

GROWING SECURITY: LAND RIGHTS AND AGRICULTURAL DEVELOPMENT IN NORTHERN SENEGAL

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INTRODUCTION

Are “traditional” or “indigenous” land rights an obstacle to development? The question seems simple enough. And the liberal economic perspective currently being advanced by free market advocates such as the Bretton Woods institutions answers: yes, to the extent that those traditional relations hinder the free exchange of land, they do slow development. But of course the question is more complex and requires answers to a number of subsidiary and ancillary questions. Some are definitional and empirical: what are these “traditional land rights”? To what extent do they, rather than codified law or administrative practices, define the relationships of social actors and groups to land and to each other through land? Other questions are more hypothetical: what are the alternatives to the current regime, what costs would installing them incur, and what would be their costs and benefits, once in place? Finally, there are ancillary, but still central questions: what other factors, such as ecological conditions, state policies and non-state institutions, may account for development or the lack thereof, apart from land tenure regimes?

I address the theoretical questions first, in the abstract. This theoretical perspective frames the rest of the article, which is an examination of these relationships and their effects on development in the south bank of the Senegal River Valley, known as the Fuuta Tooro. This stretches several hundred miles from Richard-Toll in the west, near the head of the Senegal River Delta, upstream almost to Matam in the east. It is almost entirely rural; its few towns do not exceed 20,000 in population, and most villages, themselves spread far apart, have populations in the hundreds. The majority of the population in the region is Haalpulaar, or Pulaar-speaking, a large ethnolinguistic group characterized by lasting caste distinctions and strong Islamic convictions. The historically sedentary, agriculturalist Haalpulaar are the Toucouleur, while their historically nomadic, pastoralist linguistic cousins are the Peul.¹

Traditionally, the most fertile and prestigious lands in the region have been on the waalo floodplain, while the intermediate foonde lands and the rain-fed dieri highlands have been less sought after, owing to the unreliability of rains in the semi-arid Western Sahel. The damming of the Senegal River at Manantali has disrupted flood cycles and made irrigation possible, and the foonde lands are now the site of many irrigation works, and have become more desirable.

Nationally, land law does not reflect the lasting influence of traditional rulers in areas like the Fuuta Tooro. The Senegalese nation owns nearly all the land in the country, and rural municipalities administer it. The national land law, the *Loi relative au Domaine National*, passed in 1964, dictates that municipalities are

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¹ Pulaar, or Peul, is a language related to Fulani, various forms of which are spoken mostly by herders throughout the Sahel.

to give current tenants formal rights to land, provided the tenants can put the land to productive use.

The municipal councils are democratically elected, but are, for the most part, firmly entrenched in a network of patron-client relations involving the Senegalese state, the ruling Socialist Party, and local elites, who often belong to traditional high-status religious classes. Because the sway of these religious elites remains particularly strong in the study region, they tend to dominate the councils there. Historically, the Senegalese state has also involved itself in agriculture through parastatals and agencies that provide rural credit or monopolize the marketing of agricultural products. They often require farmers to use certain techniques and inputs, but have rarely effected long-term improvements in productivity. The effects of these state activities must qualify statements on the effects of land rights on development.

For the purposes of this study, “development” is defined as measures taken—including capital, permanent and annual investments and capacity-building techniques—that are likely to result in long-term increases in crop yields and in commensurate increases in net income from farming; this is assumed to be a desirable goal, given variable weather conditions, population pressures and the monetization of the rural economy. Such development may be hastened by capital investments such as irrigation works, productivity-enhancing chemicals and machinery, and higher-yielding crop strains, and by experimentation with various farming techniques. The intermediate goals of these improvements are shorter fallow periods, multiple crop seasons, and improved responses to changing climactic conditions.

Predicting the effects of the introduction of such changes requires consideration of the dialectic effects of the economic changes and the social structures on each other. Technical or social change imported in the name of development may transform those structures; indeed, this transformation may be one of the goals of development, for example to effect a more equitable distribution of control over resources. However, the existing institutions may also affect the development such that its effect may be negligible, or contrary to what was intended. This article primarily undertakes a qualitative microeconomic analysis of the effects of overlapping systems of land rights on agricultural production. Some study of institutions and their history is essential to this analysis—inasmuch as these affect the choices of discrete economic actors or of groupings—but this is not primarily a study of institutional economic change.

Moreover, since this is a primarily economic analysis where effects on land use and crop production and distribution are the gauge of any measure taken, social change is taken as important mainly in instrumental terms, rather than because of the inherent value of any existing social systems. This is not to say that past, current or potential systems are without relative inherent value, but only that such judgments are not significant in this analysis. Inevitably, values do permeate the analysis. I consider that equitable distribution is desirable to avoid human suffering and promote social stability, and that efficiency is important in preventing waste and making maximum use of available resources. The article’s analysis considers both values, without privileging either.

Finally, to explain the understanding and use of the tradition-modernity dichotomy: in the study area, “traditional” leaders are usually elders and religious figures, and, hence, members of a high caste. It is likely that some aspects of

the “traditional” society that they claim to describe, represent and defend, do not in fact date from the pre-colonial era. Nevertheless, these figures retain considerable authority in the study area, and their claims that a practice is a “tradition” seem rarely to meet with challenges on their own terms. This approach is not analytically dangerous because other groups have rarely challenged the legitimacy of traditional elites by questioning the accuracy of those elites’ claims that they are defending long-standing traditions. Of course, this trope of tradition is primarily useful in opposition, specifically to the concept of “modern” practices and modes. I will use this latter term to designate characteristics and modalities that differ from “traditions”, though they may be bound by little else.

THEORIES OF LAND RIGHTS AND AGRICULTURAL PRODUCTIVITY

Traditional and modern tenure: liberal perspectives

Theories of agricultural development posit a continuum from communal control of land by a lineage group or village, to more individualized tenure by households or individuals. In communal systems, a small elite frequently monopolizes the authority to allocate all the land, but those elites generally may not sell the land.² Thus, an individual’s or household’s land is not inalienable, but rather “exointransmissible”: no-one may alienate usage rights to anyone outside the relevant community, but those rights are more mobile within it.³ Social restrictions, based on gender or caste, may limit the land available to an individual or a family. Traditional authorities are more likely to enforce these distinctions for more valued lands, often the most fertile ones, or where strict religious or other taboos support the distinctions.

Many communal systems in Africa also grant separate rights to various users. One farmer may be allowed to farm annual crops on a tract, another may have rights to its tree crops, and a pastoralist may have transhumance and grazing rights after the annual harvest. Noronha and Lethem identify the multiple-use pattern as a potential source of conflict over land control, and of decreased tenure security, depressing the land’s value.⁴ But productivity for a single use, such as annual crops alone, especially in infertile areas, may be quite low. In addition, flexibility in access to land allows farmers to spread the risks of crop failure or low yields.⁵

Still, some requirements in multiple-use systems do restrict a farmer’s ability to experiment. Supposedly as a result of this inflexibility, of under-investment in land due to the insecurity of tenure, and of the overuse of commons land, crop yields have contracted to below subsistence levels in many areas. These theories hold that the regime of open access to land creates a collective action problem,

² Such sales would be “unconstitutional”, i.e., “they were expressly precluded from the covenant that formed the basis of the social contract creating the community.” Rogier van den Brink and Daniel W. Bromley, *The Enclosures Revisited: Privatization, Tillage, and the Quest for Advantage in Africa*, Working Paper 19, Washington, DC, 1992, 11.

³ Monique Caverivière and Marc Dèbène, *Le droit foncier sénégalais*, Paris, 1988, 67.

⁴ Raymond Noronha and Francis J. Lethem, *Traditional Land Tenures and Land Use Systems in the Design of Agricultural Projects*, Staff Working Paper No. 561, Washington, DC, 1983, iii-v and 16.

⁵ Van den Brink and Bromley, op. cit., n. 2, 8-9.

in that neither landholders nor tenants internalize the cost of the soil degradation or other results of misuse or overuse.⁶

Some theorists have suggested that societies move spontaneously along this continuum from communal to individual land tenure as populations grow and demand for land increases. As population increases and the monetized economy penetrates rural areas, the value of land increases, encouraging a long-term view of land's value and measures to improve security. Landholders and users therefore invest in technological inputs, enhancing both efficiency and productivity.⁷ But this transition is in fact not automatic or complete, even in situations of commercialization and population growth. Even where the original landholder "sells" the land, continued obligations to the original landholders frequently limit the "buyer's" own ability to alienate the land.⁸ And where tenure has become more individualized, neither increased investment in land nor improved productivity has resulted.⁹

Increasing land scarcity does decrease the flexibility required for risk-minimization strategies such as multiple uses and open access, as users adopt long-term strategies—such as tree planting—that make assets more specific to a single user. Of course, such asset specificity for one party diminishes the flexibility of others. If a community or a landholder sees such activities as against their interests, they may block them with the censure of traditional authorities, where these remain strong. Thus, there is pressure for the individualization of tenure to come into effect, but the transition is not automatic.¹⁰

Liberal economic theory thus frames communal systems as adapted to subsistence farming, but inadequate for cash cropping, investment or development. This position advocates titling property to individuals to solve the problem of rising external costs from land's misuse or overuse in communal systems. But the process of titling creates opportunities for rent-seeking behaviour. And, once

⁶ See generally Ester Boserup, *The Conditions of Agricultural Growth: The Economics of Agrarian Change under Population Pressure*, Chicago, 1965. Alternatively, strengthening the traditional institutions that regulate access to and management of land, can ensure internalization of costs by users. See Kevin Cleaver and Götz Schreiber, "The population, environment, and agriculture nexus in sub-Saharan Africa", in Srivastava and Alderman (eds.), *Agriculture and Environmental Challenges*, Washington, DC, 1992, 204–208. I refer to those who traditionally control land's allocation and use as "landholders", because they do not own the land; typically the entire community does, but member(s) of the elite have primary decision-making authority. Under Senegalese law, the entire Senegalese nation owns most of these lands. I refer to those who farm the land in exchange for rent payments to landholders in tender or in kind as "tenants". "User" or "farmer" refers to anyone actually farming the land, whether landholder or tenant, or, occasionally, a low-caste farmer who does not have a clear claim to the land, but who does not pay any rent. In the study region, landholders are often referred to as *propriétaires* ("owners"), indicating some permeation of capitalist notions of land ownership, although very few "owners" have freehold title to the land.

