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Land Inequality: A Comparison of Census Data and Property Records in Twentieth-Century Southern Costa Rica

MARC EDELMAN

MITCHELL A. SELIGSON

At least since the time of Aristotle, inequality has been seen as the cause of revolution and social unrest.¹ James Madison supported his argument for the U.S. Constitution with this premise, while it strongly influenced Alexis de Tocqueville's views of the strength of democracy in America.² And using its modern form, John Rawls has articulated a theory of fairness that rests on redistribution as the basis for what he terms "distributive justice."³

Most twentieth-century revolutions have been linked to a particular

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1. "Inferiors revolt in order that they may be equal, and equals that they may be superior." Aristotle, *The Politics*, cited in Lee Sigelman and Miles Simpson, "A Cross-National Test of the Linkage Between Economic Inequality and Political Violence," *Journal of Conflict Resolution* 21:1 (1977), 106.

2. In *The Federalist no. 10*, Madison wrote, "the most common and durable source of faction is the various and unequal distribution of property." Cited in James Chowning Davies, *When Men Revolt and Why* (New York: Free Press, 1971), 86. In *Democracy in America* de Tocqueville declared, "Remove the secondary causes that have produced the great convulsions of the world, and you will almost always find the principle of inequality at the bottom." *Democracy in America*, 4th ed. (New York: J. and H. Langley, 1841), 2:268. De Tocqueville specifically says that small property owners have much to lose from revolution and so oppose it (pp. 269–70).

3. John Rawls, *A Theory of Justice* (Cambridge: Belknap Press, Harvard Univ., 1971), 303.

form of inequality, namely, agrarian inequality.⁴ Marie Antoinette's "let them eat cake" retort to those too poor to buy bread was echoed in 1910 by a Mexican hacienda owner who, mocking peasant demands for land, declared, "let them farm in a flowerpot."⁵ As Friedrich Katz and others have shown for the Mexican Revolution, the "land issue" was central.⁶ Modern "peasant wars" (to use Eric Wolf's term) in China, Vietnam, Cuba, Nicaragua, El Salvador, and now Chiapas, Mexico, have all been associated with struggles over land.⁷ Samuel P. Huntington, in his classic book on development and stability, articulates the explanation for these agrarian revolutions: "Where the conditions of land ownership are equitable and provide a viable living for the peasant, revolution is unlikely. Where they are inequitable and where the peasant lives in poverty and suffering, revolution is likely, if not inevitable, unless the government takes prompt measures to remedy these conditions."⁸

The hypothesized connection between land inequality and the violence it is thought to engender has not, however, been supported consistently by quantitative studies based on census data. Edward Muller and Mitchell Seligson, for example, use a worldwide, cross-national data set to dispute many of the prior studies, finding no direct linkage between land distribution and insurgency.⁹ In a review of these equivocal studies, Manus

4. Even the Bolsheviks' rise to power in 1917, while not a peasant revolution, had strong agrarian overtones. Bolshevik promises of "peace, bread, and land" spurred massive desertions in the Russian army, and many soldiers clearly hoped to obtain farms by backing the largely urban revolutionaries' bid for power.

5. John Womack, Jr., *Zapata and the Mexican Revolution* (New York: Vintage Books, 1968), 63.

6. Friedrich Katz, "Rural Rebellions After 1810," in *Riot, Rebellion, and Revolution: Rural Social Conflict in Mexico*, ed. Katz (Princeton: Princeton Univ. Press, 1988), 551-60; Paul Friedrich, *Agrarian Revolt in a Mexican Village* (Englewood Cliffs: Prentice Hall, 1970); John Tutino, *From Insurrection to Revolution in Mexico: Social Bases of Agrarian Violence, 1750-1910* (Princeton: Princeton Univ. Press, 1986); Arturo Warman, *Y venimos a contradecir. Los campesinos de Morelos y el estado nacional* (Mexico City: Casa Chata, 1976).

7. Eric R. Wolf, *Peasant Wars of the Twentieth Century* (New York: Harper and Row, 1969).

8. Samuel P. Huntington, *Political Order in Changing Societies* (New Haven: Yale Univ. Press, 1968), 375. Prosterman and Reidenger explain the connection this way: "Land is the chief source of livelihood, security, and status for most people in the less-developed countries. . . . Thus, it should not be surprising that in many societies the principal subject of grievances and the principal occasion for blame should be land-related; specifically, that a very high proportion of the most violent twentieth-century civil conflicts should have occurred in situations where a substantial percentage of the population was blocked, by human agents, from having a secure and remunerative relation with the land they tilled." Roy L. Prosterman and Jeffrey M. Reidenger, *Land Reform and Democratic Development* (Baltimore: Johns Hopkins Univ. Press, 1987), 10.

9. Edward N. Muller and Mitchell A. Seligson, "Inequality and Insurgency," *American Political Science Review* 81:2 (June 1987), 425-51.

Midlarsky argues that the weak or nonexistent empirical relationship is a function of the use of the wrong measures of land inequality, especially the Gini index.¹⁰ Another critic of the Gini index, in turn, dismisses Midlarsky's new approach, and proposes yet another set of measures.¹¹

While social scientists debate the measures, historians are generally more concerned with the quality of the data. A common thread in quantitative studies of land inequality is that virtually all of them rely on the same data base: agricultural censuses. This essay will show that the use of the agricultural censuses alone is likely to lead to erroneous conclusions because of systematic biases in that type of data.¹² At the same time, this essay seeks to demonstrate that census data, despite their flaws, can make a valuable contribution to the understanding of land distribution when combined with cadastral and land registry data. The analysis takes advan-

10. Manus I. Midlarsky, "Rulers and the Ruled: Patterned Inequality and the Onset of Mass Political Violence," *American Political Science Review* 82:2 (June 1988), 491-509. Midlarsky asserts that use of the Gini index of inequality, the top 20 percent of the distribution or other measures of "generalized inequalities" (p. 493), is inappropriate. Rather, he argues, we should look at "patterned inequality." Using data from 20 Latin American and 5 Middle Eastern countries, his study supports the view that patterned inequality is related to political violence. But those results are disputed in Edward N. Muller, Mitchell A. Seligson, and Hung-der Fu, "Land Inequality and Political Violence," *American Political Science Review* 83:2 (June 1989), 577-87.

The Gini index is a measure of aggregate inequality based on the Lorenz curve, which describes distribution of income, land, or other assets (measured in percentages along the *y* axis) among a population (percentages along the *x* axis). The measure ranges from 0 (absolute equality) to 100. For full discussions of the Gini index and alternative measures, see Philip B. Coulter, *Measuring Inequality: A Methodological Handbook* (Boulder: Westview Press, 1989), 50-58; Amartya Sen, *On Economic Inequality* (Oxford: Clarendon Press, 1973); Courtland L. Smith, "Patterns of Wealth Concentration," *Human Organization* 50:1 (Spring 1991), 50-60.

11. Charles D. Brockett, "Measuring Political Violence and Land Inequality in Central America: A Research Note," *American Political Science Review* 86:1 (Mar. 1992), 169-76. Brockett shows that while the Gini index for the five Central American republics varies only slightly, the percentage of all land in large estates does show greater variation. He also emphasizes the use of multiple indicators, including smallholders as a percentage of all operators, and the percentage of rural families without land, a measure suggested earlier by Mark J. Ruhl. See Ruhl, "Agrarian Structure and Political Stability in Honduras," *Journal of Interamerican Studies and World Affairs* 26:1 (Feb. 1984), 47.

12. To focus on methodological issues in the study of land tenure, we deliberately devote little attention to historical-cultural factors that mediate the relation between agrarian inequality and unrest. This is not to minimize, however, the importance in understanding social unrest of factors such as the legitimacy or illegitimacy of regimes, the flexibility or intransigence of elites vis-à-vis subalterns, the existence of viable political alternatives, and the processes through which subordinate groups become conscious of shared problems, form organizations and alliances, and shift from quiescence to mobilization. Indeed, the failure of comparative quantitative studies to arrive at clear-cut conclusions likely results both from problems with the data—the main concern of this paper—and inattention to such mediating factors.

tage of a rich set of computerized census data, coupled with cadastral, property, and mercantile registry records that allow the examination of the same physical area through different lenses and over time.¹³

The data all come from Costa Rica, with a special focus on one area undergoing settlement during the period for which agricultural censuses are available. The particular context of this study also allows it to address the debate over land inequality and violence in the historical literature on public land policies and colonization. In addition to the documentary sources, interviews with early colonists and current residents of the region proved crucial in enriching understanding of on-the-ground processes. Oral sources, which frequently “compensate chronological distance with a much closer personal involvement,” also provided otherwise-unavailable insights into the motivations of key actors, such as the large landowners who redistributed their holdings to peasant colonists.¹⁴

We make no claim that the study region is representative of all of Costa Rica, much less of Latin America as a whole; but we do believe that comparing the picture of the evolution of land concentration that emerges using census data with the picture derived from property registry data is highly revealing and suggestive of processes and problems found elsewhere. This holds true especially because the data set for this study is comprehensive, covering as it does all census data and much of the relevant land registry data for virtually the entire time that nonindigenous populations have lived in the region.

The Debate over Land Concentration and Colonization in Latin America

Latin America, long characterized as having an agrarian structure polarized between latifundio and minifundio, would seem an ideal region

13. Cadastral plans have rarely been used in historical research in Costa Rica. Some scholars mistakenly lament that few historical maps of properties exist. See Carolyn Hall, *El café y el desarrollo histórico-geográfico de Costa Rica* (San José: Editorial Costa Rica y Universidad Nacional, 1976); Wilder Gerardo Sequiera Ruiz, *La hacienda ganadera en Guanacaste: aspectos económicos y sociales, 1850–1900* (San José: Editorial Universidad Estatal a Distancia, 1985). Others erroneously claim that large properties usually escape cadastral survey. See George W. Hill, Manuel Gollás Quintero, and Gregorio Alfaro, *Un área rural en desarrollo, sus problemas económicos y sociales: Costa Rica* (San José: Instituto Universitario Centroamericano de Investigaciones Sociales y Económicas, 1964), 6; Irene Aguilar and Manuel Solís, *La élite ganadera en Costa Rica* (San José: Editorial de la Universidad de Costa Rica, 1988), 160. Similarly, a recent review essay on Costa Rican sources mentions neither the cadastral office nor the public property registry. Richard J. Junkins, “Historical Sources in Costa Rica,” *Latin American Research Review* 23:3 (1988), 117–27.

14. Alessandro Portelli, *The Death of Luigi Trastulli and Other Stories: Form and Meaning in Oral History* (Albany: State Univ. of New York Press, 1991), 52.

for linking land inequality closely and directly to rebellion. Yet recent historical research is challenging the image of an ubiquitous latifundio-minifundio division; indeed, an increasing number of studies now point to the importance of small family farms, even in areas thought to be dominated by large landholdings. If the conventional image of land tenure is partially or largely incorrect, then it would follow that efforts to link land inequality to rebellion would be unsuccessful.

Less than a decade ago, in an overview of late nineteenth- and early twentieth-century Latin America, Arnold J. Bauer observed: "a fairly small but economically important number of rural people were small and medium-sized farmers," living in well-known "pockets" of smallholding agriculture, such as the Bajío in Mexico, central Costa Rica, and Antioquia in Colombia.¹⁵ In recent years, a growing number of scholars have pushed Bauer's point further, moving geographically beyond the "pockets," arguing for the centrality of commercial smallholder production even in zones dominated by latifundios, and noting that the existence of large properties did not always actually prevent peasants from gaining access to land. Summing up this paradigmatic shift, a new appraisal by William Roseberry suggests that, in contrast to Bauer's "fairly small number" of market-oriented campesinos, "we may find that such peasantries were more widespread than had been thought, once we know how and where to look for them."¹⁶

The changing focus has been most pronounced in the literature on frontier colonization, public land settlement, and agrarian conflict. Initially, scholars viewed unsettled regions as sources of free land that provided an "escape valve" for tensions that built up in populated areas where peasants were losing access to land. The corollary of this thesis was that the closing of the agricultural frontier produced conflict, whether pervasive violence in Colombia or widespread land invasions in Costa Rica.¹⁷

By the 1970s, however, some historians concerned with colonization and settlement began to articulate a diametrically opposed vision of fron-

15. Arnold J. Bauer, "Rural Spanish America, 1870-1930," in *The Cambridge History of Latin America*, vol. 4, C. 1870-1930, ed. Leslie Bethell (Cambridge: Cambridge Univ. Press, 1986), 156.

16. William Roseberry, "Beyond the Agrarian Question in Latin America," in *Confronting Historical Paradigms: Peasants, Labor, and the Capitalist World System in Africa and Latin America*, ed. Frederick Cooper et al. (Madison: Univ. of Wisconsin Press, 1993), 356.

17. Catherine LeGrand, "Colonization and Violence in Colombia: Perspectives and Debates," *Canadian Journal of Latin American Studies* 14:28 (1989), 7-10; Paul Oquist, *Violence, Conflict, and Politics in Colombia* (New York: Academic Press, 1980), 90-91; José Manuel Salazar Navarrete, "Política agraria," in *Costa Rica contemporánea*, vol. 1, ed. Chester Zelaya (San José: Editorial Costa Rica, 1979), 214-15; Beatriz Villarreal Montoya, *El precarismo rural en Costa Rica, 1960-1980* (San José: Editorial Papiro, 1983), 86-90. See also Emília Viotti da Costa, *The Brazilian Empire: Myths and Histories* (Chicago: Univ. of Chicago Press, 1985), 259, n. 38.

tiers as zones where state concessions and claims of public lands gave rise to giant properties, highly skewed distributions of resources, and considerable social conflict.¹⁸ Land concentration in colonization zones, rather than the “closing” of the frontier per se, thus became a key element in explanations of agrarian conflict. For the most part, this group of scholars derived its picture of frontier land tenure from various kinds of property records (including notarial, legislative, and court documents and correspondence concerning claims), as well as from an earlier, generally traditional yet nonetheless antilatfundista historiography of large estates. These were not always good places to “look for” smallholding peasants.

The antithetical images of the tranquil, democratic agricultural frontier and the violent, latifundist one have also been questioned by another group of authors. While recognizing the significance of large claims in many regions in the early stages of colonization, these critics reassert the importance in pioneer zones of independent, small-scale commercial producers, which either emerged from within the large land claims or existed alongside them.¹⁹ Agrarian structures and processes of geographical and social mobility in colonization zones were, these writers maintain, frequently more fluid and complex than the “conventional wisdom” would have it.²⁰ In particular, they point to another process that may turn out to be “more widespread than had been thought”: landlord- and merchant-sponsored divisions of large properties that contributed to consolidating sectors of small commercial producers.²¹

Historians’ changing views on agrarian structure and social conflict in Latin American colonization zones echo longstanding debates in the social

18. Da Costa, *Brazilian Empire*; Warren Dean, *Rio Claro: A Brazilian Plantation System, 1820–1920* (Stanford: Stanford Univ. Press, 1976), and “The Frontier in Brazil,” in *Frontier in Comparative Perspectives: The United States and Brazil*, ed. Janaina Amado, Woodrow Wilson Center Latin American Program, paper no. 188 (Washington, D.C.: Woodrow Wilson International Center for Scholars, 1990), 15–27; Thomas H. Holloway, *Immigrants on the Land: Coffee and Society in São Paulo, 1886–1934* (Chapel Hill: Univ. of North Carolina Press, 1980); Catherine LeGrand, *Frontier Expansion and Peasant Protest in Colombia, 1850–1936* (Albuquerque: Univ. of New Mexico Press, 1986).

