ABSTRACT. Recent economic studies have shown that geography is a good empirical predictor of present-day economic institutions. Historians of Africa have explained several features of the continent as outcomes of its land abundance and labor scarcity. This study evaluates the validity of this “factor endowments” perspective by analyzing a pre-colonial case study. Using a sample of court records from the early twentieth century, I show that the economic institutions governing land, labor and capital among the Egba of southwestern Nigeria fit well with standard theoretical predictions for land-abundant and labor-scarce societies. In the period 1830-1914, the Egba had poorly defined land rights, practiced extensive agriculture, relied largely on family, forced and dependent labor, and loans were secured using claims over labor. There are two major exceptions to this pattern. First, the Egba began to sell land at least as early as 1870, before other Yoruba groups. Second, land disputes existed. These facts can be explained by the initial concentration of the Egba as a refugee group around Abeokuta, which decentralized control of land, and by the particular endowments which made certain plots of land more valuable than others.

1. INTRODUCTION

The idea that institutions are key determinants of long-run economic outcomes is an important one in economic history.\textsuperscript{1} Recent cross-country empirical work has confirmed this quantitatively.\textsuperscript{2} Understanding what leads some societies to have “better” institutions than others, then, is essential in explaining the persistence of underdevelopment in the poorest nations. A number of studies have advanced the hypothesis that geographic endowments play a crucial role in shaping differences in institutional quality across countries. This is not a new concept; Marx (1853) ascribed “Asiatic despotism” to that region’s dependence on state-built irrigation works. More recently, Diamond (1997) has influentially argued that Eurasian conquest of the rest of the world was facilitated by its endowments of crops and domesticable animals as well as the landmass’

\textsuperscript{1}Greif (2006), North (1991) \hfill \textsuperscript{2}Acemoglu and Johnson (2005), Nunn (2008)
East-West orientation. Engerman and Sokoloff (2002), similarly, have accounted for the differential long-run performance of new world economies according to whether their geographic endowments favored small farms or large plantations. The statistical correlation of geographical features with contemporary institutional characteristics has been confirmed by Acemoglu et al. (2001) and Easterly (2007).

Geographic factors have been particularly important in perpetuating African underdevelopment; Bloom et al. (1998) argue that geography, demography, and health explain almost four-fifths of the gap in growth rates between Africa and the rest of the world, while economic policy and governance (including institutional quality) can account for less than one quarter of this difference. In addition to their direct impacts, geography and factor endowments have shaped institutional development in Africa. Empirical support for this link is provided by Nunn and Puga (2007), who show that countries with more “rugged” geography were enabled to escape the worst effects of the slave trades, and have since benefitted from better institutions. Austin (2008) has recently reintroduced the notion that Africa’s land-abundance and labor-scarcity, coupled with its particular barriers to extensive land exploitation, explain the general features of the continent’s development. He adds to this perspective a recognition of the importance of two additional elements — scarcity of capital and the seasonality of labor demand. He attributes the first systematic use of this analysis to Hopkins (1973), who argued the ratio of land to labor determined technological choices, the nature of factor markets, whether property rights existed, and the form of economic growth.

The present study assesses the relevance of this “factor endowments” view in the context of a historical case study. Specifically, a sample of court records from the early twentieth century is used in order to show the extent to which the development of economic institutions among the Egba of southwestern Nigeria between 1830 and 1914 can be explained by their relative endowments of land, labor, and capital. I argue that institutions governing factors of production among the Egba to 1914 were primarily the result of the abundance of land and scarcity of both labor and capital (that is, embodied labor) which characterized the region. There are two principal exceptions to this pattern. First, land sales can be traced back to at least 1870 among the Egba. Second, the court records used as sources for this study are themselves evidence that land disputes existed. These are explained by initially high population densities created by the settlement of the Egba as refugees at Abeokuta, and by the specific features of certain parcels of land which gave them particular value.

Other writers have drawn similar conclusions from African land abundance. For Iliffe (1995), African underpopulation has led to societies “specialized to maximize numbers and colonize land,” agricultural systems that adapted “to the environment rather than transforming it,” ideologies and social organizations bent on maximizing fertility, and social differentiation achieved “through control over people, possession of precious metals, and ownership of livestock.” Low population density, he argues,
hindered transport, limited the surplus the powerful could extract, prevented the emergence of literate elites and formal institutions, left the cultivator much freedom, and obstructed state formation, despite the many devices which leaders invented to bind men to them.\(^3\)

Herbst (2000) has taken the broadcasting of power over sparsely populated territories to be the central problem facing African states past and present. These themes are also dominant in other case studies. While rising population density within the “iron ring” of alienated land pervades Spear’s (1997) description of agricultural intensification on Tanzania’s Mount Meru, colonial officials in Zambia feared that the practice of slash-and-burn citimene agriculture would not be sustainable if the sparsely populated Bemba increased in number.\(^4\)

The rest of this paper proceeds as follows. Section 2 provides historical background on the Egba and describes the sample of court records which are the principal sources of data for this study, as well as the supplementary primary materials which are cited. Section 3 describes property rights in land; these were poorly defined, while the markets for land were thin. Section 4 turns to labor, noting the absence of a market for free labor and the prevalence of compulsory work both within and outside the household. Section 5 looks at capital, and accounts for the difficulty of borrowing in Egba society using the scarcity of liquid capital coupled with the abundance of land. This was eased considerably after 1890 by the advent of two foreign tree crops which took on the characteristics of fixed capital – cocoa and kola. Section 6 concludes.

2. HISTORICAL BACKGROUND AND DATA SOURCES

2.1. The Egba: An introduction. The Egba are a Yoruba group, presently located in the central portions of Ogun State in south-western Nigeria. The Egba settled as refugees at the site of Abeokuta in 1830, and remained formally independent from British rule until 1914. The Egba are divided into the provinces of Ake, Gbagura, Oke-Ona, and Owu.\(^5\) The obas (kings) of each province are known respectively as the Alake, Agura, Osile, and Olowu.\(^6\) The ologun (war chiefs), otoni (civil chiefs), ode (hunters), and parakoyi (trade chiefs). Within each otoni (civil chiefs) society, the iwarefa (cabinet) comprised a select committee of the most senior members.

\(^3\)Iliffe (1995), p. 3
\(^4\)Moore and Vaughan (1994)
\(^5\)Owu was not traditionally an Egba kingdom, but became assimilated into Egba society at Abeokuta.
\(^6\)The Egba townships correspond roughly to the villages occupied by the Egba before their removal to Abeokuta. Estimates of the number of these townships vary; Burton (1863) gives 150; Ajsafe (1964) writes “not less than three hundred”; Johnson (1966) states 153; Fadipe (1970) gives 145, and Ward-Price (1939) states 70.
Egba agriculture was typical of the West-African forest zone. In the mid-nineteenth century, the Egba cultivated principally Indian-corn, cotton, yams, and beans, supplementing these with sugarcane, ginger, bird-pepper, arrowroot, groundnuts, onions and sweet potatoes.\(^7\) These were intercropped,\(^8\) and planted in heaps.\(^9\) Unfree labor in the form of slaves and pawns was widespread. Palm oil and palm kernels were the principal nineteenth-century exports of the Egba, and they were among the first Yoruba groups to become involved in this trade.\(^10\) From the 1890s onward, cocoa and kola gained favor as planted tree crops. Initially, cocoa spread from Lagos due to the efforts of merchants and demobilized soldiers seeking new economic opportunities.\(^11\) Many of the early planters were Christians, supported by evangelists, Lagos businesses, and Agege planters such as J.K. Coker, who had a 2,000 acre farm and employed more than 200 laborers.\(^12\)

Historians have remarked on the Egba as an exceptional example of “aborted modernization” in West Africa.\(^13\) Situated close to Lagos, the Egba figured largely in the minds of British consuls and merchants, and were an early focus of missionary activity in the interior of West Africa. Tucker (1853) proclaimed Abeokuta the “sunrise within the tropics.” The representatives of the Egba United Government (EUG)\(^14\) highlighted the peculiar institutional development of the Egba in their testimony to the West African Lands Committee (WALC) in 1913 by giving answers starkly different from those of the other Yoruba representatives.\(^15\) Of particular interest was the claim that outright sale of land was a long-standing custom.\(^16\) The greater prevalence of land sales in Egba territory relative to the other Yoruba provinces, both of urban plots and farmland, was noted by later colonial officials.\(^17\) Mabogunje (1961) ascribes these differences to the peculiar settlement pattern of the Egba, who began as a densely populated group refugees and expanded slowly outwards from Abeokuta over the next hundred years. The Egba at Abeokuta thus present an almost ideal opportunity to assess the impact of factor endowments on institutional development, since from 1830 to 1914, Egba society underwent both dramatic transformations in the relative abundance of land and labor and in the social norms governing property.