⁷ See, generally, Boserup, *op. cit.*, n. 6; see also Hans P. Binswanger and Mark R. Rosenzweig, "Behavioral and material determinants of production relations in agriculture", (1986) 3 *Journal of Development Studies* 503–539; Gershon Feder and Raymond Noronha, "Land rights systems and agricultural development in sub-Saharan Africa", (1987) 2 *World Bank Research Observer* 143–167; Noronha and Lethem, *op. cit.*, n. 4, 17.

⁸ Robert M. Hecht, "Immigration, land transfer and tenure changes in Divo, Ivory Coast, 1940–80", (1985) 3 *Africa* 319–336, 331–332. That is, the "buyer" has not obtained absolute title free of obligations to the "seller". The social structures are often strong enough, as in the study region, that they resist the pressures that would otherwise lead to the emergence of a market, or adapt to those pressures without allowing a market to develop fully. Jean-Philippe Platteau, *Land Reform and Structural Adjustment in Sub-Saharan Africa: Controversies and Guidelines*, Economic and Social Development Paper 107, Rome, 1992, 132.

⁹ John R. Heath, *Land Rights in Côte d'Ivoire: Survey and Prospects for Project Intervention*, Technical Paper No. 238, Washington, DC, 1993, 5.

¹⁰ Platteau, *op. cit.*, n. 8, 133–134; van den Brink and Bromley, *op. cit.*, n. 2, 13–16, 19–20.

established, property rights do not guarantee the security of tenure, but only shift the contest over that tenure out of the arena of the traditional authorities. When clearly defined and consistently enforced, however, such rights may increase the predictability of these conflicts' outcomes, increasing security and decreasing transaction costs and risk premiums. Still, the absence of secure title to land as collateral may also inhibit the development of efficient, private rural credit markets, and the resulting absence of credit may slow development.¹¹

But these and other liberal critiques overlook the significant adaptability of traditional systems. These do, in fact, have a capacity for social control to prevent free-riders in situations of land scarcity, and this secure tenure ensures a future income stream and makes the farmer a better credit risk even while his land may not be mortgaged.¹² Liberal economic theories also assume a wider range of choices for actors than is available to non-elites in rural African society. The recommendations of specialization in production and minimization of risk through the market ignore the absence of developed and reliable markets for goods, insurance, credit and capital, and the resulting lack of transactional flexibility. The traditional systems are two steps ahead of the economists. The risk-spreading strategies in traditional production techniques and tenancy arrangements create a production flexibility that substitutes for transactional flexibility.¹³

The accuracy of land prices in a free market in Africa and the development of an ancillary credit market are also basically questionable. Land may also have value as a source of social identity, and offers financial security compared to other investments, including capital, in economies with high inflation and where relatively few other investment opportunities exist. Elites may thus accumulate land for uses other than as a productive resource, though they may not be efficient farmers, moving the land's price away from its marginal productivity. Speculation in land could produce bubbles, pricing the poor out of the market and sacrificing the scarce capital of inexperienced buyers during bubbles. Also the ancillary credit market might not develop automatically in a system with an incomplete system of financial intermediation and judicial enforcement, as large borrowers with political connections could block the enforcement of debts.¹⁴

Liberal economic theory also underestimates the rootedness of land tenure in broader society. It views many of these social relations as simply giving rise to market imperfections such as externalities and transaction costs, and it measures the simple economic cost of these relations¹⁵ using the baseline of a liberal system of individually held, freely alienable land, valued as a productive asset. In fact, land also serves social functions, defining the membership and status of its users and holders, and spiritual ones, mediating between the living world and the sacred. Liberal economic theory ignores these relations, which it would upset in the name of efficiency, and the economic and social costs that such change would entail. If wage labourers on large farms feel that they have been dispossessed from ancestral lands, their employers may incur increased supervision costs. Rural labourers and even tenant farmers may be less productive, due to alienation

¹¹ Ibid., 112–117, 148, 183–187, 239–242; John W. Bruce, *Land Tenure Issues in Project Design and Strategies for Agricultural Development in Sub-Saharan Africa*, LTC Paper 128, Madison, 1986, 24; Van den Brink and Bromley, op. cit., n. 2, 20–22.

¹² Platteau, op. cit., n. 8, 120–127; Bruce, op. cit., n. 11, 24.

¹³ Van den Brink and Bromley, op. cit., n. 2, 17–18.

¹⁴ Platteau, op. cit., n. 8, 70–80, 196–198, 240–241.

¹⁵ Bruce, op. cit., n. 11, 24.

from land and work. These increased costs might lead landowners to substitute capital for labour, despite prevailing low wages and high capital costs. Finally, these processes and government policies may exacerbate the gaps between classes, and, in extreme cases, threaten political stability.¹⁶

Small landowners are also likely to incur more debt than they can repay. Inexperienced debtors may have inadequate information about their future productivity (especially after investment in new improvements), and may be pressured by predatory lenders more interested in the collateral (the land) than in the interest. These problems are internal to land and credit markets and may be corrected by effective regulation and oversight. But farmers also face other fluctuating costs, arising from weddings, funerals and other social obligations; new state-related costs, such as fees, taxes, and bribes; natural disasters such as droughts; and terms of trade both internationally and with urban areas that often decline and always fluctuate. All of these factors reduce farmers' ability to plan for debt payments, especially in the absence of rural insurance markets. And the poor peasants most at risk for default are likely to be excluded from *tontines* and other informal lending and savings schemes.¹⁷

Moreover, during the long period of reform and titling, the several competing systems of tenure are likely to increase confusion and conflict and actually decrease tenure security.¹⁸ The liberal critiques also often aggregate the negative individual effects of numerous systems, rather than examining systems holistically, individually and comparatively.¹⁹

Thus, in the absence of certain social and historical conditions, the market may fail in its most basic function—the efficient allocation of resources. These conditions include the predominance of arm's-length relationships, both among parties and between parties and the things contracted for; the establishment of universal and objective professional standards and procedural norms; functioning free markets for other inputs and outputs; and the relative autonomy of institutions such as the market and various state actors. Many of these conditions clearly do not prevail in many African countries.²⁰

Tenure security

The economists' focus on tenure security is not entirely misplaced, as a number of forces may threaten small farmers' security. But the insecurity of land tenure in traditional systems and its detrimental effects are probably both overstated. The frequent shifts in land usage in pre-colonial tenure systems occurred largely because of the abundance of land, not because of insecure tenure. Many communal systems guarantee usage rights on the condition of continued farming, providing security approximating that of freehold title. And some measures to enhance productivity, such as fertilizers, pesticides, new strains of annual crops and certain farming techniques, do not require tenure security, as they are not long-term investments specific to a piece of land.²¹

¹⁶ Platteau, *op. cit.*, n. 8, 206–216; Caverivière and Débène, *op. cit.*, n. 3, 300–301.

¹⁷ Platteau, *op. cit.*, n. 8, 198–204.

¹⁸ Cheikhou I. Sylla, *Étude de la cuvette de Cascas: Aspects fonciers des aménagements hydro-agricoles*, Working Paper 029, St. Louis, Senegal, 1989, 2, 26; Platteau, *op. cit.*, n. 8, 148–152.

¹⁹ Platteau, *op. cit.*, n. 8, 122–123; Bruce, *op. cit.*, n. 11, 24.

²⁰ Platteau, *op. cit.*, n. 8, 233.

²¹ *Ibid.*, 134; Van den Brink and Bromley, *op. cit.*, n. 2, 7–9.

There are nevertheless some reasons to fear tenure insecurity. Governments seek land to lease to agribusinesses and resort operators or to expropriate for public purposes, such as the conservation of environmental resources.²² When a household expands and needs additional lands, it can obtain more via chiefly fiat or moral obligation to family. Similarly, *émigrés*, primarily “sons of the village” who live in African or northern cities, often request large parcels for prestige or investment. Village authorities rarely reject such requests because these *émigrés* remit wages and have ties to urban and northern society.²³

Leaving land fallow can also threaten a landholder’s tenure security. As demand for arable land increases, fallow periods decline and the land’s fertility degrades. Even with fertilizers or new techniques or crop strains, land must lie fallow for a time; this choice not to farm land is a form of investment, but one which must be secured by reliable tenure. Users must introduce inputs and techniques to keep pace with increases in population and in demand for land and crops. But firm security of tenure is important even with shortened fallow periods if land’s long-term fertility is to be conserved by making such investments.²⁴

Tenure security is vital because of the three types of costs that landholders and users incur in its absence. First, landholders, users and potential buyers of land with insecure tenure or unclear title forgo investment in acquisitions or improvements, such as planting tree crops or constructing roads or irrigation works, incurring opportunity costs. In turn, the forgoing of investment checks the accumulation of productive capital.²⁵ The lack of formal rural credit makes capital formation all the more important, especially where it can be accumulated and used through savings associations.

Conversely, current landholders and users may try to minimize their insecurity by altering their own investments or those of tenants. Landholders may forbid otherwise efficient practices on loaned and leased land, including perhaps construction or tree-planting by tenants, fearing that these might strengthen tenants’ claims to the land. Permanent improvements to land may themselves be unproductive and made only to improve security. Pastoralists and urban entrepreneurs who are inexperienced at agriculture may take it up seeking to secure claims to land for pasture, prestige or asset diversification. In all of these cases, landholders and users are trying to ensure tenure security using ways that do not maximize the land’s output.²⁶

Thirdly, litigation costs mount due to conflicting traditional and modern claims, unclear boundaries between holdings, government takings and frequent conflicts between agriculturalists and pastoralists.²⁷ And there is also a fourth

²² Platteau, *op. cit.*, n. 8, 152; Caverivière and Débène, *op. cit.*, n. 3, 71. Justifications of the latter type may mask rent-seeking behaviour of the former.

²³ Platteau, *op. cit.*, n. 8, 170–174; Bruce, *op. cit.*, n. 11, 28.

²⁴ Bruce, *op. cit.*, n. 11, 28; Cleaver and Schreiber, *op. cit.*, n. 6, 201.

²⁵ Platteau, *op. cit.*, n. 8, 163–167.

²⁶ *Ibid.*, 167–70; Bruce, *op. cit.*, n. 11, 29.

