first instance, rural women's groups caught up in a boom in market gardening assumed numerous rights and privileges over *boraa banko* lineage land, often without the knowledge of, and at times in the face of direct

opposition by, male landholders. In the second, landholders embraced a forest department and development donor goal of accelerated tree planting through a garden-orchard agroforestry transition, alienating land improvements and subsidies originally produced by, or intended to benefit, gardeners in the process. In the third, the introduction of new soil and water management systems in rice-growing areas revitalized a discourse on family obligation and the moral and practical values of favoring staple foodstuffs for "joint household" consumption over production of vegetable commodities for "personal" gain. The successive interventions illustrate well the dilemmas created when developers, state agents, and other interested local parties introduce the moral claims and economic mandates of "global" environmentalism into heavily politicized local development processes.

International feminist pressure in response to the egregious gender inequities of the early "development" years was a major factor in redirecting investment to The Gambia's nascent market-garden sector. As women in the U.S. and Europe gradually worked their way into international donor agencies and fought to influence hiring decisions and redirect program objectives toward women's needs, Gambian gardeners made their own strides to improve production and forge crucial market connections. Consequently, by the 1980s, when nongovernmental agencies armed with capital and a mission to redress gender inequities sought to establish themselves in The Gambia, the increasingly viable horticultural enterprises attracted their attention. WID projects initiated by NGOs and voluntary organizations provided an ideological framework for intervention, while the negative economic circumstances created by drought and structural adjustment programs added a sense of urgency to the WID programs, and as a result, hundreds of small grants for garden wells and fences were quickly negotiated. Thus international gender critiques helped produce real gains in rural Gambian women's incomes and enhanced women's collective power and prestige at a time of great need.

When the WID emphasis behind the garden boom of the 1970s–1980s gave way to ecofeminist and feminist environmental critiques in the 1990s, however, many of these gains by rural Mandinka women were threatened. In lieu of wide-ranging assistance for women during the garden boom, developers who were focused on environmental rehabilitation began searching for

ways to enlist women in the task of producing a biologically diverse landscape and recreating the conditions necessary for sustained food security. These goals seem unassailable, but they served dubious purposes in the context of the garden boom. Instead of supporting women in their efforts to expand land-use rights, developers sought ways to tap unpaid female labor—what one agency termed "the most precious and vital local resource" (WIF 1995) in agroforestry projects. Similarly, instead of backing women's claims to their own labor and income, developers endorsed and reified what they implicitly viewed as a static division of labor, requiring women to neglect their lucrative cash crops in order to valorize new soil and water management strategies intended to boost rice production.

The Gambian case study thus sheds a great deal of light on the political ecological consequences of environmental interventions. It reveals quite starkly some of the structural constraints shifting development policies have created along the River Basin, many of which have been detrimental to the interests of women market gardeners. While these constraints have had their effects, the situation on the ground in Kerewan and other communities with low-lying market gardens has been far from overdetermined by the developers' actions. Intervention by WID-inspired developers into the land politics of the garden boom clearly created opportunities that women gardeners used to win expanded land rights. Similarly, the actions directed at environmental stabilization by NGOs, voluntary agencies, and the Gambian Forestry Department opened up opportunities that male landholders and community leaders exploited for their own social and economic purposes.

The articulation of land-use politics and gender social relations in The Gambia with these policy changes underscores the contention that rural property systems in Africa are often quite dynamic (see Bassett 1993; Migot-Adholla and Bruce 1994; and Shipton and Goheen 1992; see also Rocheleau et al. 1996 for the literature on gendered tenure). "Traditional" or "customary" claims such as those held by landholders in North Bank garden districts cannot simply be taken for granted, especially given that policy and land reforms routinely open up new opportunities for the accumulation of wealth, property, and political power (Bruce 1993; Watts 1989; de Janvry 1981). As Bruce puts it: "Often a reform is less

important for its explicit objectives than for the [new] openings that [it] . . . provides" (Bruce 1993:36). What the Gambian case illustrates is that even "secondary" rights holders such as the North Bank women gardeners can take advantage of such opportunities whenever they present themselves.