### 2.2. Data sources.

Court records have been used for qualitative and quantitative data by scholars in both economic history and African studies; the merits of these sources have been explored elsewhere (see, for example, Chanock (1985), Dickerman (1984), Dickerman et al. (1990), Mann and Roberts (1991), Moore (1986), Roberts (2005) or Ogilvie (2003)). Importantly, they provide a ground-level window into disputes between individuals which is absent from other sources.

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\(^7\)Barber (1857), p. 100
\(^8\)Though it is likely that European visitors misidentified these plants in the mid-nineteenth century, later sources confirm that corn, yams, coco-yams and beans were important crops in Egba territory. Cassava is not mentioned in travelers’ accounts, but does appear in the sample of court records described below.
\(^9\)Burton (1863), p. 62
\(^10\)Lynn (1997), p. 40
\(^11\)Berry (1975), p. 51
\(^12\)Agiri (1972), p. 164
\(^13\)Pallinder-Law (1974)
\(^14\)The central government of the independent Egba from 1893 to 1914; the name “Egba United Government” was not adopted until 1898.
\(^15\)Mabogunje (1961), p. 258
\(^16\)WALC (1916b), p. 452
\(^17\)Ward-Price (1939), Lloyd (1962)
They allow the actual operation of economic institutions to be observed in practice, as distinct from the idealized sets of rules presented in texts on customary law. Two sets of Native Court records are used for this study. The first is taken from the Egba Council Records (ECR) deposited in the National Archives, Abeokuta (NAA), and contains Civil and Criminal Record Books mostly from the period 1899-1905. The second is housed in the Hezekiah Oluwasanmi Library at Obafemi Awolowo University, Ile-Ife. From this collection, I have used Civil Judgment Books from the Ake “A” and “B” Grade Courts, the Ake Central Court, the Abeokuta Mixed Court, and the Abeokuta Native Court of Appeal. Histories of the Native Courts have been provided by Adewoye (1977) for Southern Nigeria as a whole and Pallinder-Law (1974) for Egbaland.

A typical record begins by noting the names of the litigants and either their home villages or township affiliations, as well as the number of the case. A complete record has been transcribed as Appendix A. The plaintiff’s cause of action and claim for damages are also given in the header, alongside the farm’s location (e.g. “at Kori Ogude”); the majority of claims are for either recovery of farmland or damages for trespassing and reaping crops. The parties and their supporting witnesses are in some cases sworn in on a cutlass, Bible, or Koran. The testimony is recorded in English longhand, though it is likely the participants spoke mostly in Yoruba.

Often cases were not decided in a single day, but rather adjourned so that parties could call further witness or so that the land could be “inspected.” Available records are frequently incomplete, since a case may be resumed in another judgment book which no longer survives, or may be continued from a similarly non-extant book. Inspection of the land in dispute was a common procedure which enters the court records only as the verbal report of the officer who conducted it. These were public meetings at which “villagers,” elders and chiefs would be called to give evidence and identify boundaries. The court invariably took the reports of these examinations as declarations of fact. The judgments delivered usually range from a sentence to a short paragraph, stating how the land is to be allocated or divided, and whatever damages are to be paid.

I have collected data on 497 cases involving farmland from 1902 to 1918. Summary statistics for these are presented in Table 1. Only two thirds of the cases are complete, and so the recorded frequencies of events (such the existence of cocoa planted on the plot) will be biased downwards not only by the disputants’ selective presentation of facts but also by the incompleteness of the records. In trespass cases, the amount claimed is for the damage done, while in recovery cases the plaintiff’s estimate of the entire value of the land in dispute is given. Cocoa had been planted on roughly a quarter of the plots, and kola was planted on little over a tenth. Nearly a quarter of the plots had been pawned at some point in their history, and more than a tenth had been sold. This latter measure must be presented with caution, since the word “sale” is used loosely in the records, as both an accusation of wrongdoing and as another word for pawning of land; the

\[\text{Ogun, the Yoruba god of iron (inter alia), is presumed to be able to do harm to those who break their oath to speak truthfully.}\]

\[\text{Other cases from these collections (for example, suits relating to urban land, manumission certificates or divorce) are cited in the text, but not included in the sample.}\]

\[\text{Alternatively, an upward bias is introduced by selective misrepresentation of the facts, for example if one party falsely accuses the other of selling land.}\]
actual type of transaction which occurred is often difficult to identify and occasionally a matter of dispute.

A number of strategies for defending claims are also evident in Table 1; boundaries were either made by the participants, the township chiefs, or the “villagers” in more than an eighth of cases, and a quarter of the disputes were taken to the chiefs prior to coming to court. Jujus such as ayar, egan, or mariwo were often placed in a farm to prevent other parties from entering; these provided a visible signal that a piece of land was under dispute, and a fear of supernatural punishment if their injunction was violated. If all else failed, a recalcitrant opponent could simply be driven from the land. The selected nature of the sample implies that these figures cannot be taken as representative of all Egba farms during the period – transactions such as sale or pawning caused claims over land to proliferate, increasing the probability that the parcel would be fought over in court. Similarly, crops such as kola and cocoa raised the value of the land, making a dispute in court worth pursuing. Even still, these figures indicate that by 1918, the cocoa boom was well underway in Egbaland, that pawning of land was common, that sale of farm land existed, and that Egba farmers implemented a variety of strategies to defend their claims over productive resources.

Mindful that the details of these cases cannot be interpreted without placing them in context, recourse has been made to several supplementary sources of information. Missionaries and other travelers who visited Abeokuta after 1842 left behind both published memoirs and unpublished correspondence. The latter have been deposited with the Church Missionary Society (CMS) Archive. Private correspondence of colonial officials and private persons are available in the Rhodes’ House Library (RHL) at Oxford. Official colonial correspondence, ranging from the minutes of the WALC to letters between the Alake and the Resident of Abeokuta Province are available in the National Archives of the UK in Kew (NAUK), and the National Archives of Nigeria in Ibadan (NAI) and Abeokuta (NAA). Finally, I arranged interviews with ten elderly Egba men and women while in Nigeria.21 Because the time period of this study predates living memory, these capture oral tradition, and are more useful for uncovering normative rules than as sources of historical fact.

3. LAND

By “land-abundance,” Austin (2008) means that labor, rather than land, was the constraining factor on the expansion of output. By this measure, the Egba were at the end of the nineteenth century a land-abundant society. Lugard in 1911 estimated that the whole of the Egba Division had an area of 1869 square miles and a population of 265,000 - a density of 142 per square mile.22 By 1952, this had risen only to 148.23 The latter figure is comparable to present-day Côte d’Ivoire or Kenya. Since the interpretation of this quantitative measure can vary across ecological contexts, it is more helpful to focus on manner in which land was available to independent farmers. First, as Egba military successes brought increasing amounts of territory under their control, clearing new

21These interviews were conducted, recorded and translated from Yoruba by Joseph Ayodukun. Transcripts of these interviews are available upon request. Although grammatical incorrectness in these likely reflect the multiple layers of translation rather than any error on the part of the speaker, I have left these as is when quoting them.
22WALC (1916a), p. 24
23Bascom (1962), p. 700
farmland from forest was an outside option available to potential laborers. Second, in the normal course of events, rivalry for land was usually not intense. The typical Egba farmer only cropped a few acres per year, and could usually leave land fallow and clear a new piece without coming into conflict with the claims and aspirations of other cultivators. The population density in 1911 corresponds with roughly four and a half acres per person; if one Egba in four was a farmer and if the typical Egba farmer cultivated fewer than five acres annually, this would allow each Egba to have one farm in operation and three let fallow each year without competition for land becoming rivalrous.