²⁷ Economic changes exacerbate these conflicts. Irrigation has allowed crops to be grown on greater areas over more of the year, closing off access to both land and water for pastoralists. Conversely, wells in the rain-fed highlands have increased the areas where herds can graze, reducing the formerly abundant rain-fed (i.e., non-irrigable) land usable by low-caste growers. Paul Mathieu, Madiodio Niassé and Pierre-Pol Vincké, “Aménagements hydro-agricoles, concurrence pour l’espace et pratiques foncières locales dans la vallée du fleuve Sénégal: Le cas de la zone du Lac de Guiers”, in Crousse, Le Bris and LeRoy (eds.), *Espaces disputés en Afrique noire: pratiques, foncières locales*, Paris, 1986, 226–227 and 233. The likelihood of such conflicts is increased where the state explicitly seeks to “sedentarize” herders and where land laws require residency on the land in order to secure usage rights.

cost, borne by the entire economy: the downward effect of insecurity on a plot of land's price may be exacerbated where the sale occurs in a black market where sales are officially prohibited. The illegality of the transaction may itself further increase the risk premium, depressing the land's price to less than its productive value.

A residence requirement protects landholders or users from the *émigrés*, though not from the pressures of expanding high-status households. But the *émigrés*' value to the community makes enforcement of such a requirement difficult and rare.²⁸ Rather, clearer statements and enforcement of traditional rules that protect those actually using the land appropriately increase tenure security.²⁹ Under-investment may still result where traditional systems or state laws prevent the free sale of land, which would allow complete compensation for investments, in comparison to the institutionally different model of free exchange of land.

Evidence suggests that land rights *per se* affect agricultural practices less than the overall framework of incentives, including prices for crops, and for inputs such as fertilizers, seed and capital. Land of higher value in a given market structure thus provides a greater incentive for investment.³⁰ Nevertheless, the various rights in land that a party may have—including to security, alienability and compensation for improvements—directly affect price and value. The price a landholder can charge and a farmer will pay is partly an expression of the division of rights between the original landholder and the user or buyer that the agreement confers, explicitly or implicitly. The value of the land apart from these rights—e.g., due to factors such as its fertility and preceding improvements, or the scarcity of land in the area—may cause that farmer to seek increased security. Cyclically, that increased security may encourage the farmer to adopt technologies that conserve or enhance resource yields. Therefore, farmers may implement more improvements on relatively more valuable land, and security alone may not be a sufficient condition for improvements in many cases, as where the land has inherently low value.

In general, the inability of the poor to incur risks ensures that many potential conflicts will be precluded in favour of the higher-class actor, where such a *differential* exists. Existing landholders' defensive attitudes in response to tenure insecurity also tend to restrict potential tenants' access to land and opportunities for investment in it. Finally, insecurities and conflicts allow elites who best understand both the conflicts and the general legal and political system or who can marshal the greatest financial and state resources to accumulate land for themselves.³¹

Farm size and organization

Beyond a certain, fairly small size, there is an inverse relationship between land's productivity and farm size in developing countries, making large-scale, mechanized agriculture inefficient.³² A small family farm of about one to 1.5 hectares maximizes productivity in capital-poor economies. Smaller plots are

²⁸ Platteau, *op. cit.*, n. 8, 170–174.

²⁹ Heath, *op. cit.*, n. 9, 40–41.

³⁰ *Ibid.*, 35.

³¹ Platteau, *op. cit.*, n. 8, 175–182; see also Cleaver and Schreiber, *op. cit.*, n. 6, 204.

³² Heath, *op. cit.*, n. 9, 47–48; see also, R. A. Berry and W. R. Cline, *Agrarian Structure and Productivity in Developing Countries*, Baltimore, 1979.

inadequate to secure the farmer's livelihood, while farms larger than about 2 hectares begin to see returns to land decline, requiring more serious machinery, and raising problems of access to credit or costs of labour.³³

In general, capital plays a small role in this development because revenues may not cover the costs of machinery or capital-intensive improvements at all, given often overvalued exchange rates and low world prices for primary commodities. Labour costs are typically low enough that it is not profitable to substitute capital investments for labour. Hence, large-scale agriculture does not achieve the usual economies of scale.

Large farms must pay employees to farm their land, while smaller farms use family labour, and the market wage usually exceeds the opportunity cost of family labour, as long as agricultural work does not completely crowd out family labour's household work.³⁴ These two factors in combination explain, in turn, the lower use of labour by large farms, in favour of capital. Also contributing to the lower costs of family labour are the lower disutility of working on one's own land; gender and caste restrictions on working for a wage, the ease of coordinating household and agricultural work on one's land, and a risk premium attached to uncertain employment outside the family.³⁵

A second series of explanations for the higher productivity of smaller farms focuses on costs such as labour supervision, vital on larger farms but not on smaller ones. Large-scale agriculture requires close supervision because the quality of the work affects the product. Moreover, a piece-wage system in cereal culture is not feasible; under the more common time-wage system, employers must guard against theft of inputs and shirking, but family farms resemble the piece-wage model in their incentives. And small farmers may add to the productivity of the land if they exercise exceptional care in its stewardship and have close knowledge of its physical attributes.³⁶

Share-cropping solves some of the problems facing larger landholders in labour-abundant societies, by simulating the incentives of small-scale farming. By allowing tenant farmers to grow crops independently, rather than as wage-earning employees, the landholder thus reduces supervision costs. With many share-croppers and without having to pay wages, landholders also spread the risk of poor harvests between themselves and their tenants. The lower supervision requirement also permits landholders to engage in other activities, further spreading their risk. Share-cropping may also compensate for a lack of available credit and crop insurance facilities for the tenant farmer, since payment for use of the land and other inputs may follow the harvest, and the tenant farmer assumes less risk than in a fixed-rent arrangement.³⁷

Finally, realizing the economic advantages of share-cropping over ownership by the small farmer requires a competitive market for land—such that large landholders could obtain rents from the tenants close to the value of the land as measured by its productivity—and low transactions costs for arranging leases. As noted, however, land and credit markets in Africa are often not developed.

³³ Caverivière and Débène, *op. cit.*, n. 3, 299–300.

³⁴ "Family labour" presumably includes child labour, and should include the costs of forgoing education. In addition, women's labour has a low marginal opportunity cost because women are undercompensated in wage labour and have their home labour undervalued.

³⁵ Platteau, *op. cit.*, n. 8, 51–55.

³⁶ *Ibid.*, 56–58.

³⁷ *Ibid.*, 61–63.

Fixed-rent small tenant farming therefore provides the strongest work incentive, since all marginal product above the rent accrues to the tenant.

To counteract the productivity disincentives of share-cropping compared to fixed-rent tenancy, the landholders must closely monitor the tenants to ensure that the tenants use labour and other inputs optimally—and the costs of such supervision may wipe out the gains from it. Since it is rare for this condition to be fulfilled, “total production would increase and transaction costs would decrease if land could be redistributed in such a way as to allow only owner-cultivation”.³⁸

It may be that, rather than small family farms or large agribusiness holdings, co-operatives of small farmers might provide the greatest efficiency.³⁹ Small private co-operatives, often organized around traditional institutions, have faced few efficiency problems and have treated members of different classes or castes with remarkable equality.⁴⁰ Such co-operatives present numerous advantages, compared to a system predominantly comprised of small, private landowners: administering land is cheaper and easier, since there are fewer landholders. Co-operatives allow greater flexibility in patterns of land use with minimal transactions costs, thus diversifying farmers’ risk, especially if their land is in various climatic and soil zones. And members may share some expensive resources such as farm machinery.⁴¹

Deeper integration, encompassing labour and land resources, allows the co-operative to achieve economies of scale on labour-intensive tasks, such as monitoring and guarding. Pooling of resources also allows efficient specialization, including in management tasks, without the usual increase in risk or supervision costs. Finally, teamwork may have a morale-boosting effect, especially when the tasks are demanding or repetitive. Only a limited degree of fragmentation is possible, however, if the co-operative is to remain manageable and efficient, and to realize some of these economies. The inefficiencies of land fragmentation, and the problem of incentive dilution cut against large co-operatives, especially where production is not homogeneous, but depends on the quality of the labour.⁴²

Nevertheless, the closer relationship of workers to both the means of production and managerial decisions may produce various incentives to refrain from unproductive behaviour. Social norms emphasizing discipline and cohesion and recurring interaction all protect incentives. The penetration of capitalist modes of production and exchange, with their arm’s-length, monetized relations, may erode some of these norms, but after the initial period of formation, personal trust, and norms and understandings internal to the grouping are likely to be self-sustaining. Finally, these hazards are only greater than those on small, private farms using family labour; there are clearly greater incentives to refrain from such behaviour as a member of a co-operative than as an employee of a large landholder.⁴³

³⁸ Ibid., 67.

³⁹ These must be genuine co-operatives, not top-down imitations where the state controls the co-operative. Certain Senegalese parastatals sought to create farming co-operatives, but treated the farmers as labourers rather than as autonomous entrepreneurs, and so faced the employer’s usual costs, including labour shirking, asset mismanagement, pilfering and underreporting of output.

⁴⁰ Platteau, op. cit., n. 8, 247–252; Madiodio Niasse, *Les acteurs fonciers de l’après-barrage (rive gauche du fleuve Sénégal): Pesantiers, tensions, tendances*, unpublished dissertation, Université Cheikh Anta Diop-Dakar, 1989, 93–94.

⁴¹ Platteau, op. cit., n. 8, 253–271.

⁴² Ibid., 253–271, 276–278.

⁴³ Ibid., 282–289.

Technological inputs and productivity

Use of capital-intensive technology—especially chemical fertilizers, agricultural machinery and enhanced crop strains—in developing country agriculture appears to bring the productivity of large farms closer to that of small farms.⁴⁴ But small farmers tend not to use such inputs because they are available only to those with extensive cash or credit resources. Large landholders are more likely to have the education, government contacts and resources to be both aware of these inputs and able to take advantage of them. Large farmers do have a natural advantage in their capacity to take risks on new technologies, given their superior access to credit and more diversified holdings, and to take advantage of scale economies.⁴⁵

The levelling of access to these inputs for farmers with holdings of all sizes may be fiscally unfeasible, as it would require significant subsidies to small farmers. And the feasibility of developing either a market for hiring expensive, indivisible resources to small farmers, or institutions such as co-operatives for joint use of these resources has not been conclusively demonstrated.⁴⁶ Most of these inputs, besides machinery, tend inherently to raise crop yields. The use of machinery does not necessarily increase productivity over labour-intensive practices, but it does replace labour, decreasing supervision costs and reliance on more labour-intensive forms of production. If the land market were competitive, those with greater marginal productivity—i.e., small farmers—would simply purchase land from the larger farmers, but such markets rarely exist in sub-Saharan Africa.