19. Mauricio A. Font, *Coffee, Contention, and Change in the Making of Modern Brazil* (Oxford: Basil Blackwell, 1990); Ezequiel Gallo, *La pampa gringa: la colonización agrícola en Santa Fe (1870–1895)* (Buenos Aires: Editorial Sudamericana, 1983); Michael F. Jiménez, “Traveling Far in Grandfather’s Car: The Life Cycle of Central Colombian Coffee Estates. The Case of Viotá, Cundinamarca (1900–30),” *HAHR* 69:2 (May 1989), 185–219; Mario Samper, *Generations of Settlers: Rural Households and Markets on the Costa Rican Frontier, 1850–1935* (Boulder: Westview Press, 1990).

20. Font, *Coffee, Contention, and Change*, 15.

21. *Ibid.*, 24; Gallo, *La pampa gringa*, 66–70; José Antonio Salas Viquez, “La búsqueda de soluciones al problema de la escasez de tierra en la frontera agrícola: aproximación al estudio del reformismo agrario en Costa Rica, 1880–1940,” *Revista de Historia*, número especial, “Historia agraria” (1985), 107. See also LeGrand, *Frontier Expansion*, 159.

sciences, politics, and philosophy.²² These echoes are, however, largely unacknowledged. If historians, as this essay will suggest, have frequently had a hard time “looking for” smallholding peasantries in property records, social scientists concerned with quantitative studies of land inequality have at times been unable to “see” large estates in the agricultural censuses that constitute their preferred sources of data. These silences and blind spots have important epistemological and methodological implications.

The Reliability of Agricultural Census Data

Do agricultural censuses allow scholars to “see” accurately the size and number of both small properties and large estates? How reliable and valid are the agricultural census data? Unfortunately, we just don’t know. It is perhaps surprising that these questions are not asked very often. Income distribution data have received considerable critical attention, and manuals on rural survey research routinely warn of potential problems in posing sensitive questions about property and production, such as those typically asked by census takers.²³ Rather than speaking to these concerns, most authors offer general caveats about the reliability and validity of their data sets, tending to assume explicitly or implicitly that errors in the data are random, with a more-or-less equal impact across all farm sizes and all national censuses.

Population census data normally undergo far greater scrutiny in the historical and social science literature and in political debate.²⁴ In the United States, for example, where the population census is used to apportion legislative seats and to determine the distribution of federal funds for state and local projects, the validity of population census data has been subject to court tests, such as the recent challenges to the 1990 census.

Population census data are, of course, easier to validate than agricul-

22. They also reflect a dialogue with mythic, nineteenth-century images of the frontier in North American historiography and Latin American social thought. See Alistair Hennessy, *The Frontier in Latin American History* (Albuquerque: Univ. of New Mexico Press, 1978).

23. Jacques Lecaillon et al., *Income Distribution and Economic Development: An Analytical Survey* (Geneva: International Labor Office, 1984); Hsin-Pao Yang, *Fact-finding with Rural People* (Rome: Food and Agriculture Organization of the United Nations, 1955), 63.

24. Lutz K. Berkner, “The Use and Misuse of Census Data for the Historical Analysis of Family Structure,” *Journal of Interdisciplinary History* 5:4 (Spring 1975), 721–38; Norman Carrier and John Hobcraft, *Demographic Estimation for Developing Societies: A Manual of Techniques for the Detection and Reduction of Errors* (London: London School of Economics, Population Investigation Committee, 1971); Jerome M. Clubb, Erik W. Austin, and Gordon W. Kirk, Jr., *The Process of Historical Inquiry: Everyday Lives of Working Americans* (New York: Columbia Univ. Press, 1989); Charles Hirschman, “The Meaning and Measurement of Ethnicity in Malaysia: An Analysis of Census Classifications,” *Journal of Asian Studies* 46:3 (Aug. 1987), 552–82.

tural census data. They tend to follow predictable and well-known patterns; demographers can search for and detect internal inconsistencies and adjust for deviations.²⁵ Undercounting, for example, a problem common in many urban areas in the United States and elsewhere, can be checked by detailed recounts of selected areas, and adjustments can be made on the basis of projections from those recounts. Inconsistencies may be probed by comparing intercensal population growth with growth predictions based on migration estimates and the natural increase reflected in vital statistics.

Agricultural census data are more difficult to validate, for two reasons. First, land tenure data conform to no obvious or logical pattern. Census bureaus know the total land area for each territorial subdivision, but not how much of that land is owned or how it is distributed. Second, agricultural censuses gather data primarily on assets and production, topics inherently more sensitive than household demographic characteristics.

To compound the problem, distortions in agricultural censuses have a much greater impact on validity than do distortions in population censuses. Demographic information about a single individual or household has only a minuscule impact on the overall population data for a given area, while the omission of all or part of a single large farm occupying a significant portion of the land in a given area will distort census results rather dramatically. Compare, for example, the minor distortions introduced into a population census because of the well-known tendency of individuals in certain age cohorts to understate, exaggerate, or round off their ages, and the gross distortions produced in agricultural census data when latifundio owners fail to report their land or report only a fraction of what they actually own.²⁶

An Alternative Approach: Combining Land Records with Census Data

Despite their infrequent use by social scientists, land records have long been recognized as another source that can be used in conjunction with or

25. Carrier and Hobcraft, *Demographic Estimation*; William Brass, *Population Projections for Planning and Policy*, Papers of the East-West Population Institute no. 55 (Honolulu: East-West Population Institute, 1978); Samuel H. Preston, "An Integrated System for Demographic Estimation from Two Age Distributions," *Demography* 20:2 (May 1983), 213–26.

26. For example, in societies that value youthfulness, individuals in their early forties may report their age as 39. In African countries where elders are highly regarded, older men may exaggerate their age. Carrier and Hobcraft, *Demographic Estimation*, 2–5. In many places, those unsure of their exact age may round to the nearest number ending in 0 or 5, thus producing a telltale "heaping" in the age distribution of the censused population. Clubb, Austin, and Kirk, *Process of Historical Inquiry*, 80–81.

in lieu of census data. In a review of quantitative methods in rural landholding, for example, Robert P. Swierenga concluded, "if land records were to receive as much attention from quantitative scholars as census records, our knowledge of rural landholding and tenancy would be considerably advanced."²⁷

This article seeks to advance both the social science debate over the inequality-insurgency linkage and the historiographic debate over the "true" picture of land distribution. We do this by examining a significant, though rarely addressed, epistemological question: the validity of the agricultural data that underlie both discussions. We argue that land records and census reports are created for different administrative or bureaucratic purposes and that each contains systematic biases that contrast with those of the other. State data gathering is always inherently political and, depending on just how it is perceived and implemented, it may be expected to generate resistance or compliance from different sectors of the population.²⁸ Obviously, neither agricultural census data nor land records can ever provide more than an imperfect picture of on-the-ground reality. Nevertheless, some "representations" are better than others. We maintain that utilization of both types of data—census and land records—is likely to yield a more accurate synchronic and diachronic account of land distribution patterns in a given region or country than would either type alone.

Our two central, interconnected theses are as follows. First, an inverse relationship exists between farm size and the probability of a landowner reporting that farm to the census taker. Second, a positive relationship exists between the size of a farm and the probability of a landowner legally registering the property with the competent government agency.

Large landowners have an interest in precisely describing and registering properties with cadastral survey or land offices in order to use them as collateral for bank loans and, especially in recently colonized zones, to protect them from competing claims.²⁹ At the same time, landowners

27. Robert P. Swierenga, "Quantitative Methods in Rural Landholding," *Journal of Interdisciplinary History* 13:4 (Spring 1983), 807–8.

28. Roger J. P. Kain and Elizabeth Baigent, *The Cadastral Map in the Service of the State: A History of Property Mapping* (Chicago: Univ. of Chicago Press, 1992).

29. Marc Edelman, *The Logic of the Latifundio: The Large Estates of Northwestern Costa Rica Since the Late Nineteenth Century* (Stanford: Stanford Univ. Press, 1992), 92; Carlos Sáenz P. and Foster Knight, "Aspectos jurídicos y económicos de la titulación de tierras en Costa Rica," *Revista de Ciencias Jurídicas* 20–21 (Oct. 1972), 184. Mario Barrantes Ferrero contends that large landowners in Costa Rica may seek to avoid registering properties with the cadastral office because this will bring greater tax liabilities. Barrantes Ferrero, *El catastro rural. Visión global* (San José: Instituto Geográfico Nacional, 1975), 9. William Roseberry, using Holloway as a basis, makes much the same argument for late nineteenth-century Latin American coffee zones: "One of the remarkable features of the coffee economy . . . is the resistance of large landholders to land surveys and registries."

are less likely to provide accurate information to census takers. Agrarian reform agencies often use census reports to make decisions about where to expropriate properties; and those gathering the data are usually local schoolteachers or other government officials whose promises of confidentiality, and perhaps even political sympathies and motives, may be suspect. Small farmers, however, frequently lack the financial resources and political connections required to complete the complex process of land registration.³⁰ Yet precisely because they have little to hide, they are far less likely to be evasive with local census takers.³¹ Indeed, some small farmers even view reporting land to the census taker as a surrogate method of staking a claim; it increases tenure security by providing some recognition of ownership in official documents.

In the pages that follow, we present two rather different portraits of land distribution in southern Costa Rica. The first, based on the census

Roseberry, "La Falta de Brazos: Land and Labor in the Coffee Economies of Nineteenth-Century Latin America," *Theory and Society* 20 (1991), 361. But Holloway actually notes that large landholders were eager to register claims with local notaries so that they could be used as loan collateral, bequeathed to heirs, or sold; he stresses the "importance of establishing commercially valid title." Holloway, *Immigrants on the Land*, 121. Roseberry also asserts that in Costa Rica "the early establishment of a land registry and survey" allowed smallholders "to protect and defend their holdings." "La Falta de Brazos," 366. We would argue that the latter function was at least as important to large landowners as to smallholders. Moreover, land taxes in Costa Rica and much of Latin America have historically been based on investment or improvements (*mejoras*) and have been inconsequential. Edelman, *Logic of the Latifundio*, 251. For large landowners, nominal taxes have been a small price to pay for the security of possession and the access to credit conferred by having properties legally registered.

30. In a study of Brazilian peasants, Stephen G. Bunker provides a detailed analysis of the costs (travel time, transport, food, lodging, commissions, photocopies, and identity and other documents) involved in trying to register holdings. Smallholders, in Brazil and elsewhere, are unlikely to incur such expenses unless absolutely necessary. Bunker, "The Cost of Modernity: Inappropriate Bureaucracy, Inequality, and Development Program Failure in the Brazilian Amazon," *Journal of Developing Areas* 16 (July 1982), 573–96. Oscar A. Salas Marrero and Rodrigo Barahona Israel estimate, on the basis of surveys of selected areas, that in Costa Rica at least half the farms censused in 1963 did not have legal titles; in Coto Brus, the figure was over 90 percent. These estimates included only properties operated by those claiming to be owners, not those occupied by squatters. Salas and Barahona, *Derecho agrario*, 2d ed. (San José: Publicaciones de la Universidad de Costa Rica, 1980), 352–53. On smallholders' problems in obtaining title in Costa Rica, see Mitchell A. Seligson, *Peasants of Costa Rica and the Development of Agrarian Capitalism* (Madison: Univ. of Wisconsin Press, 1980), 90–92. Governments, with foreign assistance, have attempted to assist small farmers in obtaining land titles. For Costa Rica, see idem, "Agrarian Reform in Costa Rica: The Impact of the Title Security Program," *Inter-American Economic Affairs* 35 (Spring 1982), 31–56. For Honduras, see David Stanfield et al., "The Honduras Land Titling and Registration Experience" (Land Tenure Research Paper, Univ. of Wisconsin, Madison, June 1990).

31. In some developing countries, such as India, various kinds of government benefits may be available to those falling below official poverty lines. In such situations, poorer farmers may also be expected to understate their holdings to census takers. K. Sivaramkrishnan, personal communication.

data used for much social science hypothesis testing, shows the familiar pattern of rising land inequality. The second portrait, based on the land records, shows the inverse: declining inequality. The concluding section attempts to demonstrate how these two portraits can be combined to present a more accurate image of land distribution.

A First Look: Through the Census Lens

This study examines the evolution of land tenure in what today is known as the Cantón de Coto Brus in the province of Puntarenas, located on Costa Rica's southern border with Panama (see map 1). Although only recently settled by nonindigenous colonists, Coto Brus has become a region of major economic importance. By 1984, it was producing an annual harvest of more than 34,000 kilograms of coffee, making it the single largest coffee-producing canton in Costa Rica, a country that has historically depended on coffee for a major share of its export earnings.³²

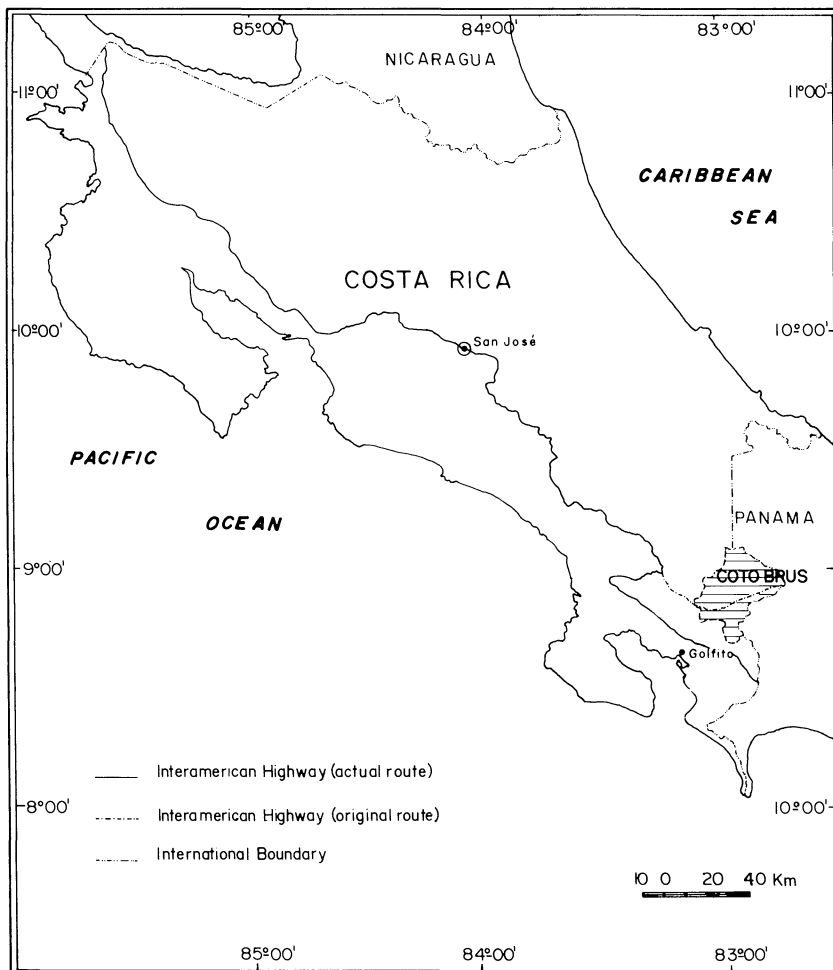
Remote from the major population centers of Costa Rica's central plateau, Coto Brus is usually considered a newly colonized frontier. The peopling of the region nonetheless dates back to sometime between 3,000 and 6,000 B.C.³³ During the period of the Aguas Buenas culture (500 B.C. – 300 A.D.), large, permanent settlements emerged, but by the time of the sixteenth-century Spanish conquest, the population was likely smaller and more dispersed.³⁴ The indigenous inhabitants put up fierce resistance to the Spanish, who never achieved full control of the area.³⁵ One late colonial report, referring to the region's native population, complained that "these barbarians live in round houses or *palenques* that they construct in a few hours from rough poles and dry straw; and they move their vil-

32. Juan R. Quesada and Victoria Ramírez, "La historia reciente de la zona fronteriza de Costa Rica con Panamá," *Revista de Ciencias Sociales* 45/46 (Sept. 1989), 18. The site was chosen not because it looked likely to yield any novel findings related to its land tenure patterns. Rather, its selection stemmed from an entirely different research interest that grew out of the two-year Peace Corps residency there in the 1960s by one of the authors of this essay.