The present section outlines the theoretical predictions made in the literature about economic institutions governing land in cases where it is abundant. It then discusses the evidence that Egba land use and the property rights governing land were driven largely by the abundance of land relative to labor. It establishes that land was cheap and the market for land was thin. In economic theory, thin markets are often explained by the presence of informational asymmetries. Once a market is thin, price volatility may push out risk-averse buyers in the presence of transactions costs, perpetuating the lack of market liquidity. In the Egba case, however, the limited number of participants in the land market stemmed from a more basic cause. The widespread availability of land put strong limitations on the willingness to pay for any particular plot. Agriculture was “extensive” in that it economized on labor and few plot-specific investments were made. Property rights over land were ambiguously defined. Land was not, however, wholly free. Mabogunje (1958, 1959, 1961) has argued that over the course of the nineteenth century property institutions governing land were altered by the Egba settlement pattern; his argument is reinterpreted here as a response to changes in the land-labor ratio. Further, as Austin (2008) has pointed out, specific pieces of land may, by virtue of their individual characteristics, have particular value. That this was true in the Egba case can be validated empirically using the sample of court records.

3.1. Land institutions under land abundance: Theory. Economic theory makes several claims about the nature of land tenure in land-abundant societies. Here, the contrasting predictions of Binswanger and Rosenzweig (1986) and Binswanger and McIntire (1987) for land-scarce and land-abundant tropical agriculture can serve as a guide. Binswanger and Rosenzweig (1986) argue that, because scarce land is appropriable, is not risky, and offers returns to the holder, it will be useful as collateral. This will raise its market price above its productive value. Land will be rented for at least annual periods, and long-term rental of trees will be present although subject to incentive problems. Because of the collateral premium, land sales will be few and limited to distress sales. Binswanger and McIntire (1987), alternatively, suggest that with land abundance land per farmer will be independent of household size or wealth, and that common property will exist as an insurance substitute. This is because, with easy access to land and simple technology, cultivators can produce as much on their own as working for a landowner, who cannot compensate them for the

\[24\] This is a rough rule of thumb used by colonial officials for the proportion of economically active males to the total population.

\[25\] The Olofin of Ilogbo estimated that his subjects cultivated three acres each in 1917 (NAUK, CO 147/162, enc in 20 Oct, 1902: Acting Governor to Chamberlain).

\[26\] Glaeser and Kallal (1997)

\[27\] Pagano (1989)
forgone self-cultivation. The latter result depends on the existence of monitoring costs and other inefficiencies which have been shown to be important features of rural labor markets. These problems are reduced with long-term contracts and by the use of family labor. This explains the reliance on compulsion, reciprocal obligations, and the labor of family members and dependents described in Section 4. The importance of simple technology here is in preventing the existence of economies of scale, which would permit sufficiently large farms to pay attractive wages to laborers even in the presence of monitoring costs. Following Boserup (1965), Binswanger and McIntire (1987) argue that the transition to specific land rights will occur when population pressure creates the incentive to invest in individual plots – i.e. when land becomes scarce.

3.2. Consequences of land abundance for Egba land institutions.

3.2.1. Thin land markets. Land tenure among the Egba in many ways resembled the ideal case presented by Binswanger and McIntire (1987). Since uncleared forest was widely available in Egba society, the “price” of land was very low. Individuals could acquire land for farming freely, or in return for token payments. Grants were traditionally either tito (Partridge 1911) uses the term egan) or fifun. If the gift was of tito, the owner of a piece of “virgin” forest received presents proportional to the size of the land granted. When the recipient cleared the forest, he became its absolute owner. Fifun grants, conversely, were of already cleared land known as igboro. The recipient of such a grant operated under the rules of the mawoke (“don’t look up”) system; he was not permitted to plant permanent crops, to reap the fruit of trees on the land, or to alienate it. The payments given for such plots were typically small, and the descriptions given by Folarin (1939), Partridge (1911), or Lloyd (1962) overstate the regularity of the conditions attached to them. Statements in the court records frequently omit these entirely; the grant from Durojaiye to Lukosi mentioned in Appendix A is an illustrative example. Even where the grant was for planting cocoa or kola, land could be acquired virtually without cost. Many early planters obtained their land without payments, before the owners were aware of its value. After 1885, many Lagos Egba obtained free grants from the landowning families near Agege and Ilu. While Ward-Price (1939) reported that land for planting cocoa sold at roughly £3 and two bottles of gin per acre during the 1930s, he also noted that much of the land under the control of chiefs had already been given away and that they could no longer obtain any revenues from it. Many migrants chose to plant at Otta because of its relaxed tenurial system. An individual could farm a piece of land while serving a master, and obtain ownership of a plot if he settled permanently. One interviewee reported that when his grandfather obtained land at Ilogbo, near Otta, all that had been asked for was prayer wine.

Because land was cheaply available, markets for it were thin. Burton (1863), after visiting Abeokuta in 1860, wrote that there were two ideas “incomprehensible to Europeans, but part

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28Foster and Rosenzweig (1994)
29Bharadwaj (2008)
30Folarin (1939), p. 74
31Folarin (1939), p. 74-75
32NAI, Fowler “A Report on the Lands of the Colony Districts,” p. 30
33Agiri (1972), p. 176
34Chief M. O. Adeyiinka, Odofin of Africa General Totoro, 26 July, 2007. No 1 Totoro Street, Owu Abeokuta
and parcel of the African mind. The first, which requires only enunciation, is that a slave-born man is a slave for ever. The second is the non-alienation of land.” In an 1878 schedule of property for the CMS Yoruba Mission, none of the land held in Egba territory was declared to have any value apart from the buildings situated on it. At Osiele, it was noted that “land property cannot be estimated here as to the value, because the practice of selling land is not customary in this village.”

Even while officials of the EUG were testifying to the British that land sales were a long-standing custom, significant elements of Egba public opinion questioned their legitimacy; the inspecting officer in a 1915 suit told the court, for example, that “Itoko people have objection to their lands being sold.” The terms on which land was leased to the British also reflected its low market value; in 1914, the colonial government held ten plots of land on lease from the Egba Native Authority (the successor to the EUG) totalling a little over 26,000 acres and on which annual rents were below £600 – less than a shilling an acre.

3.2.2. Extensive agriculture. Because labor was much scarcer than land, Egba agriculture was “extensive,” in that the techniques used economized on labor but not on land. Farms were cleared by fire. Land was generally cultivated for for five or six years, followed by five to six years of fallow, and then two or three more years of cultivation before a long fallow of up to twenty years. Prior to the introduction of cocoa and kola, there were no fixed investments made in improving the land and no fertilizers used. The prevalent crop rotations, in which maize and yams gave way to water-yams during the end of the cultivation cycle, reflected adaptation to the deterioration of a plot’s productivity rather than an effort to manage it.

When a plot was exhausted, individuals often moved several miles away to farm; Lloyd (1962) and Mabogunje (1959) have both noted that individual plots are more distantly scattered in Egba territory than elsewhere in Yorubaland, often twenty or thirty miles apart. This was a consequence of the initial scramble for land, discussed below, in which individuals would pursue both patrilineal and matrilineal claims (as well as engaging in outright squatting) to take land wherever it was available. As a result, it was common for farmers to relinquish their claims entirely when a plot’s fertility had become exhausted and to rely on the memories of those left behind in order to reassert them several years later. In one suit, the defendant Oyedele had been a small child when compelled to leave the farm during the Abo war. He returned around 1909, and came with case of gin asking to be shown his father’s land. On finding it occupied, he, according to the plaintiff, “began to any farm he met in the way, all which he called his father’s when he was corrected by an old pawn of his father.” A common strategy for retaining control of abandoned land – used in approximately a tenth of the sample cases – was to grant usufruct rights (such as reaping of palm nuts) to a “caretaker” until the owner returned. With time, however, the plot could fall into the hands of the caretaker or his children. In a 1915 suit, the plaintiff Lawani had left land

35CMS, CA2/O14 Buildings and Property
36Abeokuta Civil Suit 403/1915
37NAUK, CO 583/10, enc. in Feb 16, 1914: Lugard to Harcourt
38Clarke (1972), p. 15
39NAUK, CO 147/162, enc. in 20 Oct, 1902: Acting Governor to Chamberlain
40Dennett (1910), p. 141
41Ake “A” Civil Suit 235/1917
with the defendant’s father, who had planted kola trees prior to 1895. Though he had stated he was “prepared to give pltf [plaintiff] out of it,” his daughter (the defendant) refused to honor the promise.