There are clearly certain inefficiencies that arise from restrictions on the free exchange of land, but the liberal economic perspective probably overestimates both these inefficiencies and the possibility for a privatization and titling scheme to correct them. For example, efficient multiple-use practices may restrict a user from capital-intensive, multiple-season farming. Even without such restrictions, an entrepreneur running a large farm would probably incur high supervision costs and low labour productivity compared to a share-cropping system with better incentives. As a result, the entrepreneur might substitute capital investments for labour, despite low wages. Unfamiliarity with the land and multiple-use farming might make the entrepreneur a poor land manager; and unfamiliarity with the community might cause him to make costly errors of judgement. Thus, the baseline of the profit-maximizing capitalist is not an appropriate one for measuring the relative costs of traditional land rights.

Similarly, the inefficiencies of a tenure system of the commons, of open access to land, are well documented: no user has incentives to improve the land, or even to ensure the maintenance of its long-term productivity. Advocates of property rights suggest that individual titles will improve tenure security and encourage both sustainable stewardship and investment. But traditional systems do provide tenure security, especially where land is scarce and the user farms it continually. Strong traditional institutions can prevent overuse and abuse of the commons through censure or punishment. Finally, tenure security is not a

⁴⁴ *Ibid.*, 126–127.

⁴⁵ *Ibid.*, 68–70.

⁴⁶ *Ibid.*

sufficient condition for investment in the land, especially where the land's marginal productivity is inherently low.

Moreover, the process of titling presents opportunities for costly rent seeking, and to make land freely alienable would disrupt social institutions centring on land. Changing these social institutions could conceivably improve equity and tenure security, but a titling scheme is unlikely to produce this result, given the privileged access of elites to the state apparatus, and the prevalence of rent-seeking behaviour during titling programmes.

Property rights advocates nevertheless insist that if African countries could create a free market for their land—i.e., devise a titling scheme mostly immune from rent-seeking behaviour and profound inequalities⁴⁷—the resulting land market would resolve the inefficiencies described above. The emergence of this market should even spur the development of rural credit and insurance markets, enabling investments and specialization, with transactional risk-spreading through insurance, rather than production risk-spreading. But non-productive functions of land are likely to distort the market for land. Creditors might have excessive leverage over vulnerable borrowers, such as small farmers. And the insurance market is unlikely to extend to rural areas of countries that have underdeveloped financial services in their major cities.

Any scheme seeking to increase the control of the small farmer over his land will involve some form of official allocation or recognition of existing use and rights that will be susceptible to rent seeking. Co-operatives in many situations are now comprised of small farmers with only usage rights to their land; even where the traditional or modern regimes ensure that these use rights are relatively secure, some remaining insecurity may result in under-investment. They would thus arguably benefit from having freehold title to the land.

LAND TENURE IN THE FUUTA TOORO

The current state of land law, rights, tenure and policy in Senegal has numerous actors, and as many meanings. The wording of the law on land is indefinite. Understanding land tenure requires an examination of the implementation of the law by the responsible bodies—here, municipalities. In the study region, land tenure relationships still involve traditional social relations centring on land. Traditional elites continue to enjoy legitimacy, popularity and electoral power, and can therefore sustain, represent and defend these customs. National policies relating to land use, land rights, farming and other natural resources, also affect land tenure relationships, as do other forms of social and economic change.

A gift to the Senegalese nation: the *Loi relative au Domaine National*

The *Loi relative au Domaine National*⁴⁸ (LDN) sought to forge a middle path between “selfish individual ownership and levelling collectivism”, typical of the “third way”, the “African socialism” that President Senghor proclaimed for Senegal. Senghor believed that the relations between traditional elites and tenant farmers were socially retrograde and caused land degradation. Hence, the LDN

⁴⁷ See, for example, that suggested by Platteau, in *ibid.*, 218.

⁴⁸ *Loi No. 64-46, relative au Domaine National* (1964).

aimed to suppress the powers of traditional landholders in favour of current tenants.⁴⁹ The law declared all land not already privately owned to be the *Domaine National*, the property of the Senegalese nation, covering over 95 per cent of the country's land area. Thereafter, no private actor could take title to lands from the *Domaine National*. Most of the unregistered rural areas were designated *zones du terroir*, or village land zones.⁵⁰

The LDN's framers imagined that decentralized associations of cultivators would administer the village lands, but in the absence of administrative efforts supporting such co-operatives, these did not appear on their own. The government then created municipal units⁵¹ to administer the land, among other local governmental responsibilities; these have been integrated into Senegal's national political-administrative structure and are largely dominated by the ruling *Parti socialiste* (PS).

The reforms grouped small numbers of villages into Rural Communities (*Communautés rurales*), each of which is governed by a Rural Council (*Conseil rural*). The community elects two-thirds of the Rural Council's members, while representatives of local agricultural co-operatives comprise the remaining third. These Rural Councils "affect" (i.e., allocate), land to parties, who then become the *affectaires* of the land; the councils thus take on the role of traditional land authorities. The council elects its president and vice-president internally. Traditional village chiefs, presidents of co-operatives and councillors whose primary work is not rural—often urban elites who hail from the Rural Community and have family there—are not eligible for the presidency and vice-presidency.⁵² But these exclusions are of marginal relevance to land allocations, since the whole council votes on them;⁵³ the structure ensures that elites on the council can limit the council's encroachment on the role of traditional authorities. The council's power to affect land to non-familial groupings has allowed co-operatives to allocate lands internally, but only as long as they comply with the local PS authorities.

Thus, the LDN did not seek to effect a massive redistribution of existing land occupation; rather, it recognizes the tenure of those using the land. But if the law were fully implemented according to its original intent, there would be a massive change in land rights, since traditional landholders would lose their powers. The law then presumes that the tenure it grants will be passed down within families, though it makes no formal provision for this inheritance.⁵⁴ The councils may also affect unused land to new users, or "disaffect" (divest) land from *affectaires* who are not using it. The councils' decisions of affectation are to be based on the capacity of the applicants, individual or corporate, for personal use and *mise en valeur*—i.e., putting the land to valuable use as an economically

⁴⁹ Caverivière and Débène, op. cit., 3, 71, 225; Sylla, op. cit., n. 18, 46.

⁵⁰ Caverivière and Débène, op. cit., n. 3, 226–227; Platteau, op. cit., n. 8, 154–155.

⁵¹ *Loi No. 72–25, 19 juin 1972, sur la réforme de l'administration territoriale*.

⁵² Platteau, op. cit., n. 8, 154, 158–159; "Les prérogatives du Conseil rural", (21 June, 1990) *Le Soleil* 3; Sylla, op. cit., n. 18, 46–47. The Rural Communities are often miles apart, and their residents often do not know each other. The Rural Councils also lack administrative resources, often allowing traditional, village-level authorities to wield greater influence than the councils. Caverivière and Débène, op. cit., n. 3, 189–190.

⁵³ *Loi No. 80–14, 3 juin 1980, sur la modification de l'administration territoriale*, cited in Caverivière and Débène, op. cit., n. 3, 178. These decisions must then be approved by the sub-prefect, per a 1986 decree. *Décret No. 86–445, 10 juin 1986*, cited in *ibid.*, 186.

⁵⁴ "Les enjeux fonciers dans le Delta: Les obstacles à la réforme", (21 June, 1990) *Le Soleil* 2; Caverivière and Débène, op. cit., n. 3, 73, 207.

and physically productive resource. Only members of the community may be *affectaires*, thus in principle preventing outside entrepreneurs from accumulating land at the expense of locals.⁵⁵

The government established the bodies authorized by the 1972 reforms slowly, reaching the St. Louis region, which contains the study area, only in 1980.⁵⁶ The slowness of this implementation added to the confusion over tenure security, with no organ to administer the LDN and decide land disputes in the meantime.⁵⁷ In this vacuum of national support for the LDN's implementation, many local governments continued to accede explicitly to traditional authorities, claiming to be unaware of the LDN. Traditional authorities thus maintained their capacities in land allocation unopposed throughout the 1970s.⁵⁸

The government explicitly foresaw the likelihood of resistance by traditional authorities as it contemplated implementation of the law.⁵⁹ It was aware of both the need for the dissemination of information on the LDN to rural areas, and the underfunding of the complementary agricultural extension offices, the *Centres d'expansion rurale polyvalents* (CERPs). The 1972 reforms sought to address these deficiencies. But almost 20 years after the creation of the Rural Councils in the St. Louis Region, councillors still claim an incomplete acquaintance with the mandate and details of the LDN and even with the territorial limits of their jurisdiction, leading to conflicts between councils.⁶⁰ Rural Councils lack capacity largely because they have few resources. They have no funding for a secretariat, or for remuneration of their members; very few councils maintain a central registry of affectations. The CERPs, which might aid the councils in matters of land affectation, also remain "sadly underfunded".⁶¹

The 1972 laws provided that councils could affect and disaffect land because of insufficient productive use ("*pour insuffisance de mise en valeur*"), because of poor land management, or because neither the *affectaire* nor his family was exploiting the land personally. If the council finds one of these violations, it may put the *affectaire* on probation; if the *affectaire* does not remedy the situation within a year, the council may disaffect.⁶² But the law's acceptance of corporate parties as

⁵⁵ Caverivière and Débène, *op. cit.*, n. 3, 73, 201; Platteau, *op. cit.*, n. 8, 154–157.

⁵⁶ *Décret No. 80-085, 29 janvier 1980, sur l'entrée en vigueur de la Loi 72-25 dans la Région du Fleuve, "Les enjeux fonciers dans le Delta"*, *op. cit.*, n. 54.

⁵⁷ Mamadou Niang, "La réforme de l'administration territoriale et locale au Sénégal", (1981) 172 *Notes Africaines* 106.

⁵⁸ See, for example, Malal N'Diaye, "A propos du Domaine National: Le Toucouleur, la coutume, et la loi", (20 August, 1976) *Le Soleil* 8. N'Diaye, an adjunct to the prefect of Podor Department, in the St. Louis Region, believed that this ignorance was wilful and protected the privileges of the religious authorities, who convinced the lower castes that to contest traditional land allocations was a sin. A response defended the local system as fair and maintained that the positions of traditional authority were open to all members of a clan, not inherited. D. W. Massy, "A propos du Domaine National: Un Toucouleur répond", (1 September, 1976) *Le Soleil* 9.