33. Wolfgang Haberland, "The Archaeology of Greater Chiriquí," in *The Archaeology of Lower Central America*, ed. Frederick W. Lange and Doris Z. Stone (Albuquerque: Univ. of New Mexico Press, 1984), 235–36.

34. The "Aguas Buenas" culture apparently flourished no later than 500 B.C., according to Haberland, "Archaeology of Greater Chiriquí," 240. Other archaeologists, however, place it somewhat later, between 0 and 300 A.D. See Luis Ferrero Acosta, *Costa Rica precolombina* (San José: Editorial Costa Rica, 1981), 174–78. On sixteenth-century population, see Bernardo A. Thiel, "Monografía de la población de la República de Costa Rica en el siglo XIX," in *Población de Costa Rica y orígenes de los costarricenses*, ed. Luis Demetrio Tinoco (San José: Editorial Costa Rica, 1977), 56.

35. Ricardo Fernández Guardia, *El descubrimiento y la conquista* (San José: Editorial Costa Rica, 1975), 113–15.



MAP 1: Costa Rica and Coto Brus Canton

lages frequently, always fleeing Spanish domination, which they consider slavery.³⁶ Elements of this mobility persist even in the present among the Guaymí indigenous people, many of whom migrate periodically between Coto Brus and Panama.³⁷

36. León Fernández, *Colección de documentos para la historia de Costa Rica*, vol. 2, *Encomiendas y reducciones, indios no sometidos, Matina* (San José: Editorial Costa Rica, 1976), 280.

37. María Eugenia Bozzoli de Wille, *El indígena costarricense y su ambiente natural*

Viewing history through the eyes of the Hispanic settlers of Costa Rica, the region thus remained virtually uninhabited until at least the early twentieth century. Cattle ranchers may have grazed herds there occasionally by the late nineteenth century; a handful of Panamanian colonists settled the southern part of the zone as early as 1900; and Costa Ricans from the central plateau came in the 1920s.³⁸ Nevertheless, Costa Rica's 1927 population census makes no mention of human settlement.³⁹ Earlier censuses (such as 1915 and 1920) do not segregate the region under study into a separate political unit, which not only makes it impossible to determine the population in those years, but also strongly suggests that no significant settlement existed there.⁴⁰ It is not until 1950 that the population census reports some settlement in the area.⁴¹

Among the most commonly repeated assertions in the literature on land tenure in Latin America are that farm ownership has become more concentrated over time and that peasants are losing access to land.⁴² Although many authors have argued this, few have attempted to prove it for other than relatively small regions.⁴³ The earliest agricultural census of the Coto Brus area is for 1950, the same year the population census first indicates

(San José: Editorial Porvenir, 1986), 68–72. The native people of this area only received Costa Rican citizenship documents in 1991.

38. Gerhard Sandner, *La colonización agrícola de Costa Rica*, vol. 1 (San José: Instituto Geográfico Nacional, 1962), 78; J. L. Valenzuela, "Cantón de Coto Brus" (1966, mimeographed). We thank Eliécer Rojas of San Vito de Coto Brus for providing us with this document); Quesada and Ramírez, "Zona fronteriza," 17.

39. The original 1927 census sheets for the Canton of Golfo Dulce were consulted in ANCR. In that census year, Golfo Dulce encompassed what was to become three separate cantons: Golfito, Corredores, and Coto Brus, the area under study in this paper. The census found a total of 1,195 people living in Golfo Dulce, but all were clustered along the coast, many in fishing villages. Hermógenes Hernández, *Costa Rica: evolución territorial y principales censos de población, 1502–1984* (San José: Editorial Universidad Estatal a Distancia, 1985), 103–4.

40. Interviews confirm this impression. One person who arrived in Sabalito, in southern Coto Brus, in 1952 recalled that even then the settlement consisted of "only four little houses" (*solo cuatro casitas*). Interview with Blanca Vega Chávez de Mejía, Paso Ancho de San José, July 11, 1990.

41. Hernández, *Principales censos*.

42. Rodolfo Stavenhagen, ed., *Agrarian Problems and Peasant Movements in Latin America* (Garden City, N.Y.: Doubleday, 1970); Ernest Feder, *The Rape of the Peasantry: Latin America's Landholding System* (Garden City, N.Y.: Doubleday, 1971); Alain de Janvry, *The Agrarian Question and Reformism in Latin America* (Baltimore: Johns Hopkins Univ. Press, 1981); Merilee S. Grindle, *State and Countryside: Development Policy and Agrarian Politics in Latin America* (Baltimore: Johns Hopkins Univ. Press, 1986).

43. One important exception is William H. Durham, who presents data on the evolution of land distribution in El Salvador since 1524 and Honduras since 1952. To produce land distribution data from pre-Columbian times, however, he merely assumes a perfectly equal distribution (Gini index = 0) because he does not have data for that period. Durham, *Scarcity and Survival in Central America: Ecological Origins of the Soccer War* (Stanford: Stanford Univ. Press, 1979), 45.

TABLE 1: Distribution of Land Owned in Canton Golfito, La Cuesta District, 1955 (in hectares)

Land owned	Number of farms	Percentage of farms	Area	Mean area	Percentage of area
2-2.99	6	3.2	12.76	2.13	<0.1
3-3.99	1	0.5	3.59	3.59	<0.1
4-4.99	3	1.6	12.05	4.02	<0.1
5-9.99	12	6.5	77.88	6.49	0.4
10-19.99	6	3.2	83.76	13.96	0.4
20-49.99	27	14.6	821.80	30.44	4.0
50-99.99	80	43.2	5,371.08	67.14	26.3
100-199.99	28	15.1	3,683.46	131.55	18.1
200-499.99	18	9.7	5,587.64	310.42	27.4
500-999.99	2	1.1	1,243.59	621.80	6.1
1,000-2,499.99	2	1.1	3,489.12	1,744.56	17.1
Total	185	100.0	20,386.72	110.20 ^a	100.0
Median area:	61.67 ^a				
Gini index:	55.17				

Source: Archivos Nacionales de Costa Rica, Agricultural Census of Costa Rica, calculations from reconstruction of official census files.

Note: Before the canton of Coto Brus was created in 1965, this territory formed the La Cuesta district in the canton of Golfito.

^a Mean and median figures are based on individual farm sizes, not the grouped sizes reported in this table.

settlement in the region. Unfortunately, the original data for the 1950 census have been destroyed, and the published census still does not disaggregate the Coto Brus area from its larger political unit, which was then Golfito Canton, La Cuesta District. (The canton was not formally designated until 1965.) Only for the next census, in 1955, have the original census questionnaires been preserved on microfilm. These were used to reconstruct the census data on a farm-by-farm basis for the area corresponding to Coto Brus.⁴⁴ The results of this reconstruction appear as table 1.

44. We thank Professor Héctor Pérez-Brignoli for making the microfilms available to us and Margarita Torres Hernández for constructing the dBase file from the original census questionnaires. A number of Costa Rica specialists have pointed to deficiencies in the 1955 agricultural census, partly because no population census was carried out at the same time (as in 1950, 1963, 1973, and 1984). It is important to note, however, that measured against agricultural censuses from the rest of Central America and much of Latin America, the Costa Rican censuses are of relatively high quality. An indirect but relevant indicator is the estimated level of omission in the population enumerations that are carried out concurrently with the agricultural censuses. Such estimates are available for most Latin American countries for the 1970s and 1980s. Costa Rica's 1973 population census had the lowest estimated omission rate (less than 1 percent) of any Latin American country for the decade; in 1984 Costa Rica's omission rate rose to 5 percent, substantially better than Ecuador, Guatemala, and Vene-

As late as 1955, this was a sparsely settled zone; the census recorded only 185 farm units, less than 6 percent of the farms recorded almost 30 years later in the 1984 census.⁴⁵ If the Coto Brus region could appropriately be considered to be one at the beginning of its cycle of land tenure evolution, this early period of settlement appears to conform very well to the expectation, expressed in the literature on agrarian change, that land distribution in Latin America was initially far more equitable than in later years.

Several observations lead to this conclusion. First, the Gini index in table 1 is only 55, compared with an average of 67 for the 28 countries around the world for which data existed around 1960, and dramatically lower than the 79 calculated for Costa Rica as a whole.⁴⁶ Indeed, a Gini index of 55 is lower than that recorded for any country in Latin America for that census period (the lowest is Mexico, with 69). Second, although the census uncovered two relatively large properties, one of 1,642 hectares and another of 1,847 hectares, these were far smaller than the farms in the 1,000-hectare-and-over category in Costa Rica as a whole, which averaged 3,431 hectares each. In Coto Brus the impact of the large farms was small; they comprised only 17.1 percent of the available land. Third, the great bulk of the farms was concentrated in the range of 20 to 200 hectares, a pattern more reminiscent of farms owned by the classical North American yeoman than of the minifundios often considered typical of Latin America. Indeed, only 5.3 percent of the farms in the area were smaller than five hectares. In 1963, about 37 percent of all farms in the country were smaller than five hectares.

The picture of relatively egalitarian land distribution in the early years shifts rapidly and progressively in the censuses that follow. Tables 2, 3, and

zuela but worse than Argentina, Brazil, Cuba, and the Dominican Republic. Manuel Rincón and Emilio González J., "Evaluación del censo nacional de población 1984" (Paper presented at the Noveno Seminario Nacional de Demografía, San José, June 1987), 2-3. Therefore, the conclusions developed in this article are by no means the result of especially grave problems unique to Costa Rican census data.

45. A portion of the increase in later censuses results from the inclusion of very small farms excluded from the earlier censuses. In 1963 a separate census tabulation recorded farms smaller than one *manzana* (0.7 hectare). See Dirección General de Estadística y Censos, *Censos agropecuario de 1963: fincas menores de una manzana y animales fuera de finca* (San José: DGE, n.d.). In 1973, 18.7 percent of all farms recorded for that year were smaller than one *manzana*. The definition of a farm was altered, however, for the 1973 census, which, for the first time, recorded farms smaller than one *manzana* as part of the regular census tabulations. For a discussion of this problem, see Mario E. Fernández, "Algunas observaciones acerca de las definiciones y preguntas sobre tenencia y distribución de la tierra en los censos agropecuarios" (Paper presented at the Seminario Sobre los Censos Nacionales de 1983, San José, Sept. 28-30, 1981), 2-4.

46. The Costa Rican Gini index is based on the authors' calculation from census data. For other countries, see Charles L. Taylor and David Jodice, *World Handbook of Political and Social Indicators*, 3d ed. (New Haven: Yale Univ. Press, 1983), 140-41.

TABLE 2: Distribution of Land Owned in Canton Golfito, La Cuesta District, 1963 (in hectares)

Total land	Number of farms	Percentage of farms	Area	Mean area	Percentage of area
0.01-0.99	27	2.2	23.08	0.85	<0.1
1-1.99	42	3.5	64.42	1.53	0.1
2-2.99	74	6.2	183.29	2.36	0.3
3-3.99	58	4.8	216.69	3.74	0.4
4-4.99	39	3.2	176.18	4.52	0.3
5-9.99	185	15.3	1,395.03	7.54	2.5
10-19.99	254	21.0	3,854.54	15.18	7.0
20-49.99	357	29.6	11,702.50	32.78	21.2
50-99.99	114	9.4	7,899.97	69.30	14.3
100-199.99	27	2.2	3,679.33	136.27	6.7
200-499.99	21	1.7	6,863.31	326.82	12.4
500-999.99	5	0.4	3,274.33	654.87	5.9
1,000-2,499.99	21	0.2	2,352.42	1,176.21	4.3
2,500+	2	0.2	13,566.81	6,783.41	24.6
Total	1,207	100.0	55,251.91	45.78 ^a	—
Median area:	17.43 ^a				
Gini index:	70.69				

Source: Dirección General de Estadística y Censos, Agricultural Census of Costa Rica, official census tapes. See note to table 1.

^a Mean and median figures are based on individual farm sizes, not the grouped sizes reported in this table.

4 present the census data for 1963, 1973, and 1984. With each census, Coto Brus looked more like Latin America as a whole. Average farm size shrank dramatically, from more than 110 hectares in 1955 to fewer than 10 hectares by 1984. Farms smaller than five hectares increased from less than 6 percent of all farms in 1955 to 56 percent in 1984.⁴⁷ The Gini index of concentration rose each year through 1973, when it reached 79, a level identical with the national figure. Finally, large farms increased their domination of the region: four farms greater than 1,000 hectares comprised 28.9 percent of the canton's total area in 1963 and 39.8 percent in 1973. Figure 1 presents a summary image of the evolution of land tenure in Coto Brus from 1955 through 1984.

The 1984 census data, while generally conforming to the patterns established in the 1963 and 1973 censuses, present some anomalies that,

47. This increase is largely not a function of the inclusion in later censuses of farms smaller than one *manzana* or one hectare. Even if those farms are eliminated from the 1984 census, for example, 46.8 percent of farms still measure less than five hectares.

TABLE 3: Distribution of Land Owned in Canton Coto Brus, 1973
(in hectares)

Total land	Number of farms	Percentage of farms	Area	Mean area	Percentage of area
0.01-0.99	198	10.1	68.66	0.35	<0.1
1-1.99	145	7.4	189.15	1.30	0.3
2-2.99	150	7.6	346.63	2.31	0.5
3-3.99	92	4.7	301.45	3.28	0.4
4-4.99	109	5.5	470.44	4.32	0.7
5-9.99	322	16.4	2,238.55	6.95	3.2
10-19.99	354	18.0	4,916.88	13.89	7.1
20-49.99	414	21.1	11,931.42	28.82	17.2
50-99.99	103	5.2	6,395.70	62.09	9.2
100-199.99	39	2.0	4,950.10	126.93	7.1
200-499.99	31	1.6	8,360.60	269.70	12.0
500-999.99	3	0.2	1,640.00	546.67	2.4
1,000-2,499.99	1	0.1	2,399.00	2,399.00	3.5
2,500+	3	0.2	25,189.70	8,396.57	36.3
Total	1,964	100.0	69,398.28	20.28 ^a	100.0
Median area:	5.0 ^a				
Gini index:	79.05				

Source: Dirección General de Estadística y Censos, Agricultural Census of Costa Rica, official census tapes.

^a Mean and median figures are based on individual farm sizes, not the grouped sizes reported in this table.

at first glance, appear to indicate a reversal in the pattern of increasing land concentration. Although average farm size continued its decline in the 1984 census, the Gini index for 1984 dropped to 72.6, from 79 in 1973. A lower Gini index is an indication of a lower concentration of landholdings. An examination of the census data in table 4, however, reveals that the reduced concentration is attributable primarily to the disappearance of the three largest farms listed in the 1973 census, which together controlled 25,190 hectares, or 36 percent of the area of Coto Brus. In 1984, the largest farm measured only 1,100 hectares and the second-largest only 1,000 hectares. To examine changes in all but the uppermost end of the distribution, we excluded the four farms larger than 2,000 hectares that were counted in 1973 and recalculated the Gini index, which fell from 79 to 66. This indicates that the 1984 Gini index of 72.6 shows a continuation of the pattern of increasing concentration as compared to the adjusted 1973 data.