3.2.3. Weakly defined land rights. With land freely available and extensive cultivation techniques, property rights over land were poorly defined and rarely permanent. This was striking to European observers. Clarke (1972) wrote that land was “held by possession and only so long as cultivated unless it is vacated with a reserved right.” Campbell (1861) recorded his impressions in greater detail:

The tenure of property is as it is among civilized people, except as to land, which is deemed common property; every individual enjoys the right of taking unoccupied land, as much as he can use, wherever and whenever he pleases. It is deemed his property as long as he keeps it in use; after that, it is again common property.

As is evident from Table 1, farms did often have boundaries. These were not always apparent to Europeans. Clarke (1972) described Yoruba farms as having the “unbroken appearance of a single field,” as no fences were used and only a “small path” might exist to show where one farm ended and another began. In actual fact, natural features such as streams and roads were often taken as boundaries, and porogun trees were planted as markers. These were not generally placed, however, until a dispute had already arisen; unless the necessity of demarcation had been shown, investment in boundaries was not worthwhile. Not only were boundaries ambiguous, but the law itself was not fully defined. Egba land tenure was not recapitulated as a coherent set of rules until it became important to do so in negotiations with British officials about colonial land policy. Johnson (1966), in his nationalist history, wrote that the “land laws of the Yoruba country are simple and effective, there being no need of any complicated or elaborate laws,” while admitting that these were “to be observed rather in the spirit than in the letter.”

The process by which land disputes were resolved was itself informal and often indeterminate. Generally, the bale (village head) was responsible for disputes arising within his compound.

His authority, however, depended on his personality and was exercised in consultation with other household members. Indeed, any person as old as the eldest of the parties to a dispute was qualified to help settle it. Interviewees suggested that the importance of the bale (village head) derived from his knowledge of the land in question and his personal authority. For example,

For household head it is usually the oldest which is believe to know the history of the settlement and what belong to who in the settlement than anybody therefore his statement about land is held as final.

If the parties were not satisfied with the bale’s (village head’s) intervention, they could go to the township chiefs, relegating the bale’s (village head’s) role to that of arbitrator. The specific chiefs

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42 Abeokuta Civil Suit 578/1915
43 Campbell (1861), p. 43
44 Blair (1980), p. 16
47 Blair (1980), p. 32
are not usually given in the sample of cases, though where this does occur the Apena is often named. In nearly a quarter of the sample cases, a previous attempt at settlement had been made before the local chiefs prior to the case reaching court. Disputes over rights in land, then, were not settled decisively, but rather were subject to ongoing renegotiation.

3.3. **Land sales and the existence of land disputes.** Although land markets among the Egba were thin, the greater prevalence of land sales in Egba territory relative to the other Yoruba areas is one of the most striking features of the evidence presented at the WALC. Similarly, the sources used for this study are evidence that some land was valuable enough to be the subject of dispute. Mabogunje (1958, 1959, 1961) ascribes the existence of land sales to the conditions under which Abeokuta was settled in 1830 and the area around it reoccupied over the next century. He argues that during the initial scramble for land, townships were asked to waive their rights so that new-comers could settle, disrupting *ogboni* (civil chiefs’ claims) over land in favor of family control. Households located their dwellings in the middle of their farms, rather than in Abeokuta, in order to lay claim to them. During the initial period of settlement, the only land safe for farming was located in a small region bounded on the northeast by Osiele, on the Southeast by Oba (twelve miles southeast, established 1837), and on the North by Aiyetoro (ten miles north, established in 1879). These are shown in Figure 1. "Behind the movements of the Egba armies," he argues “followed their farmers.” The Egba expanded west after 1864, and by 1878 they had stretched out towards Otta and occupied the territory between Owode and Mokoloki. Much land in the South was still uncultivated in 1877, and expansion to the Northeast was impossible before 1893. After this date, many of the *oriles* (the ruined sites of the original townships) were reoccupied. The first re-settlers were hunters and the land-poor, who reported to the township chiefs of the land they reoccupied, and were made responsible for dividing land among later settlers. Expansion into areas that were not originally Egba proceeded differently. In the north-western Egbado territories, the Egba expropriated land during the nineteenth century, but further west were given land as strangers, “more or less as tenants-at-will.” Mabogunje (1958, 1959, 1961) presents several types of evidence to support his claims, including oral histories, the density of small settlements, village names, the depopulation of villages near Abeokuta, and sample maps of land distribution in eight villages.

Mabogunje’s argument is one in which the initial scramble for land created strategies of village establishment which initially disrupted *ogboni* (civil chiefs’) control of land, but later reaffirmed it during the reoccupation of the *oriles* (deserted villages). An alternative interpretation would stress the change the relative abundance of land and labor. Boserup (1965) has contended that exogenous

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48 Mabogunje (1961), p. 260  
49 Mabogunje (1958), p. 24  
50 Mabogunje (1961), p. 260  
51 Mabogunje (1959), p. 72  
52 Agiri (1972), p. 469  
53 Mabogunje (1959), p. 74  
54 Mabogunje (1958), p. 48-49  
55 Mabogunje (1958), p. 51
intensification of population pressure increases the frequency of cultivation by reducing fallow periods. As land becomes scarce, families become more “concerned and jealous about their special rights to the old plots” and may reduce fallow or pledge out land in order to retain their rights. Boserup’s (1965) model, then, allows for a reevaluation of the Egba case as an exogenous shock to the density of population in an agricultural society. Further, European observers noted that the area around Abeokuta had particularly poor soils, reducing the effective amount of land per farmer. Calculating the actual change in the ratio of land to labor is, however, imprecise. Several observers attempted to estimate the population of Abeokuta in mid-century, establishing 60,000-150,000 as the most plausible range. The area of initial settlement described by Mabogunje (1961) is effectively an oval roughly ten miles by twenty, approximately 160 square miles in area. Using mid-century population estimates, this gives a range of reasonable density estimates ranging from 375 to 938 per square mile. Even accounting for the upward bias which results from using the population after twenty years of growth and in-migration, it can be safely asserted that the ratio of men to land in the 1830s was no less than double what it would fall to by 1911.

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56 Boserup (1965), p. 65  
57 Bowen (1857), p. 106  
58 Barber (1857), 80,000 c. 1845; Freeman (1844), 50,000 in 1842; Bowen (1857), 60,000 in 1850; Beecroft estimated the population at 300,000 in 1850 and Hockin estimated the population at 70,000 in 1866, according to Townsend (1887); Townsend (1887), 50,000 in 1850; Campbell (1861, p. 33), more than 100,000 in 1860; Burton (1863), 150,000 in 1861 when the soldiers return.
In addition to Mabogunje’s sources, there is strong evidence that Egba farmers expanded outwards as the risks due to war diminished. In 1863, the Governor of Lagos reported that “the natives of the villages dare not cultivate far from their homes lest they should be kidnapped whilst labouring on their farms, and their only protection is the impenetrable bush, which has now over-run again immense tracts of land which but three years ago were covered with fine farms.”\(^{59}\) In 1893, fear of Dahomey raids was still keeping the country west of Abeokuta clear of settlement.\(^{60}\) Witnesses told the 1898 Commission on Trade that the Egba were returning to land vacated during the wars – “from five miles below our crossing of the River Ogun, the whole valley, down to Abeokuta may be taken as cultivated.”\(^{61}\)

Evidence that the temporary period of land scarcity altered Egba farming practices comes from Cyril Punch’s 1902 tour of the Egba country, depicted in Figure 2. His observations are organized in Table 2. Three differences are apparent between the land-scarce region of initial settlement and those areas occupied later. First, farmers nearest Abeokuta shortened their periods of fallow. Between Abeokuta and Aberu Agba, Punch reported fallow lengths of 3-4 years, 5-6 years, and 4 years. Between Ijeun and Ashero (northeast of Mokoloki), he reported three times that land was left fallow for 5-6 years. Second, Egba cultivators used intercropping more intensively on the exhausted soils nearer Abeokuta. Third, farmers abandoned the long fallows that allowed the land to return to forest. The direct evidence here is mixed; Punch mentions indefinite or very long fallow periods between Kajola (East of Onibode) and Aberu Agba, Ijeun and Asha, Asha and