⁵⁹ Ministère du Plan et du Développement, *Synthèse des rapports du séminaire des cadres intermédiaires (1965) relative au Domaine National*, Dakar, 1965, 5; see also Ministère du Plan et du Développement, *Problèmes et programmes d'application de la Loi no. 64-46 relative au Domaine National*, Dakar, 1966, 12; Ministère du Plan et du Développement, *Commission interministérielle d'étude de l'application de la Loi relative au Domaine National*, Dakar, 1967; Secrétariat d'Etat auprès du Premier Ministre chargé du Plan, *Communication en conseil interministériel sur le point actuel de l'application de la loi relative au Domaine National*, Dakar, 1971, 10–11. The 1966 report suggested various methods to disseminate the details of the LDN to local citizens and administrators, none of which was widely implemented.

⁶⁰ "La délimitation, solution idoine", (21 June, 1990) *Le Soleil* 3; Mathieu, Niasse, and Vincké, *op. cit.*, n. 27, 235.

⁶¹ "Les prérogatives du Conseil rural", *op. cit.*, n. 52; Caverivière and Débène, *op. cit.*, n. 3, 194–195.

⁶² Caverivière and Débène, *op. cit.*, n. 3, 202–203.

affectaires also allows traditional family groups to maintain their land rights. The main criterion for land affectation, the notion of *mise en valeur*, has also not been defined adequately, causing administrative inconsistencies. The Rural Councils thus have sufficient latitude to maintain traditional land tenure relations, although all uses of land where neither the *affectaire* nor his family are directly exploiting it, such as share-cropping, are technically illegal.⁶³

The law also leaves loopholes and lacunae. It generally prohibits disaffectation of land that a family has been farming, but allows it in the name of “public utility”.⁶⁴ Traditional authorities have used this clause to justify affectations to their families of land already in use by other parties. The requirement that affectation applications be written further limits the possibility for members of low castes to become *affectaires* since most are illiterate.⁶⁵

The law does provide that, if the council disaffects land from one party and affects it to another, the new *affectaire* must compensate the former one for any improvements made. Similarly, disaffectation for public utility must be compensated with the affectation of parcels of equal value elsewhere. This counterweight is of limited use, however, in Rural Communities with a minimum of arable land remaining, and in the absence of a mechanism for measuring a land’s value.⁶⁶

Thus, the LDN sought to strengthen tenants’ and users’ claims to continued tenure security. However, the weak council presidency has ensured that the elites who typically populate the majority of the remaining council seats control it. The councils’ ineffectiveness in implementing the law’s intent is especially unsurprising given that their mandate is unclear, especially the vague requirements of *mise en valeur*. Furthermore, the councils rarely have a clear sense of the territorial limits of their jurisdiction, and lack funding to support their administration. Finally, there is no effective oversight of the councils’ activities, since the elected elites are tied to the prefecture through clientelist networks, especially through the Socialist Party. As a result, traditional land relations still prevail in many parts of Senegal.

Traditional land rights in the Fuuta Tooro today

As they do in many other traditional African land tenure systems, family lineages traditionally control land in the Fuuta Tooro. In one type of traditional landholding, the *diowre*, the landholding family is that which was mythically the first to appropriate the land by clearing it of brush. The *diom leydi*, or master of the land, is the head of the lineage, and either allocates the *diowre* to family members or loans it to the family’s clients. The other major type of traditional landholding, the *kedde leydi*, is a form of leasehold, usually requiring that the farmer pay in advance of the farming season for the use. These in-kind payments, the *ndjoldi*, are calculated as a share of the previous year’s harvest. Under a rarer

⁶³ Ibid., 203–204, 307; Platteau, op. cit., n. 8, 154–157; “Les prérogatives du Conseil rural”, op. cit., n. 52.

⁶⁴ Loi No. 64–46, op. cit., art. 13; Décret No. 72–1288, 27 octobre 1972, sur la réforme de l’administration territoriale; Caverivière and Débène, op. cit., n. 3, 204.

⁶⁵ Caverivière and Débène, op. cit., n. 3, 71, 205, 236.

⁶⁶ Ibid., 206–207, 222. The valuation of land is especially hard to effect and review in the absence of a market for land. Compensation for capital improvements seems less problematic, in theory: the former *affectaire* may at least claim restitution for his costs, and perhaps for the expected benefits of the improvements.

type of tenure, called *njimmaandi*, the lowest castes—the *alaaleydi*, or landless—can lease land, paying a share of the crop, the *assakal*, to the landholder after the harvest. This arrangement is called the *rem pethiem*. The *assakal* is usually a larger proportion of the crops than is the *ndjoldi*.⁶⁷

The *diom leydi* are usually *toorotobe*, a caste of Islamic Toucouleur cleric-warriors that revolted against the then-ruling caste, the *farba*, in 1776; the *farba* remain an elite landholding caste, though they lack the political authority of the *toorotobe*.⁶⁸ The *toorotobe* and *diom leydi* still occupy positions of authority in Toucouleur society, both as traditional authorities and through more modern institutions such as the Rural Councils. Women do not traditionally hold land, although a woman may be a *diom leydi* or a tenant if she is widowed by a husband who held one of these positions. Recently, however, women have increasingly taken over the roles of controlling land use and farming as many of their husbands migrate to African or Northern cities.⁶⁹

The land user, usually a tenant farmer, also enjoys certain rights. The landholder may not re-appropriate land from the user, as long as the user continues to farm or sublet the land and to pay the tribute. Thus, this tenure system has individualized aspects, and is not a pure communal tenure system autocratically managed by the *diom leydi*.⁷⁰ These rights for users also partly explain this caste system's enduring legitimacy among non-elites. Share-cropping arrangements, recently predominant in the *waalo*—the prestigious and relatively fertile floodplains of the Senegal River and its tributaries—are thus not a new system. These old share-cropping arrangements are, however, spreading to new castes, increasingly replacing labour tributes from landless farmers of slave castes.

Finally, like most other indigenous African land tenure systems, this is a multiple-use system. Specifically, herders traditionally have certain transhumance rights of access to water and to crop stubble for their herds to graze; in return, the herds fertilize the land. These various users may come into conflict when one of them, usually the agriculturalist, asserts the full panoply of rights inherent to affectation.

Facts on the ground: operation and implementation by the Rural Councils

The national government has, to some extent, pressured traditional and modern local authorities to increase access to fertile lands for low castes. In the traditional system, the slave castes only farmed millet and sorghum on the occasionally rain-fed *dieri* highlands. Now some are farming plots in both the intermediate *foonde* lands, newly cultivable because of irrigation by farmers' associations, and in government-sponsored, large irrigated perimeters in the *waalo* floodplain. Younger farmers have formed new co-operatives. The drought from around 1980 to the early 1990s, the latest period in a gradual, century-long decline in rainfall that has relented in recent years,⁷¹ and the disengagement of the state seem to have engendered solidarity and co-operation among low-

⁶⁷ Sylla, op. cit., n. 18, 22–24; Niasse, op. cit., n. 40, 167–170.

⁶⁸ Niasse, op. cit., n. 40, 167–168.

⁶⁹ Sylla, op. cit., n. 18, 32–33, 53.

⁷⁰ Niasse, op. cit., n. 40, 168–169.

⁷¹ Platteau, op. cit., n. 8, 175–178; interview with Albert Sagna (Director, *Centre d'expansion rurale polyvalent*, N'dioum) and Mary Liakos (Volunteer, Peace Corps, Kahel), in N'dioum, 23 June, 1996; Niasse, op. cit., n. 40, 32–36.

caste youth, unlike the shorter drought in the early 1970s, when the state was still able to borrow and spend heavily on parastatals. Farmers also resist becoming employees of large farms, which they fear would transform them into a rural working class.⁷²

Still, this result is unusual, since in Senegal, as elsewhere in Africa, the trend has been one of symbiosis between the dominant Socialist Party (PS) and the local elites; the PS, through the regional prefect's office, can directly control the Rural Councils' decisions on land affectation.⁷³ The LDN also aids in the patronage scheme; its rationality, requiring *affectaires* to have the capacity for *mise en valeur*, allows the councils to allocate land to those who can invest in it. In many cases, small farmers have had land affected to them only because the subsidies and loans of the state have provided them with the capacity for *mise en valeur*.⁷⁴

In other cases, poor farmers exaggerate their capacity for *mise en valeur* in order to ensure that they meet the hazy criteria, and their subsequent use of the land does not match the claims. Rural Councils do not have the means to establish and maintain a formal mechanism for review of applicants' capacities. Moreover, the lower-caste tenant farmer is rarely the applicant best able to realize the land's *mise en valeur*. This effect often conflicts with the law's original purpose of maintaining tenure security for those actually working the land.⁷⁵

The requirement that *affectaires* be members of the Rural Community should limit the Council's power to make affectations to entrepreneurial outsiders at the expense of current farmers, though it also prevents outsiders from farming lands that have lain fallow for decades, held by traditional elites as a secure asset or for prestige. In these instances, urban entrepreneurs may be better positioned than local small farmers to persuade Rural Councils to loosen traditional elites' hold on the fallow land.⁷⁶

Some Rural Councils have also organized *Commissions domaniales*, which seek accurately to delimit landholdings with the assistance of the CERPs and to determine which lands are currently occupied and in use.⁷⁷ These commissions intend to improve those land registries that do exist, which are usually poorly maintained and inaccurate, causing conflicts over boundaries. Some CERPs have sought to improve the registries independently of the councils, but have been rebuffed. Few councils have created these *Commissions domaniales*, and almost none have used their findings to disaffect current *affectaires* from land they were not using, despite occasional requests from potential farmers.⁷⁸ On the contrary, where traditional village chiefs have led the commissions, they have ensured that

⁷² Platteau, op. cit., n. 8, 178–179; interview with Sagna and Liakos, op. cit., n. 71; Caverivière and Débène, op. cit., n. 3, 290; Niassé, op. cit., n. 40, 92. Government officials are still biased in favour of leasing large tracts to agribusiness in the name of efficiency and jobs for the rural population. Cheikh Thiam, "Aménagement et allocation des terres", (15 November, 1993) *Le Soleil* 9, quoting Alioune Thioub Samb, agricultural engineer, SAED-Bakel.