One might suppose, as the architects of Costa Rica's agrarian reform have often argued, that the reform agency, the Instituto de Tierras y Colo-

TABLE 4: Distribution of Land Owned in Canton Coto Brus, 1984 (in hectares)

Total land	Number of farms	Percentage of farms	Area	Mean area	Percentage of area
0.01-0.99	549	17.3	249.20	0.45	<0.6
1-1.99	448	14.1	552.60	1.23	1.3
2-2.99	363	11.4	816.30	2.25	2.0
3-3.99	248	7.8	804.00	3.24	2.0
4-4.99	173	5.4	733.20	4.24	1.8
5-9.99	502	15.8	3,354.00	6.68	8.2
10-19.99	398	12.5	5,409.80	13.59	13.2
20-49.99	347	10.9	9,996.90	28.81	24.4
50-99.99	88	2.8	5,640.30	64.09	13.7
100-199.99	43	1.4	5,436.50	126.43	13.2
200-499.99	14	0.4	3,596.10	256.86	8.8
500-999.99	4	0.1	2,343.00	585.75	5.7
1,000+	2	0.1	2,100.00	1,050.00	5.1
Total	3,179	100.0	41,031.90	9.92 ^a	100.0
Median area:	3.0 ^a				
Gini index:	72.58				

Source: Dirección General de Estadística y Censos, Agricultural Census of Costa Rica, official census tapes.

^a Mean and median figures are based on individual farm sizes, not the grouped sizes reported in this table.

nización (ITCO), purchased or expropriated most of the large estates in the mid- to late 1970s.⁴⁸ Although large estates were still found in the mid-1980s in the Guanacaste region, the census data seem to show that they had largely ceased to exist in Coto Brus.⁴⁹ While we will have more to say on this point as a result of our examination of the property registry archives, anomalies in the census data themselves raise suspicions. To cite the most glaring irregularity, if it were true that the largest farms disappeared as a result of land reform, then the area formerly contained in those farms would still appear in the census, albeit divided into smaller plots. A comparison of the 1973 and 1984 census data reveals, however, that the total land in farms diminished by 28,367 hectares, or 40 percent of the 1973 area in farms. At the same time, the number of farms rose from 1,964

48. José Manuel Salazar Navarrete, Ennio Rodríguez C., and José Manuel Salazar X., "Costa Rica: una política agraria innovadora," *Estudios Sociales Centroamericanos* 20 (May-Aug. 1978), 47-110; José Manuel Salazar Navarrete, "¿Está concentrada la propiedad en Costa Rica?" *La Nación* (San José), Oct. 31, 1986, p. 15A.

49. Edelman, *Logic of the Latifundio*, 220-52.

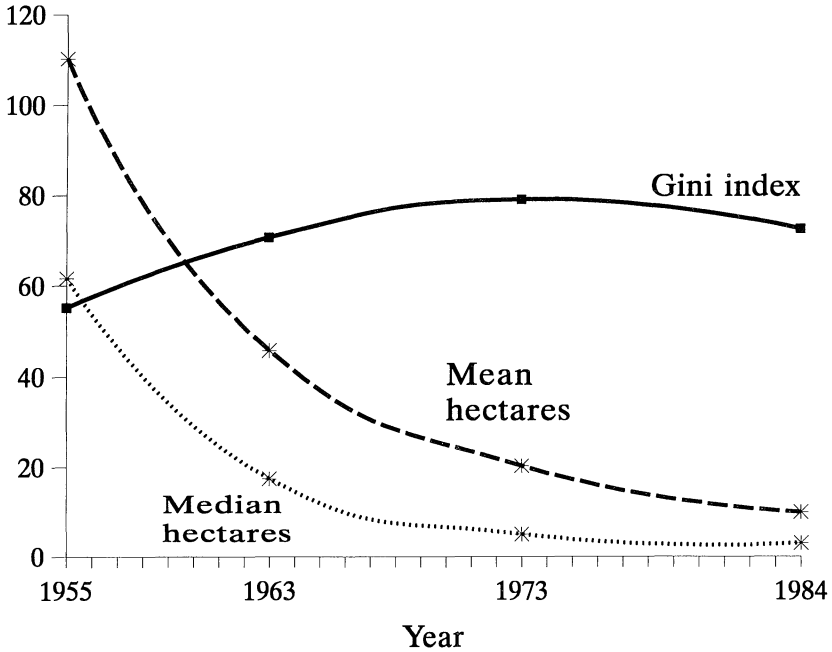


FIGURE 1: Evolution of Land Distribution in Coto Brus, 1955-1984 (in hectares)

Source: Census data

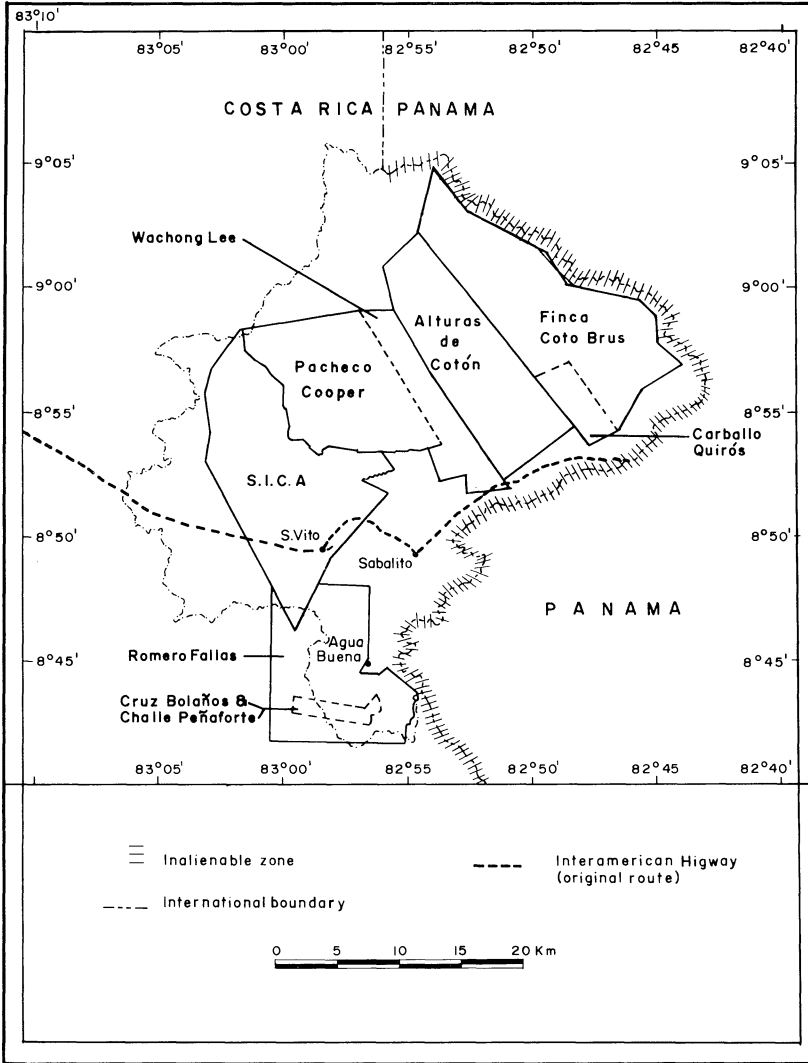
in 1973 to 3,179 in 1984, a jump of 62 percent. The canton’s population also grew, from 19,971 in 1973 to 31,650 in 1984, a rise of 58.5 percent.⁵⁰

Thus the decline in area among farms in Coto Brus was not a function of a decline in the number of farms or the population of the canton. Rather, it seems to have been primarily the result of the largest farms’ disappearance from the census. Why did this occur? Part of the answer may be found by looking at the land tenure history of Coto Brus through a different lens—that provided by the property and mercantile registries and cadastral records.

A Second Look: Through the Registry Lens

The census data suggest that Coto Brus experienced a “typical” Latin American process of growing land concentration and small-farm fragmen-

50. Hernández, *Principales censos*, 150, 160.



MAP 2: Coto Brus: Major Properties, ca. 1945-1955

tation after the mid-1950s. Property records, in contrast, indicate that by 1955 a handful of giant latifundios had appropriated most of the land in Coto Brus. These records point to a trend away from what was initially a highly skewed distribution, something diametrically opposed to what the census data show. Moreover, this “democratization” of land tenure was not

simply the result of population growth and the division of farms among heirs. Massive squatter occupations, market forces, and agrarian reforms sponsored by the state or the private sector also contributed to the reduction in land concentration. The appendix summarizes the key events in the establishment and later fragmentation of these properties, while map 2 shows their physical location in Coto Brus canton.

On August 17, 1945, Evangelista Romero Fallas, an engineer who had worked in the Costa Rican Transport Ministry, recorded with the National Cadastral Office his claim to 4,121.5 hectares of *montaña* (virgin forest) in southern Coto Brus.⁵¹ This property—more than 12 times the size of New York's Central Park—was actually among the smallest of the new latifundios that politically “connected” individuals were to claim in Coto Brus in the mid- to late 1940s and early 1950s. Less than a year after this first claim, Romero joined Carlos Alberto Pacheco Jirón, described in the Public Property Registry as a San José office worker, in titling an additional 10,000 hectares in Finca Coto Brus, which abutted the two-kilometer-wide “inalienable” buffer zone along the Panamanian border in the northeastern part of the canton.⁵²

In 1950, San José lawyer José Alberto Pacheco Cooper inscribed his claim to 15,404 hectares in northern Coto Brus in the property registry, noting that the land had a value of 231,073.60 colones (then slightly more than two dollars per hectare), though he did not have to pay cash for it.⁵³

51. CN, P-8-3-1-9, no. 10926. Documents in the Catastro Nacional are catalogued according to two systems: a locator that starts with the first initial of the province, followed by the numbers of the canton, district, folder (*carpeta*), and farm; and a registration number. We cite both descriptions when possible, although either is generally sufficient to locate a particular plot. In the next few years, Romero claimed several other modest plots in the same area (for example, CN, P-3-4-1-14, no. 11527, 1949). Three of Romero's close relatives claimed lands contiguous to his properties. Much of the information about the political connections of individual landowners comes from the authors' field interviews, although Property Registry entries generally describe owners' professions.

52. RPP, vol. 1304, fol. 85, no. 8733, asiento 1; CN, P-3-4-1-119. Entries in the Registro Público de la Propiedad may be located according to *tomo* (volume), folio, *número de finca* (farm number), and *asiento* or *inscripción* (entry or inscription, hereafter abbreviated *a*). Since the mid-1980s, most current RPP listings have been transferred to a computerized data base, with numbered records called *folios reales*. These may be located using the farm number, the owner's full name, or the owner's identification number (*cédula* or, for corporations, *cédula jurídica*). Romero and Pacheco Jirón had registered a preliminary claim to Finca Coto Brus with the Civil Treasury Court (Juzgado Civil de Hacienda) in 1944, immediately after the border with Panama was definitively defined. CN, P-3-4-1-119, no. 11066; see also the appendix.

53. RPP, vol. 1367, fol. 252, no. 9311, a. 1. Dollar-colón exchange rates for 1907 to 1946 are based on Priscilla Albarracín González and Héctor Pérez-Brignoli, *Estadísticas del comercio exterior de Costa Rica: importaciones y exportaciones (1907-1946)*, Proyecto de Historia Social y Económica de Costa Rica, Avance de Investigación no. 5 (San José: Universidad de Costa Rica, Escuela de Historia y Geográfica, 1977), 26. For 1950-85, they are based on Banco Central de Costa Rica, *Estadísticas 1950-1985* (San José: Banco Central de Costa Rica, División Económica, 1986), 211.

In the mid-1950s, two U.S. citizens, Nelson Howard and Vicente López (a former Texas wrestling champion whose sister had married a San José lawyer), acquired Hacienda Alturas de Cotón, a wooded property of 10,147 hectares adjacent to Finca Coto Brus.⁵⁴ Finally, in 1952 the government set aside 10,000 hectares of state lands for the Italian Agricultural Colonization Society (Società Italiana di Colonizzazione Agricola, or SICA), which agreed to populate an undeveloped zone of Costa Rica with unemployed Italian farmers.⁵⁵ By the mid-1950s, these five holdings, averaging just under 10,000 hectares each, occupied more than half the canton (see the appendix and map 2). Together they measured more than 8.5 times the size of Manhattan island.

A comparison of the census data in table 1 and the registry data in the appendix is striking. None of the largest farms reported in the 1955 census exceeded 2,499 hectares, yet concurrent registry and cadastral data were uncovered on five properties ranging in size from 4,122 to 15,404 hectares.⁵⁶ Moreover, these five properties alone totaled 49,673 hectares, compared with the census total for all properties of 20,387 hectares. This “hidden” property was 143 percent larger than the total land area reported in the census and encompassed 53 percent of the entire area of the canton.⁵⁷ Indeed, the total area of the five large properties of the 1950s exceeded by 21 percent the total farm area reported in the 1984 census (see table 4).

54. *La Nación*, Mar. 9, 1984, p. 8A; William F. Manger, “Colonization on the Southern Frontier of Costa Rica: A Historical-Cultural Landscape” (Master’s thesis, Geography, Memphis State Univ., 1992), 103. Cadastral and registry information on Alturas de Cotón proved elusive. André Challe Peñaforte apparently had claimed at least part of this land by 1950, before its acquisition by Howard and López. (Pacheco Cooper’s 1950 property registry entry lists Challe as owning land to the north; a 1954 plan of Anselmo Poma’s property shows Challe as owner of the area that became Alturas de Cotón. See RPP, vol. 1367, fol. 252, no. 9311, a. 1; ANCR, Mapas y Planos 7243). Even though several individuals and corporations appear as associated with the property over the years, none is listed as legal owner. Virtually identical information on the size of this property comes from press reports (*La Nación*, Mar. 9, 1984, p. 8A) and unpublished data provided by the Instituto de Desarrollo Agrario. The borders of the property in map 2 are based on an unpublished 1:250,000 scale map: Carlos Sáenz H., “Mapa parcelario de Costa Rica mostrando las fincas mayores de 1.000 hectáreas” (San José: Instituto de Tierras y Colonización, 1965). López’ athletic achievements were mentioned in field interviews with Ernesto Araya Solís, San José, July 20, 1990, and Francisco Cedeño, Agua Buena de Coto Brus, Aug. 2, 1990.

55. The “reserve” set aside for the Italian colony was never measured adequately and was probably closer to 13,000 hectares. Ulv Masing, “Foreign Agricultural Colonies in Costa Rica: An Analysis of Foreign Colonization in a Tropical Environment” (Ph.D. diss., Univ. of Florida, 1964), 165.

56. The 978-hectare farm owned by Luis Cruz Bolaños listed in the appendix is not included here, because its size falls within the range of properties counted in the 1955 census.

57. Coto Brus measures 935.52 square kilometers, or 93,552 hectares. Hernández, *Principales censos*, 150.

We argue that a systematic bias in the census data leads to the exclusion of many (or all) large properties. We also maintain that the census is quite good at including small farms, while the land registry is not. Hence, if the registry data are used to supplement the census data and thereby present a more complete picture of land tenure in Coto Brus, a radically different image emerges. The five large properties missed by the 1955 census, when added to the data in table 1, increase the Gini index from 55 to 82, a level of inequality exceeding all subsequent censuses (including its peak of 79 in 1973). Adding the "missing" properties also boosts mean farm size to a record level (369 hectares). This picture—obtained by combining census data with land registry and cadastral data—is, we believe, more consistent with the reality of land tenure than either data source alone. It suggests that extreme land concentration characterized the very early phases of colonization of Coto Brus.

Comparing table 1 and map 2, how is it possible that the picture that emerges from contemporary cadastral and property registry records is diametrically opposed to that provided by the 1955 agricultural census? To answer this question it is necessary to explore briefly Costa Rican land-titling policies, recent border changes, the construction of the Pan-American Highway, and the Italian colonization effort. Indeed, what prompted such interest in an isolated, inaccessible, mountainous jungle region, where as much as four meters of rain fell each year?⁵⁸

During most of its history from independence in 1821 until the mid-twentieth century, Costa Rica contained extensive unoccupied areas, generally distant from the central plateau and covered with virgin forest. Governments viewed these state lands as virtually a free good that could be used to amortize debts, raise revenue, reward service to the nation, encourage settlement in outlying regions, stimulate production of particular crops, or serve as an outlet for people displaced from settled areas of the country by population growth and land concentration. Aspiring farmers could claim small plots, typically between 10 and 50 hectares, under the provisions of the 1885 fiscal code or the "heads of families" or "public lands" laws passed in the first decades of the twentieth century. At various times, the state also conceded much more extensive properties to foreign creditors, illustrious citizens, and budding entrepreneurs.