\(^{59}\)CO 147/3, 5 Jan, 1863: Freeman to Newcastle

\(^{60}\)NAI, CMS Y 2/2/2 Papers on Abeokuta District 1861-1910, Jan 1893: Letter from Oluminide

\(^{61}\)CO 147/133, enc in 4 June 1898: Denton to Chamberlain
Ilogbo, Coker’s farm and Ashero, and between Okenla and Iroti. None of these are in the first stretch from Abeokuta to Onibode, and only one is in the directly southern region where the Egba made their first military expansions. Support for this point is found in the scarcity of forest Punch encountered before Ijeun and between Okenla and Itori.\(^{62}\) Punch himself believed that the land around Abeokuta had been degraded by excessive cultivation:

\[
\text{Much if not the greater part of the land between [Abeokuta] and [Asha] is exhausted or semi-exhausted soil. Successful farming seems to be carried on in a belt adjoining the forest and this belt is gradually encroaching on the forest and is itself being encroached on by second rate [fallow] land.}
\]

There is reason to think that the old tribal wars whilst they kept back progress at the same time kept back the destruction of forest and also, as seen in the [Orile Oko] district, gave time for new forest to grow on worn out farm land. With tribal wars now ended the destruction of the remaining forest land is only a question of time and I think of no very long time. From [Abeokuta] to [Orile Ijeun] is twenty miles to the eastward and in this part the road runs entirely through [open grassland] or [fallow]. [...] From the [Ogun] river to the railway line the land is of a different class. It has been long used and parts are open [grass] land. It is all either under cultivation or lying fallow.

If land use and tenure were altered by the settlement pattern, and there was moderate hysteresis afterwards, we should expect institutional outcomes to vary systematically by location. 244 cases from the sample have been matched with present-day villages in Ogun State for which latitude and longitude data are available.\(^{63}\) These allow for an empirical test of the impact of the settlement pattern by estimating the equations of the following form:

\[
y_i = \beta_0 + \sum R \beta_R R_i + X_i' \gamma + \epsilon_i
\]

Here \(y_i\) denotes an outcome of interest in case \(i\), such as the value of the land as proxied by the damages claimed, a commercial transaction, or the use of a defensive strategy (such as juju) by one of the parties. \(R_i\) denotes the settlement region in which the land under dispute in case \(i\) is located. The \(X_i\) are other characteristics of the case and the land in dispute. Under Mabogunje’s hypothesis and the alternative Boserupian interpretation, land in the initial settlement region (defined here as all land within ten miles of Abeokuta) should have been more vigorously defended during its

\(^{62}\)Fairhead and Leach (1996) demonstrate the problems of attributing deforestation to human causes. Still, the pattern of forest clearing here is consistent with what is known about the Egba removal to Abeokuta and subsequent re-expansion. The alternative narrative of forests created by recent human habitation is not plausible in the Egba case.

\(^{63}\)There are three difficulties faced in matching the locations stated in the court records with present-day villages. First, villages names are often repeated – there are eight villages named Kajola within 50 miles of Abeokuta. Second, many villages have alternate spellings for their names; Osiele is sometimes rendered Oshielle, and Papalanto is sometimes given as Papa Alanto. Third, the handwriting in the cases is not always clear, and so I have doubtlessly made errors in data collection. The procedure used for choosing locations is as follows; my best reading of the location given in the case record is matched against a list of villages within 50 miles of Abeokuta by SOUNDEX code, with ties broken by Levenshtein distance and further ties broken by distance from Abeokuta. Physical distances were calculated using the \texttt{globdist} function for stata, written by Kenneth L. Simons. Only matches with an edit distance of zero or one are retained. 160 exact matches were found, and 84 matches required the change of a single letter.
history than land in other parts of Egba territory. Two countervailing effects make it difficult to predict the how land values should differ; the demand for land in this region was heightened by competition, while reduction in fallow periods led it to become degraded. Commercial transactions, i.e. pawning and sale, should be more common.

Table 3 presents regression analyses which investigate whether seven outcomes vary according to how the land was settled, by including indicators for the region of initial settlement, for settlement to the Northwest (into Egbado territory) and to the South (into areas conquered before 1893, which became centers of cocoa production). Controls are also included for recovery claims, completeness of the case record, and a quadratic time trend. Contrary to the above hypotheses, no clear impacts of the settlement of Egbaland are immediately apparent from the table. There are three likely explanations for this which are still consistent with the factor-endowments perspective. First, measurement error in both events and locations biases all of the coefficients of interest towards zero. Second, for this test to be valid, hysteresis across space must be assumed. If, conversely, changes to the nature of land tenure which were made during the first years at Abeokuta could only be reversed slowly, there should be little difference in the the strategies used to defend land in the region of initial settlement and in the areas which were occupied later on. Third, differences resulting from the settlement pattern here are overshadowed by the impacts of the introduction of cocoa and kola, concentrated in the South. Taking into account the significance of the coefficient on “South” in Columns (1) and (5) and its near significance in Column (3), it appears that this is the case. By raising the value of certain pieces of land, these crops facilitated alienability, and occasionally necessitated destruction of a rival claimant’s trees.

Austin (2008) notes that while land may be abundant in general, specific plots are valuable for their particular characteristics. Any plot of land gains value by virtue of its location; Bowen (1857) noted that Egba farms were often ten to twenty miles distant from the towns, implying considerable effort was expended simply in commuting. Many of the cases in the sample thus unsurprisingly involve encroachment by one party into a neighboring farm. This did not necessarily result from poorly-defined boundaries; in a 1915 case, the defendant planted cocoa underneath that of the plaintiff while the latter was ill.\footnote{Abeokuta Civil Suit 906/1915} Similarly, some sites were desirable not for their productive value but for the protection that could be offered by the olorogun (war chiefs). In a 1915 suit, the plaintiff Odekunle, son of the late Balogun of Ijemo, stated that during a “conflagration,” the Igbein people had run away from the Oju Ogun of Igbein and came to his father at Esi Elebo, who granted them land for building.\footnote{Ake “A” Civil Suit 725/17}

That certain plots did have particular economic value and their users sought greater security for their claims over them can be demonstrated empirically from the sample of court records by estimating regressions of the form:

\[
y_i = \beta_0 + \sum_c \beta_c c_i + X_i'\gamma + \epsilon_i
\]
Here, \(y_i\) and \(X_i\) are defined as above, while the \(C_i\) are indicators for the crops affixed to the land – cocoa, kola, and palm trees. Results of these regressions are given in Table 4. Plots endowed with palm trees were more likely to be pawned, and more likely to have been defended through the use of a caretaker. Plots with any type of tree crop were more likely to have previously been subject to a dispute taken to the chiefs. This measure cannot, however, disentangle whether this results from a greater prevalence of disputes on these plots, or from disputants pursuing more avenues through which to exercise their claims. Plots on which cocoa or kola stood were, on average, more than £9 more valuable than other plots. Since cocoa and kola were more suited to marshy, well watered forest soils, and noting that the estimated direct impact of “water” on value is negative, it is likely that the endogeneity bias in this regression leads the impact of cocoa and kola to be understated, rather than the reverse. Water is itself a good predictor of planted tree crops (regressing an indicator for cocoa or kola on the indicator for water and a constant yields a coefficient of 0.214 with a standard error of 0.085). Once marshy land acquired value, stale claims were reasserted. In a 1909 suit, the plaintiff had planted kola on the defendant’s land in 1872 without dispute, but the defendant attempted decades later to reclaim it from her. The inspector reported that “it is now that people are using marshy soil for cocoa plantations that [defendant] came to claim.” Though the plaintiff was evicted, the defendant was ordered to pay compensation for the kola.