⁷³ Decree No. 86–445, of 10 June, 1986, requires that the prefect approve all council decisions regarding land.

⁷⁴ Interview with Sagna and Liakos, op. cit., n. 71; Caverivière and Débène, op. cit., n. 3, 186.

⁷⁵ Interview with Sagna and Liakos, op. cit., n. 71; Caverivière and Débène, op. cit., n. 3, 221, 295; Platteau, op. cit., n. 8, 179–182; Sylla, op. cit., n. 18, 41; Mathieu, Niassé and Vincké, op. cit., n. 27, 230–231, 236.

⁷⁶ Caverivière and Débène, op. cit., n. 3, 298–307.

⁷⁷ Article 25 of Law No. 72–25 authorized the councils to form these bodies.

⁷⁸ Interview with Sagna and Liakos, op. cit., n. 71.

affectations to low-caste farmers did not trample any traditional landholders' interests.⁷⁹

In the few cases where some councillors have attempted to disaffect the land from traditional elites who were not using it and reaffect it to lower-caste applicants, conflicts have crippled the councils; some have found that they can only operate if they refuse to hear any questions regarding land affectations. In other instances, the conflicts have led to violence between councillors of different castes, occasionally requiring police intervention. In general, however, the councils have not interfered with land allocations by traditional elites, because local elites often control the councils.⁸⁰

On the other hand, councils have occasionally affected land to a traditional landholder who wanted to reclaim it from a current tenant; this action directly violates the guiding principles of the LDN which intend for the users of the land to be the *affectaires*. In one instance, a landholder threatened to seek affectation of land traditionally belonging to his family, although the tenant had farmed it and paid the *ndjoldi* for years, as had his father before him. The sub-prefect refused to approve the affectation to the landholder, rather than to the user, and the farmer stopped paying the *ndjoldi*. At harvest time, the landholder's family tried to take the land, and the national *gendarmérie* had to intervene. Such disaffectations from low-caste tenants to traditional landholders do occur, but only somewhat more frequently than those in the other direction; once land is affected, usually to a landholder but occasionally to a tenant, disaffectation of any kind is unusual.⁸¹

Still, the threat of such disaffectations is real, given that traditional leaders are often both elected councillors and local PS leaders, thus consolidating traditional and state authority. Although the minority *Parti démocratique socialiste* (PDS) has fielded candidates in some council elections, few PDS councillors have been elected, and the PDS has boycotted a number of elections in frustration and protest.⁸² When conflicts do arise on the councils, different factions within the PS often find themselves in opposition. In Mboumba, the national Political Bureau of the PS recognized a minority of PS councillors—all members of the traditional elite—as the legitimate Rural Council; the other, larger faction had sought to loosen the hold of the traditional authorities on the council. Following this incident, the Mboumba Rural Council did not meet for over five years, fearing violence among its members.⁸³

Finally, the councils tend to simply defer to traditional authorities. The latter's continued strength is more pronounced in the middle Senegal River valley than in other parts of Senegal, due to their religious position in a region that has also undergone less economic change than others.⁸⁴ The requirement that one-third of the councillors be representatives of co-operatives is intended to dilute the

⁷⁹ Ibid; Niang, op. cit., n. 57, 106; "Les enjeux fonciers dans le Delta", op. cit., n. 54.

⁸⁰ Sylla, op. cit., n. 18, 60.

⁸¹ Ibid., 58, 66.

⁸² Interview with Sagna and Liakos, op. cit., n. 71; Caverivière and Débène, op. cit., n. 3, 180; Sylla, op. cit., n. 18, 62. The *toorotobe* do not always rule over these towns in a cohesive, unassailable manner. In Cascas, a group of *toorotobe* from different parts of the village attempted an agricultural project, but, because of their equal caste standing, none could assume a leadership role and the project was abandoned. See Sylla, op. cit., n. 58.

⁸³ Sylla, op. cit., n. 18, 48–51, 51–54, 62.

⁸⁴ Ibid., 48–51; Interview with Sagna and Liakos, op. cit., n. 71; Caverivière and Débène, op. cit., n. 3, 180.

influence of traditional authorities, but the co-operatives have usually been too politically weak to perform this balancing function effectively, and are often run by parastatals that themselves operate within PS networks. Some council presidents admit that no affectation decision is made without consulting with the traditional chiefs. Councils have rejected applications for unused land because the applicants failed to contact the *propriétaires*—i.e., the traditional landholders—before submitting the application.⁸⁵

Even the supposedly technocratic parastatal, the *Société d'aménagement et d'exploitation des terres du delta du fleuve Sénégal, de la vallée du fleuve Sénégal et de la Falème* (*Société d'aménagement et d'exploitation du delta*, or SAED) usually ensured that it had the acquiescence of the traditional authorities, presumably because it has a general interest in avoiding conflict with local elites, encouraged by those elites' place within the PS apparatus. As the SAED has disengaged itself from the business of co-ordinating farming, it has left the traditional authorities' land-allocating functions intact.⁸⁶

On occasion, lower-caste actors, frustrated by the unresponsiveness of the Rural Councils, resort to other means. In Thioubalel, a "*conseil de notables*" of elders formed in opposition to the Rural Council and affected a vegetable field to a women's grouping. The sub-prefect warned the group that only the Rural Council could allocate land, but the head of the local CERP delineated the plot soon thereafter.⁸⁷ No conflict resulted from the actions of the *conseil de notables*, perhaps because the Rural Council did not see the parcel as worth a fight or the *conseil de notables* as likely to prove a substantial threat in the future.⁸⁸

Despite these occasional conflicts and irregularities, there is a perception among elites of popular consensus in favour of these practices, for example, granting land to *émigrés*. There is in fact a lack of consensus on this issue even among administrative elites. For example, some councils have conflicted with the administrations of *Communes*—non-rural communities, ranging in size from Dakar (about a million residents) to N'Dioum (about 15,000)—because residents of those *Communes* who had come from a Rural Community sought to have their land reaffected to them, but met with opposition from the councils.⁸⁹

In all, conflicts occur sporadically, but not infrequently. Municipal administrations clash with each other over the limits of their jurisdiction. Landholders or tenant farmers dispute the limits of their parcels, due to the absence of documented delineations. Agriculturalists conflict with pastoralists over traditional and LDN usage rights. *Émigrés* and those who have used the land in their absence conflict when the *émigrés* wish to have land reaffected to them. Current tenant farmers or low-caste *affectaires* sometimes come into conflict with entrepreneurs or high-caste landholders when members of either class seek to have land affected to themselves. And Rural Councils and individuals may oppose state attempts

⁸⁵ Interview with Sagna and Liakos, op. cit., n. 71; interview with Abdullaye Gallo Bâ (President, Rural Council of Gamadji-Saré), 24 June, 1996, in N'Dioum; "Les enjeux fonciers dans le Delta", op. cit., n. 54; Sylla, op. cit., n. 18, 64. In Gamadji-Saré, the traditional elites are particularly well entrenched: Mountoga Tall, who heads the national *Tidiane* Muslim brotherhood (rivals of the *Mourides*) hails from this community; his brother, Kadé Tall, is the most influential marabout in Gamadji-Saré. See interview with Sagna and Liakos, op. cit., n. 71.

⁸⁶ Niasse, op. cit., n. 40, 94.

⁸⁷ Sylla, op. cit., n. 18, 63.

⁸⁸ The Rural Council appears to have been right. I have found no evidence of further activity by the *conseil de notables*.

⁸⁹ Interview with Bâ, op. cit., n. 85; see also "Les enjeux fonciers dans le Delta", op. cit., n. 54; "La délimitation, solution idoine", op. cit., n. 60.

to redesignate *zones du terroir* as *zones pionnières*, lands designated for parastatal use or lease to corporations.⁹⁰ All of these conflicts clearly add to the insecurity of land tenure that the farmers face, entailing direct costs of litigation or mediation as well.

Local structures and national policies: water, credit and technology

Land rights are also related to state development policies. The governments of Mali, Mauritania and Senegal, through the *Organisation pour la mise en valeur de la vallée du fleuve Sénégal* (OMVS), dammed the Senegal River at Manantali, Mali, primarily to produce hydro-electric power; the OMVS completed the dam in 1988. The OMVS's dam at Diama, just above the head of the Senegal River delta, prevents salt water from the delta from leaching hundreds of miles up the flat river. The regularity of flows and decreases in flooding and salinity due to the dams have enabled widespread irrigation. Early on, the SAED controlled most of the irrigated land and primarily grew rice, but the state has now returned much of this land to Rural Councils.⁹¹

Many residents of the area have opposed the flood control, however, because it makes traditional flood-recession agriculture impossible, and harms the river's ecology. The OMVS had originally intended to decrease the flooding gradually to allow residents to adjust, but was unsuccessful in replicating flood cycles in the early years of Manantali's operation, especially in 1989–1991. During the worst years of drought and inappropriate flooding, many farmers did not produce enough of their crops to feed their families, let alone to sell.⁹² The OMVS is quite autonomous and technocratic, however, and did not respond well to farmers' needs.

The Senegalese government now favours continuing the floods, though Mali and Mauritania prefer the original policy of gradually phasing them out. One local NGO, the Senegal River Basin Monitoring Authority (SRBMA), has suggested that flood-recession agriculture's low input costs, compared to irrigated agriculture, are better suited to the risks inherent in farming, including economic and climatic variations. Farmers can then devote remaining labour and capital to diversified activities and thus minimize the harm that would result from crop failure. Such self-insurance might be more valuable than the increased rice yields from irrigation; in fact, the lost value of fish, sorghum and livestock from the floodplain might outweigh the gains in rice from irrigation in a good year. Moreover, the increased labour burden for irrigated agriculture is likely to fall primarily on women and children. And decreasing productivity due to high production costs may reduce the cohesion and productivity of co-operatives, ultimately leading to the shrinkage or dissolution of some co-operatives.⁹³

In addition, the SRBMA found that access to land was not becoming more equitable on irrigated farmlands, despite the OMVS's stated intention of

⁹⁰ Dié Maty Fall, "Développement de la Vallée: Rien ne se fera sans les populations", (16–17 April, 1994) *Le Soleil* 4 (interview with Thierno Bâ, president of *Projet intégré de Podor*, a local development NGO).