For those who were not beneficiaries of this largesse or who did not possess valid deeds, land titling in Costa Rica, as in much of Latin America, was based on usucaption, the principle in Roman law that permitted the

58. In 1952–60, annual precipitation at San Vito de Java, Coto Brus, averaged 3,899.8 millimeters. Masing, "Foreign Agricultural Colonies," 75. During the 1950s, the region had an annual average of 240 days of rain. Gerhard Sandner, *La colonización agrícola de Costa Rica*, vol. 1 (San José: Instituto Geográfico Nacional, 1962), 74.

acquisition of title or rights to property through uninterrupted and undisputed possession for a certain term, usually ten years.⁵⁹ A claimant had only to muster occupants of adjacent holdings to testify that his use of the land had been continuous and was uncontested, and he could obtain a provisional title from a court, which then could be inscribed in the Public Property Registry.⁶⁰ Especially in remote areas, claimants could often demonstrate possession simply by clearing a narrow strip (*ronda* or *carril*) to mark the boundary of the land they sought to register. In 1941, a new statute (*Ley de informaciones posesorias*), which replaced all previous land-titling laws, permitted individuals to acquire up to three hundred hectares this way.⁶¹ Families sometimes amassed large properties by having each adult member title the maximum permissible extension.

Even more important in the formation of new latifundios like those in Coto Brus was a 1942 law (*Ley de poseedores en precario*) that permitted owners of properties “invaded” by squatters to trade the properties to the state for public lands of equivalent value, usually in outlying areas.⁶² This law was intended to resolve agrarian conflicts by having the state distribute occupied lands to squatters. But influential proprietors with modest “invaded” holdings in the coffee-growing *meseta central*, which were appraised at five hundred to one thousand colones per hectare (\$89 to \$178 in 1942), frequently exchanged those parcels for much larger extensions in unoccupied zones, where each hectare was valued as low as two colones (\$0.36). Under this law, 20 landowners traded their occupied properties for a total of 512,000 hectares distributed throughout the country; this was equivalent to 10 percent of Costa Rica’s national territory.⁶³

Most of the largest properties established in Coto Brus in the 1940s and early 1950s originated under the provisions of the 1942 law. The large landowners Romero, Pacheco Jirón, and Pacheco Cooper all established their claims using “rights” granted in exchanges of land with the state. On

59. For details of titling laws see Sáenz P. and Knight, “Aspectos jurídicos”; Salas and Barahona, *Derecho agrario*; Salas Viquez, “Búsqueda de soluciones”; and Ricardo Zeledón, *Código agrario* (San José: Editorial Porvenir, 1988).

60. The precursor of the Registro Público de la Propiedad was the Registro de Hipotecas y Títulos (Mortgages and Titles), founded in 1866. José Antonio Pinto, *Informe del Secretario de Estado en los Despachos de Gobernación, Justicia, Policía, Agricultura, e Industria* (San José: Imprenta Nacional, 1872), 14. Before that, legal ownership could be demonstrated by possession of deeds issued by the Spanish crown or, following independence, by local judicial authorities. The cadastral office was not established until the early twentieth century.

61. R. Zeledón, *Código agrario*, 416–17.

62. Sáenz P. and Knight, “Aspectos jurídicos,” 168–70.

63. *Ibid.*, 169; Salas and Barahona, *Derecho agrario*, 288–89. The law was repealed in 1951 as a result of these abuses. Nevertheless, one clause remained in effect: it prohibited landowners from bringing eviction proceedings against squatters with more than a year of peaceful occupation.

a less grand scale, José Joaquín Ruiz Cambronero, the trusted accountant for the Sánchez Cortés family of Heredia, the largest coffee-producing firm in central Costa Rica, utilized his employers' rights under the same law to title some six hundred hectares in Coto Brus in 1944.⁶⁴ Like Ruiz, land claimants large and small recognized the region's exceptional potential for coffee cultivation. The humus-rich soils in Coto Brus produced average yields two to three times those of the traditional coffee zones of central Costa Rica.⁶⁵ In the early 1940s, the wealthy Sánchez Cortés family viewed Coto Brus not only as a promising source of semiprocessed coffee but as a market for seedlings and depulping machinery.⁶⁶

While giant new properties occupied much of the cantón's north and west, different land appropriation processes took place in the southeastern area beginning in the early 1940s. There, dozens of migrants from other parts of Costa Rica carved small and medium-sized farms out of the dense jungle. A few acquired cleared land from Panamanians. Most of these new settlers intended to use the 1941 titling statute to legalize their holdings, while some did this using "concession rights" (*gracias*) obtained at government auctions or "rights of the fatherland" (*derechos de patria*) granted by the state as rewards for service.⁶⁷ In a number of cases, these colonists assembled properties of several hundred hectares or more.

The difficulties the early settlers experienced were not, for the most part, shared by the absentee landlords who owned the cantón's major latifundios. Memories of hardship, at times highly romanticized, are among the most common motifs in the pioneers' accounts.

After the first clearings [and] the tremendous struggle against the jungle, it was necessary to plant something to subsist. The first settlers requested in writing that the government of Señor [President Otilio] Ulate [1949–53] permit them to acquire maize seed from the other side of the frontier, which was normally prohibited. But the President failed to consider the request, forcing the agriculturalists to ignore the law

64. CN, P-8-3-1-17, no. 10831.

65. Sandner, *Colonización agrícola*, 74–76.

66. Interview with Araya Solís, July 20, 1990. On the importance of the Sánchez Cortés family in the Costa Rican coffee sector, see José Marín Cañas, *Julio Sánchez* (San José: Ministerio de Cultura, Juventud, y Deportes, 1972); and Lowell Gudmundson, "Peasant, Farmer, Proletarian: Class Formation in a Smallholder Coffee Economy, 1850–1950," *HAHR* 69:2 (May 1989), 221–58. The Sánchez family ceded Ruiz 7,713.84 colones of its rights to claim lands; of this, Ruiz used 3,540.46 colones to title a 295-hectare plot and the remainder to title an adjacent property. The exact size of the latter was not specified in the initial registry entry, but it was probably about 300 hectares. RFP, vol. 1278, fol. 231, no. 8572, a. 1.

67. In November 1945, for example, Alfredo Cortés Arce registered title to part of a much larger holding using *gracias*. CN, P-6-3-4-1, no. 10959. Five years later, Alfredo Lizano Bolaños claimed 244 hectares with *derechos de patria*. CN, P-8-3-1-13, no. 11818.

and to bring the seed from Panama on foot, under cover of darkness, to avoid the persecution of the authorities.⁶⁸

One memoir describes how desperately poor, barefoot colonists arrived in the zone in the 1950s:

The man might carry a baby, and between him and his wife they would carry the baby and a bundle. And these were their belongings, the baby and the bundle. But the wife carried a second baby, for she was pregnant. . . . While they were doing this it might, and often did, rain. And these people, the man and the pregnant wife, were looking for [work] . . . for they had almost nothing, no money, and would need first to find shelter and a means of buying food.⁶⁹

Under these conditions, registering full legal title to land was hardly a first priority. Most settlers, at least vaguely aware of the rights guaranteed them under Costa Rica's titling laws, merely took care to establish farms in areas where their holdings would not be disputed. Documents short of a full registered title—bills of sale from previous occupants, land tax receipts, or a will that demonstrated inheritance—were also known to provide a degree of tenure security. One woman who came to Coto Brus in the early 1950s recalled how her husband had built up landholdings and attempted to assure them with rudimentary contracts.

Francisco had already obtained that land, ten hectares. He bought it for 50 colones [\$7.50 in 1952]. The man who had the land sold it to him [and] they made the bill of sale on a piece of paper from a cigarette packet. They signed there to certify that the man, I don't remember his name, sold to Francisco the ten-hectare lot that had been his. Then we went to live there and the neighbors next to us sold us their parcel and we made our farm larger.⁷⁰

Much of this early smallholder colonization occurred as relatives and close friends of the first settlers migrated from central Costa Rica to Coto Brus to settle and claim land. The latifundistas who dominated the northwestern and western sections of the canton also set their sights on Coto Brus as a result of previous contacts with the region. An analysis of these connections reveals why the rush to claim lands commenced in Coto Brus in the 1940s—something an examination of titling mechanisms and the formal land appropriation process cannot alone explain.

68. Valenzuela, "Cantón de Coto Brus."

69. Darryl Cole, "The Settlement of the Frontier" (Finca Loma Linda, Agua Buena, Coto Brus, n.d., mimeographed).

70. Interview with Vega Chávez de Mejía, July 11, 1990.

Reasons for the Coto Brus Land Rush

Because the border between Costa Rica and Panama was, for many years, disputed and ill-defined, Coto Brus “was not a safe, secure zone.”⁷¹ This was true both in the sense of tenure security—along the unmarked frontier it was unclear, for example, which country’s citizens could claim land where—and in the sense of physical safety. Efforts to mediate the conflict, first with Colombia and after 1903 with Panama (earlier a province of Colombia), bore little fruit.⁷² In 1921, Costa Rica and Panama fought a brief border war, which ended only when the United States and the United Fruit Company brokered a cease-fire.⁷³ The two countries reestablished diplomatic relations in 1928, and the following year reached a tentative agreement that would have shifted from Costa Rica to Panama 30,000 hectares in “the plains of Cañas Gordas,” the area that later became Coto Brus.⁷⁴

That settlement, however, as well as a subsequent 1938 pact substantially more favorable to Costa Rica, never received congressional ratification. Not until 1941 did the two sides arrive at a mutually satisfactory treaty. The complex task of surveying and marking the border, much of which passed through uncharted, mountainous jungles, was completed only on August 16, 1944.⁷⁵ Exactly one year and one day later (and two days after the Japanese surrender in World War II), Romero registered the first of the major land claims in the north of Coto Brus. His second claim—the ten-thousand-hectare Finca Coto Brus, co-owned with Pacheco Jirón—abutted the two-kilometer “inalienable zone” that ran parallel to the now clearly defined frontier.

The circumstances of the border settlement also help explain why both latifundistas and smallholders sought to gain a foothold in Coto Brus in the 1940s. As early as 1930, the U.S. government began planning for an Inter-American Highway that would run the length of the Central American isthmus, providing overland access to the Panama Canal. A preliminary survey in 1930–33 considered four “possible routes” between the Panamanian border and San José, all of which “enter[ed] Costa Rica at the same point of the Panama–Costa Rica border near Cañas Gordas [Coto Brus].”⁷⁶

71. Valenzuela, “Cantón de Coto Brus.”

72. Marco Tulio Zeledón, *Fronteras de Costa Rica* (San José: Academia de Geografía e Historia, 1949), 9–13.

73. United Fruit Company plantations on Panama’s Atlantic coast were among the main battlefields in the 1921 war. UFCO’s contribution to ending hostilities included evacuating the warring parties on its ships. Philippe I. Bourgois, *Ethnicity at Work: Divided Labor on a Central American Banana Plantation* (Baltimore: Johns Hopkins Univ. Press, 1989), 23.

74. M. T. Zeledón, *Fronteras*, 11; Theodore S. Creedman, *Historical Dictionary of Costa Rica* (Metuchen: Scarecrow Press, 1977), 78.

75. M. T. Zeledón, *Fronteras*, 13.

76. U.S. Bureau of Public Roads, *A Report of a Reconnaissance Survey to Propose the*

These plans remained on the drawing board for the rest of the 1930s, but with the approach of World War II the Central American region—and Panama in particular—assumed new strategic significance.⁷⁷ In late 1941, the U.S. Congress, concerned about threats to shipping in the Caribbean and around the Panama Canal, appropriated \$20 million for the construction of the Inter-American Highway so as to provide a land route that would reach the canal. Legislators expressed “regret” at the “loss of valuable time” since the project’s conception more than ten years earlier.⁷⁸ Washington also applied pressure on Costa Rica and Panama that led them to settle their longstanding border problem. The highway plan and the border accord delighted the Costa Rican government, which feared that the Coto Brus region “was gradually becoming infested with Panamanian squatters who were drifting across the unmarked boundary.”⁷⁹

The U.S. Congress appropriated \$47.8 million more for the highway in 1942–43, and the U.S. Import-Export Bank loaned additional funds to Central American governments to finance their participation in the effort.⁸⁰ A Missouri partnership, the Martin Wunderlich Company, obtained the contract to build the road—dubbed the *camino militar*—from southern Costa Rica into Panama.⁸¹ “La Wunderlich,” as the firm became known in southern Costa Rica, in late 1943 also completed a 21-mile rustic feeder road that was to link the planned highway in highland Coto Brus with a lowland rail terminus built by the Compañía Bananera de Costa Rica, a United Fruit Company subsidiary.⁸² The railroad went to Golfito, the UFCO-owned port founded in 1938 to serve the company’s new Pacific coast banana plantations.⁸³

In addition to its potential as a coffee zone, the area that became Coto

Inter-American Highway, vol. 2, *Republic of Costa Rica and Republic of Nicaragua* (Washington, D.C.: U.S. Bureau of Public Roads, U.S. Department of Agriculture, 1933), 69.

77. Pan American Union, *The Pan American Highway System* (Washington, D.C.: Pan American Union, Travel Division, 1937).

78. Pan American Union, Dept. of Economic Affairs, Technical Unit on Tourism, “Chronology of the Panamerican Highway Project” (Unpublished, 1963, Organization of American States Library, Washington, D.C.), 5.

79. Masing, “Foreign Agricultural Colonies,” 36.

80. Pan American Union, “Chronology”; Secretaría de Hacienda y Comercio, *Documentos concernientes al contrato de empréstito para la construcción de la Carretera Interamericana* (San José: Imprenta Nacional, 1941).

81. Manger, “Southern Frontier,” 49.

82. U.S. War Department, *Design and Construction of the Panamerican Highway: Final Project Report* (San Francisco: War Department Corps of Engineers, 1944), 18.

83. UFCO came to Costa Rica’s southern Pacific coast partly because banana diseases had affected its Atlantic zone operations and partly because of labor problems, particularly a major strike in 1934 that resulted in the unionization of its Atlantic plantations. Bourgeois, *Ethnicity at Work*, 7, 105–9.

Brus thus had two important locational advantages in the early 1940s: it was directly on the planned route of what was supposed to be Central America's main international road artery, and it was the hinterland and potential food supplier for a major new development pole, the United Fruit Company's banana plantations and port at Golfito. Uncertainty over the exact location of the border and anxiety about possible instability during World War II slowed what otherwise might have been a major land rush. Nevertheless, those who staked claims in Coto Brus, latifundistas and smallholders alike, could expect significant appreciation in land values and the rapid completion of roads linking their land to regional and international markets. The larger claimants' political ties—and their involvement in border negotiations and surveying, road construction, or banana plantation development—also shaped the process of land appropriation.

A brief look at some of the major landowners listed in the appendix suffices to make the point.⁸⁴ During the administration of President León Cortés (1936–40), when difficult border negotiations kept tensions high with Panama, Francisco Romero, a brother of Evangelista, received government encouragement for establishing a Costa Rican presence in Coto Brus, where the handful of settlers were largely Panamanian.⁸⁵ Evangelista Romero, having worked as an engineer in the Transport Ministry, was likely to have been aware of plans to build the Inter-American Highway through Coto Brus. He also reportedly received loans from the United Fruit Company, which hoped to obtain lumber, food products for its Golfito employees, and a weekend recreation center for its managers in the cool Coto Brus highlands.⁸⁶ As early as 1943, UFCO registered a claim to 62.8 hectares adjacent to the Coto Brus landing strip that had been constructed by André Challe Peñaforte, a large landowner and coffee producer of French extraction whose operations were centered in Moravia canton, a suburb of San José.⁸⁷ Challe also had kinship connections to the

84. Information in this section is based largely on field interviews.

85. According to one generally reliable informant, President Cortés told Francisco Romero to "populate the zone." Romero then brought various family members, including his brother Evangelista, to explore the area. Interview with Cedeño, Aug. 2, 1990.