4. Labor

In contrast to land, labor was scarce in Egba territory. The result was that it was uncommon (though not unheard of) for men to exchange their labor for cash; for the freeborn, it was regarded as “opprobrious”. This was not due to an unwillingness to work, failure to perceive profit opportunities, nor to the absence of a cash economy. Campbell (1861) described the Egba as “industrious,” while Barber (1857) praised them as “diligent and successful farmers, often passing weeks and months together at their farms.” Egba farmers keenly sought chances to earn a return on their labor. The plaintiff in a 1915 case told the court that he had left his farm to work as a canoe-puller in Lagos. Similarly, the defendant in a 1917 suit told the court that he was “always away fishing but this year seeing there was a scarcity of fishes I went into this farm and reaped nuts therein.” Clarke (1972) wrote that “in trading the natives are keen and shrewd and understand how to make large profits even at the expense of truth.” Several visitors remarked on how almost all transactions were carried out in cowries, rather than by barter. They also found it remarkable that the majority of produce was sold rather than consumed by the farmer.

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66 These regressions are repeated for the sub-sample of complete cases in Table 4.
67 Abeokuta Civil Suit 91/1909
69 Abeokuta Civil Suit 830/1915
70 Ake “A” Civil Suit 540/1917
71 Burton (1863), p. 318
72 Barber (1857), p. 107
The explanation for the lack of a complete labor market is that, as land was virtually free, individuals could earn more working for themselves most of the year than as hired laborers. Even during the slack season, farmers could gather palm fruits or forest produce on their own accounts.\(^{73}\) Here, the situation was analogous to that of the northern United States during the nineteenth century, where the "abundance of public land and the speculative urge that it first incited" made it difficult for landowners to attract the labor force necessary to achieve an operational scale greater than that of the family farm.\(^{74}\) Further, the considerable distances between Egba farms raised the costs of supervising hired labor where it existed, and so informal caretaking arrangements were resorted to on remote plots. Where worthwhile opportunities for wage-labor existed, the Egba pursued them, but these were usually provided by foreign visitors with deep pockets and limited claims over the labor of others. The workers employed in printing \textit{Iwe Irohin} (the missionary newsletter) were paid four to five dollars per month.\(^{75}\) Even the missionaries, though, had trouble acquiring labor. In 1854, Townsend wrote that, "to keep down the salaries of the native agents of the society is very difficult more especially so as some of them have had a taste of European life in a style far above their means."\(^{76}\)

4.1. \textbf{Labor institutions under land abundance: Theory.} Both the Africanist literature and economic theory provide predictions about the nature of labor markets under land abundance. Austin (2008) argues that the scarcity of labor explains three related strategies adopted throughout Africa – improving the productivity of labor in agriculture, raising labor productivity in the dry season, and turning to forced labor in order to lower its cost. Binswanger and Rosenzweig (1986) contend that with land scarcity both short-term and long-term "rental" will exist for labor. Binswanger and McIntire (1987), by contrast, propose that land-abundant tropical agriculture will be characterized by the absence of a locally resident non-cultivating labor class. Because of the high opportunity costs at these times, there will be almost no hiring of labor during the peak season. Vertically extended households whose heads have claims over the labor of their dependents will exist for two reasons. Both are predicated on the thinness of a credit market due to land-abundance (see below). First, the vertically-extended household must act as an insurance substitute; so that this is possible, the household head is given control over resources within the household. Second, inter-generational contracts in which youth support elders in their old age substitute for the absence of annuities.

Factor endowments can also explain the existence of slavery. Understanding the existence of forced labor is of particular relevance to Africa, given the large-scale export of human beings from an underpopulated region – a trade which had the effect of keeping the continent’s population stagnant over the course of several centuries.\(^{77}\) Fenoaltea (1999) has attempted to resolve this paradox by contending that, while the marginal physical product of labor may have been greater in Africa than elsewhere, lower price levels in Africa meant that its marginal "value product"

\(^{73}\)Clarke (1972), p. 261  
\(^{74}\)Peffer (1958), p. 342  
\(^{75}\)Burton (1863), p. 76  
\(^{76}\)CMS CA2/085 #23: Aug 5, 1854: Townsend to Straith  
\(^{77}\)Manning (1990)
was lower; Africa exported men, in his model, to pay for expensive luxuries demanded by elites. Domar (1970) ties the the existence of serfdom in Eastern Europe to labor scarcity; free land, free peasants, and non-working landowners cannot, he argues, coexist. Conning (2004) has formalized this reasoning using a general equilibrium model in which landlords may (at a cost) enslave a portion of the peasantry. In support of Domar (1970), he finds that the return to enslavement rises with the land-labor ratio, but also notes that where inequality in landownership is greatest, larger landowners may have less costly means of exploiting their tenants. This helps explain the prevalence of slavery in African societies, where the land-holdings of even the wealthiest individuals did not approach the size of a demesne or latifundium, and landowners could not manipulate the price of land by withholding it from the market. Contra Domar (1970), North and Thomas (1971) argue that during the fourteenth century plagues in Europe drastically increased the land-labor ratio, intensifying competition between landlords for tenants and resulting ultimately in relaxation of servile obligations. The impact of factor endowments on the nature of slavery does not stem solely from the relative abundance of land and labor; Fenoaltea (1984) has pointed out that slaves used in activities where only their brute force matters will be motivated mostly by “pain incentives,” while those from whom greater care is required will have more opportunities to earn material rewards and achieve manumission.

Further, intra-household claims on labor will lead marital institutions to differ between land-abundant and land-scarce societies. Goody (1976) argues that polygyny is more characteristic of land-abundant societies, where allocating land to additional wives and their children is less costly. Tambiah and Goody (1973) explain the prevalence of bride-price in Africa (as contrasted with the use of dowry in Eurasia) by the continent’s land-abundance; since men are not distinguished by their holdings of land, the price of a husband is low. Parents do not pay for their daughters to become members of landowning lineages; rather, these lineages are compensated for the labor power lost. Similarly, Guinnane (1997) notes that the use of dowries in Ireland to compensate those children who did not inherit the family land was predicated on its scarcity. Holdings were small enough to make subdivision undesirable, while the price of admission into a landowning family was great enough to be redistributed among its members. The remainder of this section deals in turn with three of the mechanisms used by the Egba to cope with this labor scarcity – slavery, cooperative work groups, and claims over the labor power of kin and dependents. Pawnship will be dealt with in Section 5.

4.2. Consequences of land abundance for Egba labor institutions.

4.2.1. Slavery. The use of slaves was widespread among the Egba. Where a spot market for labor was absent, unfree labor filled two economic functions. First, it permitted slave-owners to effectively purchase futures contracts on the later labor services of their slaves, reducing their uncertainty about future access to manpower. Second, as durable productive assets, slaves were one of the only investments available to the Egba. Bowen (1857) estimated in mid-century that four fifths of the population were “free.” James Davies told the 1898 Commission on Trade that, fifteen

\[\text{In a complementary paper, Lagerlof (2006) presents a growth model in which population growth drives an endogenous transition from an egalitarian society, first to a slave society in which both land and labor are owned by the elite, and later to a free labor society in which the elite owns the land but people are free.}\]
years previously, men in Abeokuta had up to 400 slaves and treated them better than their own children. He estimated that a third of the original inhabitants were slaves. Slaves were generally strangers, and became slaves as a result of famine, capture, debt, or as punishment for crime. That there were many gradations of slave status was apparent to European visitors. Slaves were used as soldiers, and even commanded armies. They were used for sacrificial purposes.

Most slaves, however, were employed as laborers. In 1872, the Alake wrote to the Governor of Lagos that slaves were, in effect, productive capital, used “in the same way as children of our body begotten, they are to help us in working our farms to obtain the produce needed in the European market, this is the only investment we have here.” Bowen (1857) put the price of a slave at thirty to sixty dollars, depending on age and quality. In an 1852 letter, Townsend described the plight of a slave communicant, whose redemption price of sixty dollars was “very far beyond a poor man’s means.” Europeans believed that, without the institution of slavery, there would be an acute shortage of labor. Even the missionaries were not immune; Townsend wrote in 1856 that “we are ourselves not in a position to refuse slave labor. A case in point, a servant hired by Mr Clegg is a slave and a part of the hire goes to his master.”

When British intervention in the Yoruba interior became more direct after 1893, expatriate merchants feared that widespread slave desertions had hurt trade. Rufus Alexander Wright told the Commission on Trade that in Abeokuta and Ijebu “the slaves have felt safe in running away. I don’t think there will ever be a return to the old system.” One observer wrote in 1893 that “the money value of slaves [was] decreasing, and they [were] showing increased freedom in word and act.” The issue of labor scarcity was not ephemeral; in 1904 MacGregor noted the “dearth of labor” which had resulted from the exodus of slaves.