It is worth noting as a final point that the men and women vying for position in the struggle to control The Gambia's low-lying land resources do not operate from positions of equal power. While it is clear many of the market garden groups along the North Bank have been quite shrewd in their ability to exploit relationships with funding agencies, these advances remain more an exception than the rule. The "reclamation" efforts of male landholders fixed on orchard development have reinforced this point quite forcefully. Moreover, the labor question remains critical in explaining the outcome of development interventions in the region. As analysis of the agroforestry and soil and water management projects above has shown, the "success" of land reclamation efforts along the River Basin has hinged on capturing women's labor at every turn. Evaluation of the reclamation programs does not, therefore, simply revolve around the question of whether landholders have the "right" to plant trees on garden lands, or whether one group of resource users or another has been more effective in controlling the ebb and flow of development largesse. It requires close inspection of the ways in which use rights are renegotiated and interpreted in response to shifting development paradigms, and an assessment of the allocation of work obligations and the distribution of the benefits of the labor that forms the core of resource management systems. Finally, it is important to analyze carefully how critical notions of biodiversity, food security, and, not least, ideological associations between women and their environments have sometimes helped reproduce inequitable social relations rather than replace them.

Acknowledgments

I would like to acknowledge the helpful suggestions of several individuals who read earlier versions of the manuscript, including Maria Espinosa, Dorothy Hodgson, Donald Krueckeberg, Roderick Neumann, Donald Moore, Colleen O'Neill, Neil Smith, and Paige West. I would also like to thank three anonymous reviewers for *The Annals*, who offered exceptionally insightful comments. I am grateful to Rutgers Univer-

sity's Center for the Critical Analysis of Contemporary Culture for a writing fellowship. The field research was supported by the Fulbright-Hays Doctoral Dissertation Research Award, the Social Science Research Council/American Council of Learned Societies International Doctoral Research Fellowship for Africa, the Rocca Memorial Scholarship for Advanced African Studies, the National Science Foundation Fellowship in Geography and Regional Science, and the Rutgers Research Council. Michael Siegel of the Rutgers Cartography Laboratory prepared the maps.

Notes

- Some would argue that the increasing economic marginalization of Africa was not unintentional at all, but part of a deliberate logic centered on rationalizing the global capitalist system (Watts 1995; Simon et al. 1995; Mahjoub 1990).
- The fieldwork for this study was conducted in three phases. The first, a seven-week trip to the North Bank in July-August, 1989, included visits to eighteen different communal garden sites and interviews with 127 individuals, including vegetable farmers, garden landholders, extension agents, government officials, and agricultural researchers. During the second, February-November, 1991, I conducted a demographic and economic census of 700 domestic units (dabadalu) in 240 residential compounds (kordalu) in the North Bank community of Kerewan, and compiled an extensive data set on a stratified random sample of 100 women market gardeners and their families. Production surveys conducted with each woman in the data sample addressed land tenure, well construction, tree planting, cropping strategies, garden techniques, labor allocation, assistance from male family members, marketing, and changes in consumption patterns due to increased garden incomes. In-depth interviews were conducted with male landholders and female gardengroup leaders on the history of site development, and land and tree-tenure practices in each of twelve garden perimeters. These sites were mapped, measured, and inventoried as a means of assessing the threat posed by tree crops to garden enterprises. Finally, I gathered documentary evidence pertaining to horticultural policies and practices and conducted interviews with officials of several state-sponsored and nongovernmental organizations involved with horticultural projects. The third phase of research was carried out in June-July, 1995, when I made a follow-up visit to my original research sites to reinterview the market gardeners in my original research sample. I met with several development agents to discuss their shifting program priorities, and gathered