86. In the early 1950s, United Fruit's Golfito operations imported almost all foodstuffs, including vegetables, from Honduras and Guatemala. The company was therefore interested in finding closer, less expensive supply sources. In the mid-1950s, the Italian colonization company signed a contract with UFCO in which it agreed to provide lumber to Golfito. Masing, "Foreign Agricultural Colonies," 83, 256.

87. CN, P-8-3-1-6, no. 11570. In a mixup not uncommon in the early years of the Coto Brus land rush, Emilio Romero, a brother of Evangelista, recorded the UFCO plot as part of his own claim in 1945. CN, P-8-3-1-9, no. 10926. In 1947, much of the same land appears as a state property on which the treasury police (*resguardo fiscal*) had their post. CN, P-8-3-1-5, no. 11185.

company as the *concuño* of United Fruit's Golfito director, to whom his wife's sister was married.⁸⁸

Other major landholders also learned of opportunities in Coto Brus as a result of government service and family relationships. Several members of the Pacheco family had been instrumental in negotiating border disputes with Panama; one served on the border survey commission established in 1941; and the father of José Alberto Pacheco Cooper had claimed lands on the Atlantic side of the Talamanca cordillera just north of Coto Brus.⁸⁹ José Francisco Carballo Quirós, who in 1946 purchased 1,300 hectares of Finca Coto Brus from Evangelista Romero and Carlos Alberto Pacheco Jirón, also had a brother on the border survey commission.⁹⁰ Jorge Zeledón Castro, who acquired Finca Coto Brus in the early 1950s, reportedly had connections in the Transport Ministry and played a key role in charting the border. A major coffee producer in the central Costa Rican cantons of Aserrí and Acosta, Zeledón owned the Jeep franchise in Costa Rica and was among the first people to drive to Coto Brus along the new, still unpaved road in 1943. Luis Cruz Bolaños—a former vice minister of agriculture, a partner of Challe and of Zeledón, and one of the country's first boxing coaches—also had useful connections.⁹¹ In addition to the properties he owned with Challe and Zeledón, Cruz managed to rent from the state the portion of the two-kilometer “inalienable” border strip where the Inter-American Highway was supposed to pass from Costa Rica into Panama.⁹²

The fate of the Inter-American Highway in Coto Brus, however, must have been a grave disappointment to Cruz and the other large landowners who had believed in its promise as a future international thoroughfare. Even as the latifundistas began titling their holdings after the end of World War II, the U.S. War and State departments were losing interest in the

88. *Concuño* (or *concuñado*) is a term with no precise equivalent in English; it refers to the affinal relation between two individuals whose spouses are siblings. Informants remember the Golfito UFCO director as “Mister Sanderson.”

89. Creedman, *Historical Dictionary*, 77–78, 144; Valenzuela, “Cantón de Coto Brus”; Plano de terrenos denunciados por el Dr. Mariano Rodríguez y el Lic. Alberto Pacheco, Jan. 25, 1907, ANCR, Mapas y Planos, 8062.

90. Valenzuela, “Cantón de Coto Brus.”

91. *La Nación*, Oct. 6, 1975, p. 19A.

92. CN, P-8-3-1-62, no. 11066, July 31, 1946. Land within the two-kilometer border strip could not be titled, although the handful of legal deeds predating the frontier demarcation remained valid. Those whose holdings lay within the band or who wished to establish a farm there had to lease the land from the state. Cruz Bolaños was also apparently a useful partner for large landowners elsewhere in Costa Rica. In 1965 he was named president of two of the largest, best-endowed farms in Guanacaste province, Haciendas Tempisque and Filadelfia. Almost immediately after the companies' legal incorporation, he was replaced as president by the real owner of the properties. RPSM, microfiches 09066 and 9513.

highway project. Plans to finish the road through Coto Brus remained in effect until the early 1950s, when the Costa Rican government used the promise of the highway to lure Italian colonists to the SICA project.⁹³ But as one longtime area resident remembered later, “When Japan capitulated [in 1945], there was no need to make the road, and the whole thing was left abandoned in so few days that it was frightening.”⁹⁴ By 1954, the U.S. Commerce Department and the United Fruit Company, which had opposed the inland Coto Brus route from the beginning, succeeded in changing the course of the highway so that it would run along the coast near Golfito and its neighboring banana plantations.⁹⁵

The highly publicized Italian colonization plan, initiated before the shift in the highway route, proved to be an additional stimulus for migration to Coto Brus.⁹⁶ In 1951 the Costa Rican government signed an agreement with SICA director Vito Sansonetti giving SICA the right to purchase up to 10,000 hectares of state lands at ten colones (\$1.64) per hectare. In return, SICA had to establish an agricultural project with 250 to 300 colonists, one-fifth of whom were to be Costa Ricans; distribute the land in farms of 10 to 20 hectares; and build roads, houses, schools, electric generators, sawmills, and other basic installations.⁹⁷

For the migrants, many of whom had worked for the Sansonetti family on its properties in southern Italy, the project represented an escape from high unemployment in their homeland.⁹⁸ Sansonetti himself—who arrived boasting the rank of captain or comandante but after a few years assumed

93. Hill, Gollás, and Alfaro, *Area rural*, 3.

94. Interview with Araya Solís, July 20, 1990. Manger indicates that the road project terminated within one month of the end of World War II. “Southern Frontier,” 64.

95. Masing, “Foreign Agricultural Colonies,” 106, 259. Masing bases this explanation for the change in the highway route on confidential interviews with government officials (p. 327). In a June 27, 1991, interview with the authors, José Manuel Salazar Navarrete, former three-time director of Costa Rica’s agrarian reform agency, also commented that UFCO was probably behind the change.

96. A recent official history of road building in Costa Rica indicates that the plan to build the highway through Coto Brus was abandoned as early as 1949. Ministerio de Obras Públicas y Transportes, *Reseña histórica de los transportes en Costa Rica* (San José: MOPT, 1984), 72. This would suggest that the Italian colonists, who expected to benefit from the highway, were lured to Coto Brus under false pretenses.

97. Rita Bariatti Lussetti, “La inmigración italiana en Costa Rica, 1821–1968” (Licenciatura thesis, Escuela de Historia, Universidad Nacional Autónoma de Costa Rica, 1987), 260.

98. Several others had belonged to fascist organizations and, particularly in northern Italy where the Communists were strong, experienced difficulty in integrating into postwar society. Masing, “Foreign Agricultural Colonies,” 59. Some had arrived in Costa Rica earlier as part of a failed colonization effort in Talamanca, north of Coto Brus; they were among the first 12 SICA colonists. Bariatti quotes a description of these men as “penniless colonists, paratroopers or *arditi* [daring ones], shock troops, fearless men of action [and] of the front lines, who took the woods by assault, overturning the order of nature.” Bariatti, “Inmigración italiana,” 262.

the title of count—intended to “shine” in Costa Rican society and to acquire land that would not be threatened by the postwar agrarian reform in his native country.⁹⁹ The Costa Rican government, on the other hand, saw the scheme as a way of attracting European immigrants and investment and of opening up and populating empty spaces, much as Argentina and the United States had done years before.

While SICA succeeded in bringing more than one hundred Italian colonists to Coto Brus, the project rapidly foundered.¹⁰⁰ In 1957–58 coffee prices plummeted, and many indebted, embittered colonists returned to Italy.¹⁰¹ More important, in 1955 the boundaries of the colonization zone were changed and the new town of San Vito de Java, previously in the center of the zone, ended up in the southeastern corner. This complicated control of the far reaches of the property.

From the beginning of the project in 1953, Sansonetti complained to the president of Costa Rica that “many parasites [that is, squatters] and occupants are taking over the best lands.”¹⁰² By 1964, out of the total 10,000 hectares, 56 Italian colonists occupied 1,435.5 hectares, 25 Costa Rican colonists occupied 193.5 hectares, and SICA occupied 1,591 hectares. A foreign geographer described the remaining 6,781 hectares as “not colonized but infested with squatters.”¹⁰³

Faced with squatter invasions, management problems, and the desertion of most of the Italian colonists, SICA began to sell land to pay its debts.¹⁰⁴ Frequently, such sales involved private arrangements with squatters. SICA also sought the intervention of the agrarian reform agency, ITCO, requesting on one occasion that ITCO purchase one thousand “occupied” hectares and deposit the funds in the San José account of the U.S. Agency for International Development (USAID) as partial payment

99. Masing, “Foreign Agricultural Colonies,” 323; Hill, Gollás, and Alfaro, *Area rural*, 3.

100. Masing wrote in 1967, “For SICA the colonization project has been a complete failure. None of its objectives has materialized, and for all practical purposes the colonization company is defunct. The private financing agency in Rome (Società Finanziaria Italiana) that supported SICA in Costa Rica was declared bankrupt and closed by the Italian government. All that remains of SICA today is the name, the land, and the buildings owned by the company in San Vito.” Ulv Masing, “San Vito de Java: Analysis of the Success and Failure of an Immigrant Farm Settlement in the Rain Forest of Costa Rica,” in *Les problèmes agraires*, ed. Centre National de la Recherche Scientifique (Paris: Editions du CNRS, 1967), 495.

101. Bariatti, “Inmigración italiana,” 279.

102. Masing, “Foreign Agricultural Colonies,” 171.

103. *Ibid.*, 172.

104. H. G. Weizmann, *Emigrantes a la conquista de la selva: estudio de un caso de colonización en Costa Rica: San Vito de Java* (Geneva: Comité Intergubernamental para las Migraciones, 1982), 14.

of SICA's debt.¹⁰⁵ The colonization society also sold various properties of several hundred hectares to Italian investors, some but not all of whom were ex-colonists.¹⁰⁶

Squatting and Land Fragmentation

The division, sale, and what Sansonetti termed the "usurpation . . . [by] abusive occupants" of SICA's holdings were part of a larger, cantonwide process that appears to contradict the picture of growing land tenure concentration provided by the agricultural census data.¹⁰⁷ Squatting, and not just population growth or the division of holdings among heirs, was clearly a major factor in the democratization of land ownership.

The appendix traces examples of this process. In 1952 and 1953, next door to SICA, Anselmo Poma Murialdo, an Italian who had arrived in the zone independently of SICA, acquired 11,699 of the 15,404 hectares José Alberto Pacheco Cooper had titled three years before.¹⁰⁸ Twelve years later, Poma sold the land to ITCO, which used it to establish a 135-member agrarian reform project, Colonia Gutiérrez Braun, named for one of the engineers who had helped survey the border in the 1940s.¹⁰⁹ Next to Poma's property, Luis Wachong Lee, a Golfito merchant who became a major Coto Brus coffee producer (mostly on land acquired in 1951 from Pacheco Cooper), found his land "invaded" too, in the 1960s, and sold 4,900 hectares to ITCO in 1973.¹¹⁰ André Challe Peñaforte, along with other medium- and large-scale owners, watched helplessly as squatters

105. Roberto de Paolis to George Coumes, Feb. 5, 1964, ITCO, exp. 393 21–64. SICA's initial capital of \$800,000, provided largely by investors in Italy, expanded in the early 1950s with a \$500,000 appropriation by the Italian government agency for overseas workers (Istituto Nazionale di Crédito per il Lavoro Italiano all'Estero), a \$300,000 loan from USAID, \$150,000 from various Costa Rican sources, and additional funds from the European Intergovernmental Committee on Migrations. Bariatti, "Inmigración italiana," 259, 277; Masing, "Foreign Agricultural Colonies," 39–40.

106. These included Hacienda Italcancori, owned by Enrico Palumieri, with 834 hectares (CN, P-8-3-1-237, no. 3055, 1964; CN, P-8-3-1-367, no. 51793, 1961); and the 326-hectare Hacienda El Cedro, also owned by Italian residents of San Vito (CN, P-8-3-1-236, no. 50606, 1957; RPSM no. 05847, 1965).

107. Sansonetti to ITCO, Feb. 14, 1964, ITCO, exp. 392, fol. 5.

108. RPP, vol. 1398, fol. 440, no. 9643, a. 3, fol. 441, no. 9644, a. 1.

109. Poma purchased the land in 1953 for \$20,150 and sold it to ITCO in 1965 for \$139,623, earning almost 600 percent on his investment in 12 years. RPP, vol. 1574, fol. 54, no. 9643, a. 8; vol. 2352, fol. 3, no. 9643, a. 1. ITCO's distribution of the Gutiérrez Braun land occurred one month before an election and was apparently politically motivated. Manger, "Southern Frontier," 114.

110. Unpublished information provided by the Instituto de Desarrollo Agrario, formerly ITCO.

took over his properties. The 300- and 500-hectare properties belonging to Sansonetti's widowed sister-in-law were overrun.¹¹¹ A letter Sansonetti sent to the president of ITCO on her behalf conveys a sense of the landlords' frustration and impotence.

In 1960 the two fincas were invaded by squatters [*precaristas*]: in particular they occupied nearly all of the Agua Buena finca, where a coffee field was already in production. Efforts to liberate the property from the usurpers were useless. Agriculture Minister Urbina even sent a platoon of the Treasury Police [*Resguardo Fiscal*] to recover the 300 hectares for the legal proprietors. But the results of this action were nil. Then a suit was presented against 44 persons and the Mayor of Villa Neilly made a legal inspection, paid for by the interested parties. Later ITCO intervened and suspended judicial action in order to arrive at an out-of-court settlement. ITCO appraised the land at 350 colones [\$53] per hectare, although the lands are actually worth between 800 and 1,000 colones [\$121–\$151] per hectare. The widow and the daughters nevertheless accepted the ITCO price. The usurpers did not. The tax bureau [*Tributación Directa*] intervened and confirmed the same value. The proprietors again accepted the price of 350 colones per hectare and the usurpers did not. After nearly ten years of waiting, the proprietors expect a decision from ITCO, taking into account that they have even helped the occupants obtain loans from the Banco Anglo Costarricense, so that they might pay the small sums each one owes for the parcels they occupy, which today, with their crops, are worth much more.¹¹²

One former Coto Brus resident, who described his father's participation in the occupation of properties belonging to Sansonetti and Challe, remembered that unemployed banana workers from nearby Golfito had been behind several of the invasions, and

there was no way the guard could remove the peasants. Especially because this was mountainous jungle and they brought the guards from San José and Golfito. When they arrived in a different climate, in a place that was totally forested, in a place as difficult as [Coto Brus] was then, with hunger and rains and everything, the guards themselves desisted and stopped trying to hunt the campesinos.¹¹³

111. Challe had given these properties to Eda Cibelli after her husband, Giulio Cesare Sansonetti, the Italian colony's first director, died in an airplane crash in 1952. The airplane belonged to Challe, and his gift of the two farms was recompense for the widow and her two daughters. Other documents in the ITCO file place the beginning of the occupation in 1959.

112. Sansonetti to Domingo García, Oct. 26, 1970, ITCO, exp. 393 21-64, fols. 198–99.

113. Interview with Ulises Blanco, San José, Aug. 11, 1990.

Coto Brus shared with other major squatting zones several key characteristics.¹¹⁴ As in other parts of Costa Rica, peasants preferred to occupy underutilized properties remote from towns where civil and rural guards were stationed in larger numbers. They also targeted foreign absentee owners, in the belief that landless Costa Ricans “recuperating” foreign-owned latifundios would generate greater sympathy among policy-makers.¹¹⁵ Ex-banana workers, with experience in militant, Communist-controlled unions, were in the forefront of land takeovers in other parts of the country.¹¹⁶ In Coto Brus, many squatters were former banana plantation laborers who arrived to pick coffee and found themselves unemployed once the harvest season ended.