Because of these fears of labor scarcity, both the British from Lagos and the EUG adopted a policy of tacitly endorsing slavery while refusing to give it overt encouragement. The principles of British policy regarding slaves were set out by McCallum in an 1897 dispatch: slaves escaping to Lagos were to be considered free, those claiming cruel treatment could be freed following an inquiry, masters would be required to accept redemption payments offered, and generally disputes were to be settled according to ‘native custom.’ He was, however, prepared to write to the ‘native states’ that “as regards domestic slaves the status quo must be maintained and runaways must in all cases be given up by the governing powers unless funds are forthcoming to pay for...
the necessary compensation.” On Aug 2, 1901, the Railway Commissioner reported that “the Egba Council passed a Resolution forbidding slavery in Egba territories,” but later clarified that the order prohibited slave-dealing, not slave-holding, providing that no person should be “dealt or traded in, purchased, sold, bartered, transferred or become a slave.” Several examples of requests for manumission are in evidence in the Mixed Court Civil Record Book (1907-09), in which payments of £5/10 or £10/10 are made. Certificates of freedom were issued by the court as late as 1922.

4.2.2. Cooperative work groups. Austin (2008) has argued that the relative scarcity of labor in Africa is tempered generally by the seasonality of labor demand along the agricultural cycle. Bowen (1857) noted that during the dry season the lack of farm work made it easier to hire laborers. A variety of industries existed to raise the productivity of labor in the off-season, including what Burton (1863) called the “five great crafts” – blacksmith, carpenter, weaver, dyer and potter. For the typical Egba farmer, however, seasonality meant that his peak period demand for labor occurred at precisely the same moment that labor was least available. In addition to slaves and pawns, cooperative work groups could be used to resolve these bottlenecks. Two – the owe and aro – were most prevalent.

The owe was an informal arrangement, whereby a man’s sons-in-law, other relatives or neighbors could be commissioned to aid in clearing a land or forest, or in building a house. The aro, by contrast, was a contract between members of the same age-grade to take turns in assisting each other in clearing, sowing, and harvesting. In both cases, the beneficiary “feasted his benefactors very lavishly” and became obligated to offer his own labor in return. That these tasks were carried out in groups and sustained through repeated interaction suggests that they were needed to overcome the supervision costs which would have been required in a wage-labor arrangement. These reciprocal obligations further contracted the supply of hireable labor. Despite these difficulties, a market for free labor was not altogether absent. In a 1917 suit, the plaintiff sued for unpaid wages alleging that he had been hired by the defendant and his father to clear land at the rate of 7/6 per egba ile (roughly an acre); the court found this fee to be “a bit heavy,” implying that generally understood norms existed on the money value of farm labor.

4.2.3. Wives, kin, and dependents. Though Falola (2003) argues that it was not “economical to make use of the labor of the lineage for the simple reason that lineages did not tolerate exploitation,” it is also clear that Egba farmers coped with the shortage of labor by asserting claims on the labor of other members of their households and by attracting dependants and taking wives. Marriage in Egba society was a transaction in which current payments of cash and labor were exchanged for future claims on the productive and reproductive labor of the wife. Marriages were usually

91 NAUK, CO 147/119, 20 June, 1897: McCallum to Chamberlain
92 NAI, Abe Prof 8/3, Report Book on Egba Affairs
93 NAI, CSO 26 11799, Question of Slavery in British West Africa, 30 Sept 1924: District Officer, Egba to Resident, Abeokuta. In this dispatch, the District Officer provides a list of fourteen cases from the years 1918-1922.
94 Fadipe (1970), p. 150
95 Agiri (1974), p. 467
96 Agiri (1974), p. 467
97 Ake “A” Civil Suit 691/1917
arranged between the families of the children, and the wife’s family was owed a variety of obligations including work, regular contributions of harvest crops, and assistance with expenses such as funerals and losses by fire until the girl reached puberty. A second cash payment, which Partridge (1911) put between £2/10 and £10 depending on the wealth of the bride’s parents, was then due. Payment of bride-price (which in the court records, as in West Africa generally, is referred to as “dowry”) established claims on the children, and the repayment of bride-price due on divorce lessened with the birth of children. Gollmer (1889) described bride-price (which he guessed at £2 to £5) as a sort of pledge used to chastise a wife – “have I not paid so much on your head?” or “if you pay the 40 or 50 heads of cowries I paid on your head, you can go home again.” Byfield (2002) argues that the cocoa boom increased the demand for labor, creating a “rush to get wives,” which raised both their prices and their bargaining power.

Fadipe (1970) writes that each man “had the help of the dependent male members of his family in tilling the field, planting crops, as well as reaping.” A farmer’s son was put to work carrying, scaring birds and weeding at the age of six, began hoeing at ten, and by fourteen “may be said to have become a journeyman”. Women did not traditionally take part in clearing, planting, or sowing, but did prepare food on the farm for men and assisted in the harvest. They also carried produce back from the fields. Processing crops was women’s work. Campbell (1861) described the process of turning palm fruits into oil and kernels. Groups of six women or fewer would work to separate fruit from its “integuments,” and a second group of women would boil these in large earthen pots. Yet another group would crush the fibre in mortars and then place the resulting mass in clay vats filled with water. Two or three women would then tread out the oil, which rose to the surface to be skimmed and boiled. This was, he argued “straightforward, albeit time consuming.” In return for their labor, women would retain the proceeds of the sale of palm kernels, while the revenue they earned selling oil was the property of their husbands. Partridge (1911) estimated that, in the past a “man in good position” would have as many as 200 wives, though when he wrote 30 was the most that a “wealthy young man who is a merchant or farmer” might have.

While the link between bride-price and claims over labor was direct, the rights conveyed by payment of bride-price over land were not clearly defined nor commonly understood; the defendant in a 1917 suit told the court that the plaintiff’s farm had been handed to him by the Alake when the plaintiff’s uncle took his wife. The court, hearing that he had accepted repayment of the £7/10 dowry, turned him out of the plot. As described in Section 3, it was not originally important to define these rights. When the courts were later called upon to do so, claims over land became attached to the repayment of bride price following the precedent already established for claims over children.

98Hopkins (1969), p. 80
99Lloyd (1968), p. 70
100Fadipe (1970), p. 155
101Hopkins (1969), p. 82
102McIntosh (2009), p. 196
103Fadipe (1970), p. 151
104Ake “A” Civil Suit 148/1917
The marriages of slave wives, pawned girls, and kinless women were different than those between free persons.\textsuperscript{105} A 1910 report argued that, while it had been common to purchase slaves as wives during the Yoruba wars, this practice had become uncommon and was only resorted to by men (such as those of known cruelty, unknown background, or with a family history of mental illness) who could not induce a family to give their daughter willingly in marriage.\textsuperscript{106} In a 1918 case, the defendant claimed rights over the portion of land in dispute through his grandmother, who had been a “bought wife” of the plaintiff’s family patriarch Afonja.\textsuperscript{107} Because she had been redeemed by her family while pregnant, the plaintiff Sumonu argued that the defendant had no rights in the land. Her productive and reproductive efforts, then, were valuable not only to her husband and his lineage, but also to her own kin. Taking wives was a strategy by which men could cope with both scarce labor and scarce capital, and invested in installments in the labor and reproductive capacities of their wives.