- photographic and documentary evidence on new soil and water management projects in the area. In addition to this formal fieldwork, I also spent two years as a Kerewan resident in 1986–1988, managing food security and environmental stabilization projects for an international NGO. During this period, I provided technical and financial support to a dozen different women's garden projects in North Bank communities (Kerewan not included).
- A small percentage of land in swamps was originally cleared by men on behalf of their families and passes accordingly along male lines of inheritance. Also, in cases where a woman has no female heirs, her rice plots occasionally pass to her son(s).
- 4. There are three lineages in my principal research site. The town chief is generally drawn from the first and the town religious leader (*imam*) from the second. The third is the remnant of a warrior clan.
- 5. Reliable income data are notoriously difficult to gather. This estimate is based on the extrapolation of 1991 sales figures. A sample of 100 vegetable growers in the village sold roughly D109,645 worth of produce over an 18-week period, February–June, that year. The exchange rate at the time was approximately 7.5 Gambian dalasis to the dollar (D7.5=\$1.00). Gross earnings for the 540 vegetable growers in the community were accordingly on the order of D592,083 or \$78,944. These figures do not include off-season or tree crop income. Net returns were lower by roughly a third (source: field surveys by author, 1991).
- I.e., they held prior kono banko rights to plots that were recognized after garden fences and wells were installed by developers.
- These payments ranged from D5 when the earliest gardens were established in the mid-1970s up to D30 in 1991—the rough equivalent of \$1-\$3—for plots averaging 100m² in size.
- 8. Interestingly, none of my informants was aware of any association of the term with land allotments prior to the garden boom.
- 9. The derivation of the term rango, which was used somewhat idiomatically in this community to refer to individual plots, is the English term "rank," as in "rank and file." Gardeners applied it to plots in recognition of the geometric grid created by extension agents who typically provide surveying services to garden groups.
- 10. New members of garden groups at the time of expansion were also required to pay kumakaalu. The extension of rights for existing members was thus in some sense a means of acknowledging—of claiming—the value they themselves had added to the garden perimeters. The assertion of such privileges by women already holding plots is evidence of hierarchical social relations between women

- gardeners which come into play at key junctures (Schroeder 1996a).
- 11. Gamble's anthropological account of tree-tenure principles operating in the area in the 1940s confirms this claim: "So far the problems arising from trees of commercial value, e.g., fruit trees, seems not to have arisen. The people of [a nearby community] say that a man may not plant fruit trees on another man's land without his permission. If the landowner objects he can have the trees torn up. If he gives permission it amounts to a permanent alienation of the land for the granters would never claim it back. Others maintain that the original owners can claim the land, but that the trees remain the property of the planter" (1947, NAG, 9/399, pp. 22-23.) Witness also the judgment of a Muslim cleric on the South Bank of the river in a dispute over tree tenure: "It has happened that when a man who has planted a tree subsequently dies, another person (possibly the owner of the land) can assume the responsibility of watering and caring for the tree. If, after some time passes, the son of the man who planted the tree claims ownership of the tree, a dispute may arise in which the caretaker claims ownership over the tree. The imam stated that resolution of such disputes is clear-cut—the act of watering and caring for the tree does not confer rights of ownership over the tree. The son of the tree planter inherits ownership rights to the tree." (Freudenberger and Sheehan 1994:67).
- 12. This data was drawn from a sample of 99 women. Interestingly, 82 percent of the women also controlled trees in upland areas, primarily immediately within or surrounding family compounds in town. Of an average 11 trees owned in the uplands, 7.4 trees were inherited and 3.2 were planted by the informant herself. This suggests that recognition of tree holding rights for women was both long-standing and being continually reproduced.
- 13. Mangoes are widely eaten by children during periods when other sources of food are scarce; NGOs and government agencies also imported several "improved" mango varieties at this time that fetched attractive prices on local markets in The Gambia and Senegal.
- Cf. Wangari et al. (1996) for a contrasting case study of the incorporation of women into agroforestry initiatives.
- 15. This reconstruction is based on reports from extension agents and committee members present at the meeting.
- 16. Unfortunately, this dispute may have been partially responsible for the fact that neither the various community groups in Kerewan nor the development agencies responsible for promoting the SWMU project took it upon themselves to carry out necessary repairs of the dike system

when they became necessary the following year. As of the middle of the 1995 rainy season, no maintenance had been performed on the dikes, and much of the reclaimed rice land was once again vulnerable to salt intrusion from tidal flows.

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