Despite seemingly favorable conditions, not all Coto Brus squatters achieved their objectives. In 1982, the year of Costa Rica’s worst economic crisis since the 1930s depression, small numbers of occupants moved surreptitiously onto Hacienda Alturas de Cotón. With the exception of Finca Coto Brus, Alturas de Cotón was the only large property in the canton that was relatively free of squatters. This U.S.-owned latifundio, patrolled by shotgun-toting sentries, contained more than ten thousand hectares, only two hundred of which, by the owners’ admission, were actually cultivated.¹¹⁷ In 1984 a larger occupation occurred, and the Rural Guard evicted between four hundred and six hundred squatters from Alturas de Cotón, killing one and wounding more than ten.¹¹⁸

114. From 1960 to 1980, ITCO received jurisdiction over 11 Coto Brus squatting conflicts. These involved 205 families and 3,618 hectares of occupied land. Beatriz Villarreal Montoya, *El precarismo rural en Costa Rica, 1960–1980: orígenes y evolución* (San José: Editorial Papiro, 1983), 167. Since most such conflicts were not settled through official channels, those brought to the attention of ITCO were likely only the tip of the iceberg.

115. Edelman, *Logic of the Latifundio*, 151–52. Following the 1984 occupation of U.S.-owned Alturas de Cotón, evicted squatters and their supporters blocked streets in San Vito. The Rural Guard “tried to remove from the area Lic. Mora, the hacienda administrator, who was holed up in the cantonal guard headquarters. [Guard commander] Camacho advanced in the car with Mora, and the guards with antiriot equipment went a little bit ahead. The people who obstructed their way were singing the National Anthem.” *La Nación*, Mar. 7, 1984, p. 10A.

116. Villarreal, *Precarismo*, 134–36.

117. *La Nación*, Mar. 7, 1984, p. 10A. According to the owners’ agent, the property contained two hundred hectares of coffee and three thousand hectares of pasture. *La Nación*, Mar. 9, 1984, p. 8A. The agrarian reform agency estimated that 8 percent of the property was in some kind of productive use. Unpublished information, Instituto de Desarrollo Agrario. In Costa Rica, landlords frequently plant pasture simply to avoid government expropriation, whether or not they have productive livestock enterprises.

118. Rafael Angel Ugalde Quirós, “Remedio parcial en la zona sur no prelude aún solución agraria,” *Semanario Universidad* (San José), Mar. 9–15, 1984, 13; Patricia Blanco, “Alturas de Cotón: el detonante que nos anuncia situación explosiva en la zona sur,” *ibid.*, 14–15.

The guard confined more than 150 arrested peasants in the San Vito bullring and sent close to 200 more, their hands bound with rope, in trucks and buses to jails in nearby towns.¹¹⁹ The guard employed tear gas and truncheons to disperse supporters of the peasants who barricaded streets in San Vito. Coto Brus residents expressed anger not only at the police violence but at the underutilization of the huge, foreign-owned estate and the way its security force had long prevented the use of public roads that crossed the property. One citizen complained, “there are campesinos who have to walk two or three extra hours to reach their villages because they aren’t allowed to pass through the finca, or in other cases [because] they [then] have to go along nearly impenetrable roads.”¹²⁰

The violence at Alturas de Cotón—which suggests, of course, a link between land inequality and unrest at the micro level—sparked calls for the property’s expropriation, and the government council (*consejo de gobierno*) agreed to purchase, or force the owners to sell, two thousand hectares. Nevertheless, the owners’ agent, whom the director of the agrarian reform agency recalled later as a particularly “arrogant, intransigent” individual, refused to sell.¹²¹ The state failed to proceed with the expropriation when other lands became available just south of Coto Brus.

One final process of land division bears mention, because it also contradicts the picture of growing land concentration provided by the Coto Brus census data. In addition to the largest owners’ sales of medium-sized properties and the public-sector land reform, several major proprietors donated lands or sold them at low prices to local peasants, carrying out what one Costa Rican historian, in another context, has termed “private enterprise” land reforms.¹²² When Challe, for example, went bankrupt and could not pay his workers, he used lands to provide them the severance premiums obligatory under Costa Rican law.¹²³

The most striking example of a “private enterprise” agrarian reform involved Ernesto Araya Solís, who came to Coto Brus at the urging of his brother-in-law, José Joaquín Ruiz Cambronero, the accountant who claimed lands using “rights” received from his employers, the largest coffee producers in central Costa Rica. The precise size of Araya’s holdings

119. *La Nación*, Mar. 9, 1984, p. 8A.

120. Blanco, “Alturas de Cotón,” 15.

121. Interview with Salazar Navarrete, San José, June 27, 1991.

122. Salas Viquez, “Búsqueda de soluciones,” 107.

123. One woman whose father had been Challe’s Coto Brus manager remembered that Challe “inherited a fortune, but didn’t know how to administer it. He even used to go to Europe on a ship with all the servants. He went broke and didn’t have money to make severance payments. So Challe paid his employees with lands, distributing at least ten fincas, if not more, that way. The smallest one was four hectares. He gave much more to Papá.” Interview with Jovita Cordero, Agua Buena de Coto Brus, Aug. 3, 1990.

is difficult to estimate because he acquired many small and medium-sized farms using a variety of procedures.¹²⁴ It seems likely, however, that by the late 1950s he, together with close family members, controlled nearly one thousand hectares in the area of Agua Buena, Coto Brus. What is clear from the documentary record and field interviews is that in 1959 he began to divide his holdings into numerous lots, selling them at low cost to aspiring smallholders.¹²⁵ In a few cases, Araya distributed lots as a result of pressure from squatters. More commonly, however, he permitted smallholders to acquire them in return for nominal monthly payments.

Araya's "private enterprise land reform" originated in a combination of instrumental and altruistic motives. In addition to land, he owned several local businesses and hoped to form a prosperous town, inhabited by a stable, loyal clientele. Like many Costa Ricans, Araya viewed smallholders as the source of the country's economic progress and democratic values.

What we needed was a town. What were we going to do with just pastures there? If you go to [the cattle-raising province of] Guanacaste, you'll find that four people, a few people, own the land and the rest are working as peons. If the land is divided and each person has 5, 6, 8 hectares or something like that, it speeds progress. So I left myself the central part, 90 hectares perhaps; fractioned the rest into pieces of

124. In the July 20, 1990, interview in San José, Araya stated that he had titled 30 hectares in his name and 30 in his wife's name using the 1941 titling statute, and had purchased *gracias* from one of the Pachecos. Cadastral plans suggest that Araya's and his wife's holdings included at least 346 hectares (CN, P-8-3-1-4, no. 10784, 1944; P8-3-1-22, no. 50341, 1956; P-8-3-1-229, no. 50759, 1957; P-8-3-1-228, no. 10979, 1957; P-8-3-1-36, 1959). He and his sister also rented much land in the two-kilometer frontier strip; for example, 200 hectares in 1945 (CN, P-3-4-1-4). Property registry entries indicate that in addition, Araya's sister and daughter sold him much of the land belonging to them and to Ruiz (RPP, vol. 1278, fol. 231, no. 8572, a. 3, 1961; vol. 1746, fol. 69, no. 13292, a. 2, 1973). In 1950, a relative of Araya's wife also claimed 244 hectares adjacent to their property using *derechos de patria* (CN, P-8-3-1-13, no. 11818). Araya purchased "improvements"—houses, cleared land, coffee, or other perennials—from the many Panamanians who left Coto Brus once the border was defined. Panamanians frequently left in the early and mid-1940s because Costa Rican titling laws required that those claiming state lands be citizens.

125. In 1959, 13 individuals, some of them apparently squatters, received lots of between 9 and 13 hectares, and at least one more received a lot of almost one hectare (CN, P-8-3-1-36; P-8-3-1-5-41-53; RPP, vol. 1624, fol. 187, no. 8666, a. 2). In 1965, Araya and his wife "segregated" from their holdings at least 16 more lots of 4 to 5 hectares each (CN, P-8-3-1-383; P-8-3-1-388; RPP, vol. 1676, fol. 85, no. 12666, a. 1). In 1973-78, they divided what remained of the farm distributed in 1959 into 12 lots of approximately 6 hectares each, divided another farm into 12 one-to-two-hectare pieces, and fragmented yet another into 81 house lots (RPP, vol. 1746, fol. 49-71, nos. 3272-94; vol. 2535, fol. 81, no. 26681, a. 1). In 1965, Araya also donated lots in Agua Buena for a municipal building, a community meeting hall (*casa communal*), a church, and a school (CN, P-8-3-1-401 to 405). On other occasions, he donated land for a bullring to the community and a house lot to the state-run Social Aid Institute (Instituto Mixto de Ayuda Social). Manger, "Southern Frontier," 177; RPP, vol. 1624, fol. 187, no. 8666, a. 3, 1981.

four, five hectares; and left it to people in return for payments. . . . Now people are interested in the place, it's not just any old place where they go to earn a day's wage. . . . Conformist towns (*pueblos*) don't progress, because they accept anything. If the church falls down [they say], "What a bother! (*¡Que vaina!*), the church fell down." If the doctor leaves, "How annoying (*¡Que tirada!*), the doctor left." But people who work in a place fight [for it], and it's not so easy to take things away from those people.¹²⁶

However much Araya may have been influenced by less than purely philanthropic considerations, and despite remarks that could be interpreted as a tacit and grudging recognition of the difficulty of "taking things away" from squatters, his "private enterprise reform"—and those of other landowners—contributed to the democratization of land tenure in Coto Brus.

Large Properties, Censuses, and Disappearing Hectares

By the late 1980s, only two major latifundios remained intact: Alturas de Cotón and Finca Coto Brus. The 1973 census, unusually thorough and accurate, at least in its demographic data collection, detected Alturas de Cotón (but not Finca Coto Brus) for the first and only time since census taking began in 1950.¹²⁷ The 1984 census, in contrast, failed to record either farm. As mentioned earlier, it also registered a dramatic 28,367-hectare drop in farm area since 1973, even though total population and the number of farms soared. An examination of why the 1984 census missed these two major properties and why the canton's farm area fell so precipitously suggests several additional elements that need to be taken into account in using census data to study changes in land tenure.

One recent, census-based study of changing land tenure patterns in southern Costa Rica notes the disappearing hectares in Coto Brus in 1973–1984, but explains them as resulting from the creation of the new La Amistad International Park, which spans the border.¹²⁸ Only 8,400 hectares of the park, however, actually lie in Coto Brus.¹²⁹ The published

126. Interview with Araya Solís, July 20, 1990.

127. On the reliability of the 1973 population census, see Dirección General de Estadística y Censos and Centro Latinoamericano de Demografía, *Costa Rica: evaluación del censo de 1973 y proyección de la población por sexo y grupos de edades, 1950–2000* (San José: DGEC, 1976), 15, 100–101.

128. Mario E. Fernández, "La estructura agraria de la región fronteriza de Costa Rica con Panamá: resultado de la lucha campesina por la tierra," *Revista de Ciencias Sociales* 45/46 (Sept. 1989), 59.

129. Manger, "Southern Frontier," 206.

censuses do not provide nominal lists of properties.¹³⁰ Nevertheless, by comparing raw, case-by-case data with a map of census segments it is possible to situate individual censused properties in a very small geographical zone. When this information is complemented with cadastral and property registry data, a more precise, albeit complex and particular, explanation emerges for the surprising drop in farm area between 1973 and 1984.

The largest farm recorded in the 1973 census as part of Coto Brus was a 10,584.7-hectare property. Although the farm's headquarters was in southern Coto Brus, most of its territory actually lay in the adjacent canton of Golfito. Shortly after the 1973 census, a new canton—Corredores—was created out of Golfito and 3,200 hectares shifted from Coto Brus to the new jurisdiction. But because the farm's headquarters sat in the section moved from Coto Brus to Corredores, a 3,200-hectare real loss resulted in the appearance of a minimum of 10,584.7 lost hectares.¹³¹

An additional 10,147 hectares vanished in 1984, either because the administrators of Hacienda Alturas de Cotón did not report their holdings or the census taker never bothered to inquire. During the 1984 squatting conflict it became clear that this latifundio was still intact, despite the census' failure to record it. Nearly three-quarters of the seemingly anomalous drop in total farm area is thereby explained by these two circumstances alone. If the area of Coto Brus that became part of La Amistad Park (8,400 hectares) and the two large properties "lost" in 1984 (20,731.7 hectares) are added to the 1984 censused farm area (41,031.9 hectares), the total is a mere 1 percent larger (765.3 hectares) than the 1973 censused area (69,398.3 hectares).

Neither the 1973 nor the 1984 agricultural census recorded the 10,000 hectares of Finca Coto Brus. This case bears further scrutiny because it is a clear illustration of the thesis stated at the outset: the largest landowners have a strong interest in listing their holdings in the Public Property Registry, but whenever possible, avoid reporting them accurately to census takers. Since the early 1950s, different owners of Finca Coto Brus have used it primarily as collateral for loans—two mortgages in 1951, four in 1962, one in 1965, three in 1971, two in 1973, and one in 1976.¹³² These liens, of course, could only be made against legally titled land. Productive

130. Dirección General de Estadística y Censos, *Censo agropecuario 1973* (San José: DGEC, 1974); *Censo agropecuario 1984* (San José: DGEC, 1987).

131. This property did not, however, re-emerge in Corredores canton in the 1984 census. It is unclear whether this resulted from its actual disappearance (through subdivision) or to deficiencies in censusing, such as those discussed in this article.

132. RPP, vol. 1304, fol. 85, no. 8733, a. 3-4; vol. 1676, fols. 285, 288, no. 12767, a. 2, 4-6, 8, 11-12, 14; vol. 2075, fol. 42, no. 12767, a. 17-18, 22.

investment, by contrast, was relatively insignificant; in 1962, this massive property contained only 49 hectares of coffee, 280 hectares of pasture, and a shed for a sawmill.¹³³ Although it also had houses for managers and peons, total farm “improvements” were estimated (for tax purposes, no doubt) at a mere one hundred colones (\$15).¹³⁴ Only in the early 1970s did the owners begin to make modest capital investments, installing coffee-drying patios and processing facilities.

In 1974, more than five hundred new land invasions occurred in Costa Rica, more than in any other year in recent memory.¹³⁵ The state began to pursue agrarian reform with unprecedented energy, purchasing and expropriating underutilized properties for distribution to landless peasants.¹³⁶ In 1975–76, the owners of Finca Coto Brus, probably in response to the pro-reform political environment and to land invasions in Coto Brus and elsewhere, divided the ten-thousand-hectare property into less conspicuous lots of one thousand hectares, owned by nine separate corporations. Not surprisingly, all were controlled by Jorge Zeledón Castro’s son-in-law, daughter, and grandsons.¹³⁷

Studies of agrarian change in different parts of Latin America have cautioned that “paper” divisions of latifundios frequently serve to conceal real levels of land concentration, and that agricultural census data are correspondingly distorted.¹³⁸ In the case of Finca Coto Brus, the fictitious partition’s effect on census data was minimal; in 1984 enumerators uncovered only one farm of one thousand hectares in Sabalito district,

133. Even in the 1970s, one owner of the finca, Carlos Enrique Riba Zeledón, noted unselfconsciously in his *Who’s Who* entry that he enjoyed “horseback riding and cattle raising as a hobby” (emphasis added). Allan E. Huper Salazar, *Who’s Who in Costa Rica, 1979–1980* (San José: Lubeck, S.A., 1979), R7–R8.