⁹¹ Mathieu, Niasse and Vincké, op. cit., n. 27, 217, 228; Muneera Salem-Murdock and Madiodio Niasse, *Land Use, Labour Dynamics, and Household Production Strategies: The Senegal River Valley*, IDA Working Paper No. 94, Binghamton, NY, 1993, 1.

⁹² Salem-Murdock and Niasse, op. cit., n. 91, 6–7, 13.

⁹³ *Ibid.*, 8–12, 19.

increasing lower castes' control over productive lands. The *toorotobe* had acquired a disproportionate quantity of the new irrigated perimeters, as had the *sebbe*, another high caste. On the other hand, low-caste *gniagnbe*, artisans, and *mathioubé*, former slaves, have had limited access to the new irrigated perimeters. The castes have thus remained stratified in their access to land.⁹⁴

To the extent that irrigated land has been transferred from former elites to small farmers, some was illegally sold. Because the users' tenure is thus insecure, they are likely to under-invest in their land. Higher castes have also transferred some irrigated perimeters to lower castes by traditional loans, which are also illegal. Most of the lower castes' wealth derives from these leased lands, but these relations require the highest payment, the *assakal*, to landholders. To the extent that lower-caste farmers have gained access to the irrigation works, capital-poor farmers of small plots rely on credit from higher castes or the state; the SRBMA concluded that these small farmers are thus merely "disguised wage labour". Finally, many of the new irrigated perimeters are undertaken primarily to obtain governmental incentives; they are not independently sustainable investments and pursuing them frequently requires the abandonment of other, still viable perimeters.⁹⁵

Opposition to the flood control never fully faded, and flooding resumed successfully in 1994. The continued flooding has meant that only those parties with resources sufficient to construct flood-protection levees, typically outside entrepreneurs and foreign agribusinesses, can safely invest in irrigation works in the *waalo* and have multiple growing seasons.⁹⁶ The demand for the highest lands, the *dieri*, which are rain-fed and difficult to irrigate, has not risen significantly. But the *foonde* lands, between the *waalo* and the *dieri*, have been more easily irrigated, especially in village perimeters. The demand for and value of illegal leases on these lands have risen, and farming has been increasingly individualized—i.e., lease parcels have become smaller and more numerous—due to the increased demand. Outright sales, also illegal, do not appear to have increased, however, and landholdings by affectation have also not become substantially more fragmented.⁹⁷

Thus, the technological changes wrought by the state have resulted in some new patterns of demand for and usability of land. These patterns have somewhat destabilized traditional social structures and their modes of access to land, especially where low-caste *gniagnbe* and *mathioubé*, often in co-operatives, have gained access to land. But these effects have been limited and, because leases are illegal under the LDN, tenant farmers typically do not seek to have the land affected to them.

The limited availability of credit clearly limits farmers' opportunities to invest in their lands. Most farmers, including the *affectaires*, do not have full title to the land, nor much other property as collateral. This lack directly slows development by depriving the farmers of the means of improving land. It also operates indirectly: elites with better access to capital have a greater capacity to effect

⁹⁴ *Ibid.*, 16; Niasse, *op. cit.*, n. 40, 170.

⁹⁵ Salem-Murdock and Niasse, *op. cit.*, n. 91, 16–17.

⁹⁶ Interview with Sagna and Liakos, *op. cit.*, n. 71; Mathieu, Niasse and Vincké, *op. cit.*, n. 27, 232.

⁹⁷ Platteau, *op. cit.*, n. 8, 142–143; interview with Sagna and Liakos, *op. cit.*, n. 71; interview with Bâ, *op. cit.*, n. 85.

the land's *mise en valeur*, and are thus more likely to have land affected to them, reducing the tenure security of the (usually poorer) farmers on the land.⁹⁸

NGOs such as the *Projet Intégré de Podor* (PIP) and parastatals such as the SAED and the *Société nationale du crédit rural* (SNCR) have attempted to extend rural credit themselves.⁹⁹ But these programmes have not been self-sustaining because farmers facing poor weather and unreliable distribution networks have not been able to make regular payments. The loans are inadequately collateralized by design to include farmers without sufficient private property, and the NGOs and parastatals encourage farmers to use irrigation, pesticides and fertilizers that cost as much as the average annual earnings from crop sales.¹⁰⁰

The government has also promoted climatically unsuitable crops, such as rice or groundnuts, especially through the SAED, to meet high demand in the consumer market. Rice in particular requires extensive irrigation. In addition, growing only one or two crops increases the risk to the farmer, compared to a more diversified portfolio of crops. The policy of financing and subsidizing irrigation and providing inputs is intended to decrease opposition by farmers to the Manantali Dam: consideration of agricultural issues were secondary to power generation in the planning of the dam and intended mainly to counteract the harm done by the disruption of the floods.¹⁰¹

The early stages of government disengagement also contributed to farmers' indebtedness. During this period, the SAED and the *Office national de coopération et assistance pour le développement* (ONCAD) undertook projects that could be *rentabilisés*—i.e., that could generate a profit—to defray the high cost of the Manantali and Diama dams. The SAED expanded its credit operations and cut back on its direct subsidies, but still endorsed improvements as conditions for obtaining credit. These programmes failed to consider farmers' general lack of access to insurance markets, or even to the monetized economy.¹⁰² The attempt to *rentabilize* the projects has failed as many farmers have defaulted on their loans.¹⁰³

These failures were especially acute during the low-rainfall years of the 1980s and early 1990s; because of these defaults, the government has often appropriated the land itself and leased it to foreign agribusinesses, or turned a blind eye when Rural Councils have affected land to outside entrepreneurs. These practices highlight the contradiction in the LDN between the goals of securing the tenure of farmers already working the land and local control over allocation, and those of maximizing domestic crop production.¹⁰⁴

The irrigated perimeters also often fail to increase crop yields, in part because the farmers may lack adequate training in the construction and maintenance of the perimeters. Irrigation works are frequently without appropriate drainage

⁹⁸ Other factors also slow development such as lack of access to reliable distribution networks, the state's appropriation of large tracts of land (though this practice has abated in recent years), and uncertainty about the status of Mauritanian refugees. See Fall, *op. cit.*, n. 90, 4; Niasse, *op. cit.*, n. 40, 93–94.

⁹⁹ Fall, *op. cit.*, n. 90.

¹⁰⁰ Interview with Sagna and Liakos, *op. cit.*, n. 71; Niasse, *op. cit.*, n. 40, 93–94; Caverivière and Débène, *op. cit.*, n. 3, 282–283.

¹⁰¹ Fall, *op. cit.*, n. 90; “Les enjeux fonciers dans le Delta”, *op. cit.*, n. 54.

¹⁰² Interview with Sagna and Liakos, *op. cit.*, n. 71; interview with Amadou Sow (president of *Gestion villageoise de l'espace naturel de Podor*, N'dioum), 24 June, 1996, in N'dioum; Fall, *op. cit.*, n. 90; “Les enjeux fonciers dans le Delta”, *op. cit.*, n. 54.

¹⁰³ Niasse, *op. cit.*, n. 40, 92.

¹⁰⁴ Mathieu, Niasse and Vincké, *op. cit.*, n. 27, 236–237.

networks, and the standing water causes salts to leach up from beneath the surface. This process facilitates increased crop yields in the short term, because of the more intensive use of the water, but the rapid salinization of the soils causes substantial decreases in crop yields within three to four years. The land then takes years to recover from this unproductive state. Farmers then leave this land, and seek new allocations of unused plots and subsidies for their irrigation, resulting in an "itinerant irrigated agriculture".¹⁰⁵ In such a system, tenure security becomes unimportant because the investments actually decrease productivity in the long term.

The state has not adequately funded efforts by the CERPs to remedy this situation, and the problem has worsened since control of the perimeters passed from the SAED to the Rural Communities, which lack any technical expertise. The benefits of increasing technical expertise may be limited, however, as even the best-drained irrigation systems cause some salinization of topsoil.¹⁰⁶ Some have suggested that the state should completely disengage from agriculture and stop subsidizing irrigation entirely.¹⁰⁷

Proponents of technical training insist that the technical complexity of capital improvements and new techniques are a significant but surmountable obstacle to development, and that training complements development. Or farmers may become intimidated by costs and the complexity, and decide not to undertake the projects.¹⁰⁸ But, as mentioned, the national government has withdrawn from agriculture since the mid-1980s, under structural adjustment programmes,¹⁰⁹ which at least promises to reduce the effects of the costly and inappropriate loan schemes it has thrust on local farmers. Still, many farmers remain indebted, and the government's withdrawal of technical support has led to the degradation of soils. In any case, the withdrawal of the state cannot improve the security of the small farmer's tenure and private rural credit has not appeared now that conditional state credit has dried up.

NGOs including the *Projet Intégré de Podor* (PIP) and the newer *Gestion villageoise de l'espace naturel de Podor* (GVEP) probably cannot change the institutional regimes that define land rights in the study region. They can, however, assist farmers in improving their productivity and incomes. Cyclically, increased assets may also eventually improve farmers' access to credit; and both greater wealth and the participatory modes of these NGOs strengthen farmers' institutions, their position in rural society and the security of their tenure.

Local NGOs have attempted to popularize methods of resource conservation and assessment.¹¹⁰ As a result, communities have developed and implemented their own natural resource management plans. The participatory assessments have also led the farmers to request further training where they see a need. At the very least, farmers will presumably develop a sense of ownership of these

¹⁰⁵ Thiam, *op. cit.*, n. 72.

¹⁰⁶ *Ibid.*

¹⁰⁷ Caverivière and Débène, *op. cit.*, n. 3, 293.

¹⁰⁸ Sylla, *op. cit.*, n. 18, 70.

¹⁰⁹ *Décret No. 87-720, 4 avril 1987, Portant le reversement de certaines Zones pionnières dans la Zone des terroirs*. The report accompanying the decree suggested that local control would provide better resource management. *Rapport de la présentation du projet du Décret portant le reversement de certaines Zones pionnières dans la Zone des terroirs*, Dakar, 1987. See also Salem-Murdock and Niasse, *op. cit.*, n. 91, 7; Niasse, *op. cit.*, n. 40, 82-83.

¹¹⁰ GVEP has developed its own *Méthode accélérée de recherche participative* (MARP) and *Méthode accélérée de planification participative* (MAPP)—a more participatory version of the Peace Corps' Rapid Rural Appraisal—and translated these tools into Pulaar.

tools they have requested, and should use and maintain them more consistently than they did under state-imposed plans. Finally, GVEP is attempting to understand and catalogue local, traditional measures for maintaining or increasing productivity, which may be transferable.¹¹¹

These local actors have developed such programmes in response to the negative effects of the programs of the SAED, ONCAD, and other development agencies' programmes on farmers' motivation, co-operation and productivity. These effects resulted from the agencies' excessive intervention in the farmers' day-to-day operations, often in ignorance of local agricultural conditions and social relations. In some instances, the SAED usurped the role of the Rural Councils, and made affectation decisions on some of the *zones des terroirs*. The ONCAD did sponsor infrastructure projects, including schools, markets, pharmacies and clinics, but it concentrated these projects in the larger towns. Most of the parastatals' lands have reverted to the *zones des terroirs*, under the Rural Councils' control.¹¹² The NGOs have attempted to step into the technical void left by the parastatals with methods they consider more appropriate and sustainable. Their long-term effects have yet to be measured.

There is also a major recent lacuna in the state's control over rural lands. For several years, farmers have been able to buy land already affected to them, by ceding a third of it to the state and acquiring freehold title to the rest, or by paying the state for title to the whole tract. However, the existence of this opportunity is not widely known, especially in the study region, and most farmers can afford neither the large fee for the purchase of the land, nor the sacrifice of a third of the area. Similarly many farmers work land that is not officially allocated to them, and therefore, land titling has not yet become a significant phenomenon.¹¹³

CONCLUSIONS

On paper, the *Loi relative au Domaine national* seems to provide significant tenure security, which should at least result in an optimal level of investment in land by the *affectaire*, especially given its provision for compensation for improvements made. The administration of land by the Rural Councils and the prohibitions on sales, however, keep land from being efficiently distributed to those best able to use it. But this is a choice of economic models and social functioning: rather than allowing the often harsh free market to operate in the already difficult conditions of the Western Sahel, the LDN leaves the allocation of land for productive use to municipal bodies, and prohibits the taking of land from *affectaires* currently using it.

In fact, the system as administered entails a number of additional costs. Lower castes have made some inroads into control of irrigated perimeters, due in part to a new-found solidarity in some co-operatives and castes. The LDN's requirement that the *affectaire* reside in the Rural Community strengthens their claim against outside entrepreneurs, and the requirement that the *affectaire* or his family farm the land further buttresses them against elites seeking to invest in the land. But the Rural Councils apply these requirements irregularly, if at all,

¹¹¹ Interview with Sagna and Liakos, op. cit., n. 71; interview with Sow, op. cit., n. 102.

¹¹² Niang, op. cit., n. 57, 107-108; Caverivière and Débène, op. cit., n. 3, 306.

¹¹³ Interview with Gaspar Goumis (private farm owner, Casamance), 13 June, 1996, in Dakar; "Les enjeux fonciers dans le Delta: Les obstacles à la réforme", (21 June, 1990) *Le Soleil* 2.

and the reading of the LDN dictating that the council should affect land to the party able to use it most productively may be used to support allocation to wealthy entrepreneurs.

This mandate of optimal productive use thus often conflicts with the requirement that those using their land be allowed to continue doing so, where the current users are poor farmers, as well as with the personal use and (sometimes) the residency requirements. The contradiction between these mandates allows councils to choose an outcome on other bases and justify it as they will. When conflicts do arise between users and elites, the elites almost always prevail, even when the lower-caste parties have a faction of councillors behind them. All of these patterns weaken the small tenant farmer's tenure security, as do conflicts due to unclear boundaries.

A cadastral survey could resolve at least the conflicts relating to the delineations of individuals' holdings and municipalities' jurisdictions. To date, its costs have remained prohibitively high. But there are also traditional methods to define the limits of land.¹¹⁴ Thus, the absence of a cadastral survey is felt mainly in the context of more modern situations and institutions that exceed the boundaries of small traditional communities, such as Rural Communities. In short, the current land tenure system needs a cadastral survey mainly to resolve the significant problems created by modern land tenure issues.

In a sense, the very existence of the Rural Council may itself generate, or at least extend conflict. The possibility of contesting another's claim to land before the council, where this organ is distinct from the traditional authorities, provides an alternative arena for conflicts over land. The possibility of taking conflicts to this second arena may extend them beyond the point where traditional authorities would have resolved the conflicts in favour of one party.

The small farmers can only rival the investment capabilities of elites with state assistance, which still comes with strings of heavy and often inappropriate tutelage attached. This state involvement usually results in sub-optimal productivity, in spite of the farmers' enhanced investment capacity. Alternatively, small farmers lie about their investment capacity in order to have land affected to them, with the result that their productivity does not meet the claims of their affectation applications.

Instability, vagueness and insufficient capacity seem endemic to state action in Senegalese agriculture. Parastatals, large corporations and local actors have been engaged in a tug-of-war over the last 25 years, with decreasing state involvement in agriculture in approximately the last decade. Recently, the government has turned a blind eye on the occasions where the councils have themselves taken these large tracts formerly run by parastatals and leased them to corporations. This shifting matrix of actors and authority can only weaken the perceived and actual security of the users of the land.

Similarly, Rural Councils could improve their administration of land affectations by maintaining accurate registries and by establishing *Commissions domaniales*, but these tools require unavailable resources and political will. Where the councils have created such commissions, the latter have been largely co-opted by traditional elites. The few instances where the commissions have operated independently, or where some portion of the councils has sought to protect co-operatives from

¹¹⁴ Caverivière and Débène, op. cit., n. 3, 298–299.

expropriations by elites have typically led to conflict and a breakdown in the council's operations.

Therefore, land users' relative powerlessness raises equity concerns, while tenants' traditional obligations—and their insecurity due to conflict and the legal bias against users with lesser investment capabilities—entail efficiency costs. The recent responses of local NGOs reflect this insecurity: rather than assisting farmers in installing land-specific improvements, such as irrigation works, the NGOs have largely undertaken projects that build transferable capacity and skills. The ultimate removal of land from the control of local, small farmers probably has its own, further efficiency costs, since small farms produce more efficiently, especially where the cost of labour relative to capital is low and where the small farm uses family labour.

In comparison, a purely traditional tenure system may actually provide more secure tenure, especially where the reciprocity of feudal or caste relations remains strong. The landholders have few opportunities to remove the users of the land, as long as the latter continue to use the land productively and to pay the appropriate share of the crops. The increasing monetization of the rural economy and mobility of rural populations probably have weakened the sense of reciprocal obligation between elites and small farmers, but it should not be taken for granted that traditional tenure systems are automatically less secure than modern ones. The traditional tenure systems in the Fuuta also provide a form of credit, the *njimaandi* where the *assakal* is paid after the land has been farmed. In contrast, farmers of *kedde leydi*, pay the *ndjoldi* share before planting. The difference between the *ndjoldi* and the *assakal*—the latter is typically a larger share—represents interest.

The continued strength of the traditional elite largely results from the lower castes' general support of traditional structures, in part for religious reasons. Land users' strong resistance to becoming a "rural working class", especially compared to their relative acquiescence in the traditional system of share-cropping, demonstrates this support. That Rural Councils controlled by traditional elites can resist the creation of *Commissions domaniales* plainly conceived to further the explicit technocratic ends of the LDN also shows the strength of these elites relative to the state apparatus.

Creating a more equitable or efficient system would require the redefinition of underlying social and religious tenets and relations, a process that may have begun. Some lower-caste actors have wilfully challenged the traditional elites. Some elite landholders' self-designation as *propriétaires*, a concept that violates the traditional narrative of communal ownership, may have emboldened the lower-caste claimants. On the other hand, the elites' symbiotic relationship with the national PS gives them bureaucratic legitimacy as well. The costly current conflicts and the insecurities they produce are probably less than the conflicts that could arise if traditional elites' authority were more seriously challenged.

Land users' resistance to becoming a "rural working class" also underlines their sense of spiritual attachment to the land, which a traditional patron's control does not interrupt while a capitalist employer's does. This attachment creates doubts as to whether a system of freely alienable, individually-owned land would, in fact, be more efficient, since users value it for its spiritual worth as well as for its productivity. Economists might view a valuation that does not reflect economic production as a market failure that should be corrected. But

that view ignores that such a change might be impossible to effect intentionally, or that it would at least require the disintegration of current social relations and trust, at a high cost.

It is thus unclear that “modern” land rights of any sort are necessarily more efficient than the traditional tenure arrangements of the Fuuta Tooro. Rather, the instability of the current, overlapping forms of authority lend themselves to an unpredictable and often personal and subjective use of that authority. The commodification and monetization of rural markets are gradually breaking down traditional relations, but these remain strong enough. And the Senegalese government has not yet articulated a coherent plan for commodifying land. The state and its Bretton Woods tutors should undertake such a programme with caution, however, given the historical tendencies for titling schemes to result in inequitable and inefficient concentrations of land ownership; a system aiming at control of land by co-operatives is better suited to take advantage of low labour costs, and to prevent the disenfranchisement of small farmers.

Reforms of the system require more participatory, dialogic and capacity-building forms of state assistance, careful consideration of the ecological context; resistance against concentration in the process of liberalization, and the establishment of a firm, transparent and accountable system of administration and oversight. It may be difficult to meet these conditions, given the influence of urban and traditional elites and the uprooting of social relations through land that such reforms are likely to entail. However, each of these conditions must be met to end this period of unstable land regimes in the Fuuta Tooro and establish a system of land tenure that allows the region to produce food with equity and efficiency.

EPILOGUE: DECENTRALIZATION

Recently, the national government has continued to downsize, as part of its latest structural adjustment plan. To this end, it passed a series of laws in early 1996 decentralizing authority and ceding more to local political actors. Presumably, this reform will result in fewer subsidies to small farmers and less oversight of agriculture. Other than this effect, it is difficult to see how decentralization will affect land rights in rural Senegal. In the rare instances where a higher administrative actor, such as the prefect, might have sided against the elites, the reforms will probably constrain him from doing so now. Conversely, where co-operatives or other groupings of mostly lower-caste actors successfully challenge elites at the Council level, those elites will presumably have a limited ability to seek intervention from above. But these are cases at the margin, and the decentralization is unlikely to change the essence of land rights, given the extent to which they were already decentralized.