134. RPP, vol. 1676, fol. 285, no. 12767, a. 1.

135. Francisco Barahona Riera, *Reforma agraria y poder político: el caso de Costa Rica* (San José: Editorial de la Univ. de Costa Rica, 1980), 112; Villarreal, *Prevarismo*, 94. ITCO data indicate that more land occupations took place in 1963. In fact, this was the first year the new agrarian reform agency recorded such cases, and the high figure represents an accumulation of disputes, most of which had begun many years earlier.

136. Seligson, *Peasants of Costa Rica*, 130–36.

137. The companies were Río Cedro (RPSM no. 30308), Las Mellizas (RPSM no. 30310), Ganadera El Cedral (RPSM no. 26279), Industrial del Sur (RPSM no. 30302), El Barú (RPSM no. 30306), Agropecuario Pico Blanco (RPP, vol. 2075, fol. 42, a. 19), Río Cotito, Maderas Tres Lomitos, and Río Odni. Several partners who were not family members held stock and directorships in these corporations, including an aviation executive, an Ecuadoran diplomat, a Nicaraguan dentist, and a Nicaraguan accountant. Three of the companies apparently never were legally constituted, and the records of one were missing from the Mercantile Registry.

138. Cristóbal Kay, *El sistema señorial europeo y la hacienda latinoamericana* (Mexico City: Ediciones Era, 1980), 99; Grindle, *State and Countryside*, 102; Alejandro Reyes Posada, *Latifundio y poder político: la hacienda ganadera en Sucre* (Bogotá: Editorial CINEP, 1978), 148; Maurice Zeitlin and Richard Earl Ratcliff, *Landlords and Capitalists: The Dominant Class of Chile* (Princeton: Princeton Univ. Press, 1988), 155–57.

where Finca Coto Brus was located, indicating that at least nine similar lots were not reported. More important, an assessment of the quantitative importance of “paper” divisions for land distribution—something rarely attempted by those who warn of the possible census data distortions—can be made through the type of multisource approach to understanding land inequality for which we have been arguing in this paper.

Once a “mother farm” (*finca madre*) or its “daughters” have been identified and located in the property registry (through an index of proprietors, cadastral plan, or other source), it may be possible to employ the mercantile registry to identify the officers and major shareholders of companies that own the different “segregated” lots. This in turn may confirm the existence of “single capitals” even when these are deliberately divided and concealed behind various corporate facades.¹³⁹

Conclusions

Different kinds of state data gathering are virtually always carried out for particular political or bureaucratic purposes. They may therefore be expected to generate compliance or resistance from sectors of the population that believe themselves served or threatened. These biases inform diverse kinds of sources that presumably describe the same object—such as property records and agricultural censuses that refer to the same geographical area—and that social scientists and historians too frequently use uncritically and interchangeably. In particular, this study has shown that the use of census data alone in estimating land concentration can prove highly misleading.

139. The Finca Coto Brus example also suggests that geopolitical factors like those that fueled the Coto Brus land rush in the first place did not entirely disappear, even in the late 1980s. In 1976, Zeledón’s heirs sold most of the property—9,098 hectares—to two brothers, Mario Arturo and Alberto José Esquivel Volio, both San José-area businessmen and the latter President Oscar Arias’ minister of agriculture in 1986–87. RPP, vol. 2075, fol. 94, a. 21; CN, P-8-2-3-496, no. 746393-88. In May 1989, the Esquivels sold the northern two-thirds—6,059 hectares—to Cecil D. Hylton, a Virginia real estate magnate (RPP, folio real 25514). At his death in August 1989, Hylton was the second-largest landowner (after the local utility company) in Prince William County, Virginia, in suburban Washington, D.C., where his holdings were valued at almost \$97 million. *Potomac News* (Woodbridge, Va.), Aug. 29, 1989, pp. A1, A5. He was also among the largest landowners in the northern Costa Rican province of Guanacaste, where he acquired various large haciendas near the Nicaraguan border in 1980–81, not long after the Sandinistas came to power. Some of these properties served as Contra camps in the early 1980s; in 1984, many were donated to evangelist Jimmy Swaggart, who was also active in anti-Sandinista causes. Edelman, *Logic of the Latifundio*, 240–45. Hylton Enterprises Virginia, Inc., acquired most of Finca Coto Brus on Costa Rica’s southern border just seven months before the December 1989 U.S. invasion of Panama. Much of this property lay in a protected watershed in which forest felling, agriculture, and other money-making land uses were severely restricted.

Armed only with the most recent census data, a scholar doing research in Coto Brus, Costa Rica, would conclude that land distribution in the area is highly skewed, matching that found in neighboring countries such as El Salvador, where agrarian inequality is often viewed as a central cause of the 1980s civil war. Armed with all the census data from 1955 through 1984, the investigator would also conclude that the region has followed a “typical” pattern of increased concentration of land over time. Moreover, the researcher would be likely to ascribe the fragmentation of smallholdings that emerges in the census data, and that is widely considered a “typical” concomitant of growing land concentration, to population growth and divisions resulting from inheritance rather than to the more complex set of determinants we have outlined above.

Property registry and cadastral data provide a very different picture of the evolution of land tenure in Coto Brus. They indicate that it was actually during the initial years of settlement that land became highly concentrated in the hands of a very few wealthy absentee landlords. These data also show that large landowners generally have been careful to have their holdings surveyed and registered, a tendency less apparent for smallholders, especially in the early years of colonization of the region. The land registry and cadastral records also suggest that in the case of Coto Brus, large properties were acquired and held primarily for speculative purposes or as collateral, despite the region’s abundant timber and outstanding potential for coffee production and even well after the route of the Inter-American Highway was shifted to the south.

Over the years, nearly all these large farms were broken up through various mechanisms, including recourse to the land market, state-sponsored land reform, “private” land reforms, and squatting. In at least one recent case, landowners employed fraudulent “paper” subdivisions to make it appear that their large farm had been split into smaller lots. But the survival of large farms in Coto Brus was the exception rather than the rule.

We have found that large farms often go uncounted, notwithstanding the Costa Rican census bureau’s reputation for conducting accurate enumerations.¹⁴⁰ Indeed, even when large farms are artificially subdivided into relatively small, one-thousand-hectare units to escape expropriation, the census takers miss these lots as well. In general, because of large landowners’ reticence about reporting their properties, we would argue that researchers may find agricultural censuses most useful in examining

140. This problem is apparent in other contexts as well. In contemporary northern Guatemala, for example, cadastral plans include many large properties that large landowners did not report (or underreported) to census takers. Mitchell A. Seligson and John Kelley, “Tierra y trabajo en Guatemala: la ecuación desequilibrada,” *Anuario de Estudios Centroamericanos* 12:2 (1986), 5–34.

the lower end of distributions. The reasons for this are both substantive and practical. Compared with large owners who fear expropriation, smallholders have few reasons not to describe their farms accurately to census takers. At times, they may even welcome reporting their holdings in the belief that this constitutes one kind of official recognition of their tenure rights. Such willingness to accommodate census enumerators is understandable because, in the absence of subsidized titling programs or immediate threats to their claims, smallholders are less likely to shoulder the costs of inscribing their farms in the property registry or cadastral office. Finally, in the event that a state-sponsored program does facilitate peasants' legalization of their holdings, the number of these listed in registry and cadastral records will probably be so large that it complicates data collection, even in the event that a sample of records is taken.

Agricultural censuses occasionally manage to count large properties. In such cases, they may still be very useful in studying large farms, even if the sizes reported do not correspond to property records or to physical reality, and even if the overall data provide a distorted picture of the important upper end of distributions. Raw census data, when available, may allow the identification of single farms by small geographical segments, thereby permitting a precise determination of which large landowners have successfully escaped enumeration. The raw data, in combination with property and mercantile registry information, may also indicate whether landowners have attempted "paper" divisions of large properties and how successfully those efforts have obscured the real degree of land concentration. Raw or published census data provide a means of checking the extent of distortion in the upper end of land distribution against property and cadastral records. Agricultural censuses are a rapid means of detecting and dating the original process of land appropriation in different regions. It would have been far more difficult, for example, to establish a working periodization of the Coto Brus land rush without available census data.

Of course, the difficulty in using property records for larger units of analysis is obvious. After all, this study has focused exclusively on a single *cantón*, or county. A number of examples, however, suggest that the difficulties are not insurmountable. One developing-country researcher has employed a complete set of property records to aggregate different holdings of single landowners and to analyze recent land distribution patterns in a region of more than 45,000 farms and approximately one thousand square kilometers (slightly larger than Coto Brus).¹⁴¹ Hilda Sábato has

141. Lim Teck Ghee, "Reconstituting the Peasantry: Changes in Landholding Structure in the Muda Irrigation Scheme," in *Agrarian Transformations: Local Processes and the State in Southeast Asia*, ed. Lim et al. (Berkeley: Univ. of California Press, 1989), 196–205.

used cadastral plans to analyze increasing property concentration in 16 partidos of Buenos Aires Province, Argentina, over most of the nineteenth century.¹⁴² Héctor Lindo-Fuentes' sampling of property records in his examination of land distribution in a larger region, western El Salvador, suggests numerous routes future researchers might pursue.¹⁴³

We would caution, however, that just as the omission of a single latifundio from an agricultural census may radically distort the picture of land tenure in a small jurisdiction, the exclusion of one or a few large farms from a sampling plan may have similar consequences. A sample of property records stratified by farm size will probably yield a more accurate picture of land distribution than an unstratified sample, especially if it draws heavily from the upper end of the distribution. Sampling of any kind is probably most feasible for the period immediately following the creation of a modern property registry, during a region's initial settlement, or for a small geographical area. It would also be practical to base sampling on the system of records organized at the smallest possible geographical level and with the most accessible information on property size. In the Costa Rican case, this would involve cadastral plans, which are classified chronologically by district, rather than the typically lengthy property registry entries, which are inscribed, often in ornate or barely legible script, in giant, unwieldy tomes according to province. Sampling of property records could also be used to adjust regional or national census findings in light of a series of micro-studies of the type described in this essay.

The use of a small unit of analysis, such as that presented here, cannot, of course, provide definitive proof of the hypotheses in this essay—that the different kinds of sources that have been used to study land inequality contain built-in biases. This study, however, has highlighted the intractable epistemological problems of census-based studies, and is intended to serve as a warning to those who draw conclusions about the causes of rural unrest and revolution on the basis of agricultural census data. We hope this will encourage more researchers to undertake detailed yet small-scale quantitative analyses of the links between land tenure and social unrest and rebellion, especially in regions of political and historical significance in the development of agrarian movements. Such studies have greater potential for quantitative accuracy and rigor and are also more likely to permit a

142. In the newly settled zone north of the Río Salado, Sábado found a pattern similar to that of Coto Brus during a later period. Landowners divided their huge initial claims into smaller properties, permitting the emergence of a significant sector of small and medium-sized producers but also bringing about greater aggregate inequality over time. *Capitalismo y ganadería en Buenos Aires: la fiebre del lanar, 1850–1890* (Buenos Aires: Editorial Sud-americana, 1989), 51–78.

143. Héctor Lindo-Fuentes, *Weak Foundations: The Economy of El Salvador in the Nineteenth Century* (Berkeley: Univ. of California Press, 1990), 146–51.

full appreciation of the key qualitative factors that inevitably mediate the relation between skewed distributions of land and social upheaval.

Our analysis could also be used as a partial explanation of nonrevolution in Costa Rica, which some analysts consider an anomalous phenomenon in the strife-torn Central American region, especially if additional studies elsewhere in the country demonstrate similar patterns. Here is a largely agrarian country whose Gini index of land inequality has long equaled that of El Salvador. In the Coto Brus area, however, even while the Gini index was rising, land concentration was actually declining, and an ever-growing number of peasant migrants were able to acquire small plots of land. This peasant access to land in Coto Brus no doubt helped to defuse pressures for land that were building elsewhere in the country. And in the few cases in Coto Brus in which large farms managed to remain intact, such pressures did build very rapidly, resulting in repression and violence. None of these dynamics is detectable by use of the census data alone.

Appendix: Summary Histories of Six Major Properties in Coto Brus

This information was gathered from the Registro Público de la Propiedad; Registro Público, Sección Mercantil; Catastro Nacional; and field interviews.

Evangelista Romero Fallas, Andre Challe Peñaforte

1945	Evangelista Romero Fallas claims 4,122 hectares.
Late 1940s and early 1950s	Romero sells much of claim to André Challe Peñaforte.
1950s and 1960s	Challe loses most property to massive squatter occupation. Donates some sections to a cooperative.

Finca Coto Brus

1944	Evangelista Romero Fallas and Carlos Alberto Pacheco Jirón claim 10,000 hectares before judicial authorities (Juzgado Civil de Hacienda).
1946	Romero and Pacheco Jirón inscribe their claim in the Public Property Registry.
1946	Romero and Pacheco Jirón sell 1,300 hectares to José Francisco Carballo Quirós for 12 colones per hectare.
1954	Carballo sells 1,300 hectares for 29.23 colones per hectare to Jorge Zeledón Castro.

- 1956 Zeledón sells 1,300 hectares for 40 colones per hectare to Compañía Agrícola Coto Brus, represented by Luis Cruz Bolaños.
- 1962 Finca Coto Brus refounded as a 10,001-hectare property of Compañía Agrícola Coto Brus, owned by Zeledón, Cruz, and Jorge Salgado Vera.
- 1975 Two lots of 1,000 hectares sold to Ganadera El Cedral, controlled by a son-in-law of Zeledón and other relatives.
- 1976 Seven lots of 1,000 hectares each sold to other companies owned by relatives of Zeledón.
- 1976 These companies sell 9,098 hectares to Sociedad Sabana Grande, controlled by Mario Arturo and Alberto José Esquivel Volio.
- 1989 Sabana Grande sells 6,059 hectares to Hylton Enterprises (Virginia), Inc., and retains 3,039 hectares.

José Alberto Pacheco Cooper, Anselmo Poma Murialdo,
Colonia Gutiérrez Braun

- 1950 José Alberto Pacheco Cooper claims 15,404 hectares.
- 1951 Pacheco sells 3,005 hectares to Luis Wachong Lee, who subsequently acquires smaller adjacent properties.
- 1951 Pacheco sells 700 hectares to Oscar Hernández Montea-
legre.
- 1951 Pacheco sells 6,800 hectares to Sociedad Abangares In-
vestment Corporation for 56,000 colones.
- 1952 Abangares Investment sells 6,800 hectares to Pacheco's
Corporación Japacheco for 101,350 colones. This re-
unites property of 11,699 hectares.
- 1952 Corporación Japacheco divides property in two and
sells it to Pacheco, its lawyer and owner.
- 1952-53 Pacheco sells the pieces for 25 colones per hectare
to Anselmo Poma Murialdo and to Compañía Agrícola
Talamanca, owned by Poma.
- 1965 Poma and his company sell 10,699 hectares at 86 colones
per hectare to ITCO, the land reform agency.
- 1973 ITCO begins to title divided property.
- 1973 ITCO expropriates, with compensation, about 4,900
hectares from Wachong, leaving him about 500 hect-
ares.

Hacienda Alturas de Cotón

- Late 1940s to mid-1950s Lands claimed by André Challe Peñaforte.
- Mid-1950s Nelson Howard and Vicente López acquire 10,147 hectares.
- 1984 Major squatting conflict on the hacienda, now administered by López' brother-in-law, Roig Mora Cháves.

Sociedad Italiana de Colonización Agrícola (SICA)

- 1952 Government sets aside 10,000 hectares for SICA.
- 1955 Government changes borders of 10,000-hectare SICA reserve, shifting town of San Vito from center to southeast of colonization zone.
- 1960s SICA divides its holdings among Italians and Costa Ricans, resulting in many small and some large properties.
- Late 1950s to early 1970s Massive squatter occupations of many properties formerly part of SICA grant.

Luis Cruz Bolaños, Andre Challe Peñaforte

- 1947 Luis Cruz Bolaños and André Challe Peñaforte claim 978 hectares within Romero's original claim.
- 1950s and 1960s Occupied by squatters.