Dependants were desirable before 1893 for both their labor services and the security they provided. The EUG Secretary testified to the WALC that “you would almost beg people to come live with you”.\textsuperscript{108} Immigrants, he argued, were needed to protect settlements from outside raids.\textsuperscript{109} Accumulation of dependents, however, did not end with the Yoruba wars. In a 1915 suit, the defendant Abogurin had been brought to the plaintiff Akide around 1904 by a mutual acquaintance, and asked for land.\textsuperscript{110} Akide told the court that “I agreed as I want good people about me,” and made similar grants to nine other individuals. A “stranger” of this sort lived under the protection of the family head and was considered as a member of the family; “it [was] his duty to rejoice with them in their happiness and sympathize with them in their sorrow”.\textsuperscript{111} He was expected to offer “voluntary” service in the form of two or three days of labour annually.\textsuperscript{112} He was also to give presents at annual festivals and make contributions towards family funeral expenses.\textsuperscript{113} The olorogun (war chiefs) had an advantage in attracting dependents of this sort, which explains why Townsend noted that it was the chiefs who were “turning to agriculture” and experimenting with crops such as cotton; one, he noted, “farms a large piece of ground and is reputed to be sufficiently well off.”\textsuperscript{114} Burton (1863) described Okukenu as “rich in land and slaves.” In a 1917 case, the defendant Alaji of Ikeredu claimed that his father was a slave who redeemed himself but chose to remain with his master until his master attempted to sell him to pay off his debts; he approached the Balogun of Ikeredu for assistance, and the Balogun consulted with the Ikeredu chiefs, granting him a site on which to build a house.\textsuperscript{115}

\begin{itemize}
\item \textsuperscript{105} McIntosh (2009), p. 139
\item \textsuperscript{106} Hopkins (1969), p. 82
\item \textsuperscript{107} Ake “A” Civil Suit 419/1918
\item \textsuperscript{108} WALC (1916b), p. 452
\item \textsuperscript{109} WALC (1916a), p. 187
\item \textsuperscript{110} Abeokuta Civil Suit 905/1915
\item \textsuperscript{111} Folarin (1939), p. 69
\item \textsuperscript{112} Hopkins (1969), p. 85
\item \textsuperscript{113} WALC (1916a), p. 187
\item \textsuperscript{114} CMS, CA2/O85 #11
\item \textsuperscript{115} Ake “A” Civil Suit 163/17
\end{itemize}
A variety of institutions existed, then, enabling the Egba to cope with chronic labor scarcity, and the result – as on a European manor – was that the supply and demand for labor were resolved through competition for rights over persons. Access to these rights depended on a farmer’s wealth, political position, and his status within his family. While those with only their labor power to offer were compelled to rely on reciprocal work arrangements, individuals with economic and social capital could access the labor power of slaves, pawns, wives, sons, kin, and dependents.

5. Capital

5.1. Capital institutions under land abundance: Theory. Austin (2008) rightly points out that capital as a factor of production has been neglected by writers who explain African institutions as the result of relative endowments of land and labor. Like labor, capital was scarce in the Egba economy before 1914. There were three reasons for this scarcity. First, as embodied labor, the availability of capital tracked that of labor. Second, technological constraints limited the profitable uses to which it could be put. Agriculture was not capital-intensive, the typical implements being the hoe and cutlass. The pre-colonial absence of the plough south of the Sahara (outside of Ethiopia) is an important theme in African history. Goody (1971) cites the absence of the wheel and the prevalence of livestock diseases as factors. Similarly, Richards (1985) has noted that West African techniques of land preparation, by leaving trees in situ, intercropping, and “barely scratching the soil,” aid in preserving the physical properties of silty soils and sandy loams which are at high risk of erosion in regions of heavy tropical rainfall. Ehret (2002) adds that, in rainforest and the wetter woodland savannah areas, an even more potent factor militates against plowing. There lateritic soils widely occur. These soils ... turn to a hard stone-like surface if beaten by direct tropical rainfall. Only generations of regrowth of rainforest can break up this tough surface and turn it back into soil. A full clearing of the ground in the forest even without digging it up, let alone plowing it, can endanger the future fertility of the land.

The physical environment of Egba agriculture, then, hindered capital accumulation. It was not possible to substitute capital for men and thereby raise operational scale.

Third, the abundance of land prevented it from having value as collateral, limiting the supply of credit. Not only were property rights over it poorly defined, but it also had little market value for a creditor who did not wish to take over the farm himself in the event of default. There were few alternative assets available to fill this function. Although slaves could, in theory, serve as collateral, I have found no examples of this, nor of slaves being pawned. This is likely because slaves are subject to collateral-specific risks similar to those identified by Binswanger and Rosenzweig (1986) for livestock – they are prone to disease and easily stolen. These are precisely the reasons why Binswanger and McIntire (1987) argue that credit markets under land abundance will be constrained by supply, while the simplicity of the agricultural technology, as in their framework, restricts the market from the demand side. The scarcity of capital made borrowing difficult, and this section describes the credit institutions which did exist and the methods used by creditors to secure debts in the absence of collateral assets. Most important of these was the system of iwofà, or human pawning. Next, this section discusses the limited influence of Europeans and impact of
the introduction of kola and cocoa – planted tree crops which acted as fixed capital – on the credit market.

First, however, it should be noted that “capital” can also refer to liquid cash. Imported cowrie shells were used for most transactions. They were not particularly useful for large purchases; Bowen (1857) noted that 2000 cowries, worth a dollar, weighed five to seven pounds. Freeman (1844), similarly, commented that ten dollars in cowries would be a fair load for one man. Their value fluctuated according to familiar patterns of supply and demand. Clarke (1972) wrote during the 1850s that, four to five years earlier, it had been hard to get a good rate for silver at Ijaye, but that it had since come into demand there and at Abeokuta because of its portability. During periods of war, however, cowries could become unavailable. In early 1861, during the Ijaye War, Iwe Irohin noted that “the rapid rise in the price of provisions causes great trouble and anxiety, the entire failure of the last crop of corn, together with the great drain that Ijaye proves upon the resources of Abbeokuta, causes this.” Dollars had fallen in value due to the scarceness of cowries.116 In extreme circumstances, this could lead people to pawn themselves; while food was available, they did not have the money to buy it.117 Pawnship first appears in Egba oral histories in the settlement of Abeokuta, during which Egba pawned themselves to Itoko and Ibara farmers to escape famine.118

5.2. Consequences of land abundance for Egba capital institutions.

5.2.1. Credit without collateral. A variety of institutions for borrowing existed other than human pawning, though generally these were so unpleasant that the missionary Samuel Crowther in comparison called pawning “a custom of relief”.119 Items might be loaned freely or for a consideration.120 Barber (1857) believed that farmers’ rotating credit societies prevented idleness, facilitated saving, and served as a form of insurance, but did not suggest that they assisted the Egba to raise capital. Cash might be borrowed as ele, in which interest was charged recurrently until the loan was repaid, as eda, in which interest accrued monthly, or as sisi, on which no interest was usually charged.121 What interest rates were actually charged on these is difficult to know, but anecdotal evidence suggests they were very high. Folarin (1939) describes an hypothetical ele loan of 20,000 cowries, on which 200 cowries would be charged as interest every market day, totalling 40,000 over the course of a year. A colonial official during the 1920s noted that the rich at Owode had invested in receiving farms on pawn, and received 30-60% interest, with 100% paid in the case of palms.122 In 1924, a colonial official elsewhere in Yoruba territory wrote that,

“personal service is given as interest, because cash is very scarce and the interest on a cash loan is calculated at 30 to 60%. When it is realized that the average gross income of a Yoruba farmer is of the value of £12 a year and that a farmer personally

116NAI, Iwe Irohin, Jan 7, 1861
117Oroge (2003), p. 329
118Ajisafe (1964), p. 64
119Oroge (2003), p. 337
120Hopkins (1969), p. 90
121Folarin (1939), p. 57
122NAI, CSO 26 24873 Assessment Report Owode District
cultivates only an average of 2.5 acres per annum, it must be understood that he cannot afford to pay cash interest on a loan of £7/10/0 at current rates.\textsuperscript{123}

In addition to the high interest rates charged, the methods of collecting debt made these loans particularly unattractive. These were resorted to because the value of land was too low for it to serve as collateral, and there were few suitable alternative assets that could replace it. Folarin (1939) lists four methods of recovery – ogo, edan, emu, and sale into slavery.\textsuperscript{124} If ogo was used, a messenger, possibly a leper, was sent to the debtor’s house. He could eat his food, wear his clothes, and “do all in his power to worry or irritate him.” If the edan, a ceremonial staff was sent by the township authorities to the house of the borrower and payment was not immediately forthcoming, the goods or persons in the house could be sold. Occupants would flee at the rumor that the edan was coming. Emu enabled a creditor of long standing to recover his debts by seizing persons or property of the debtor, who was fined for causing the township authorities to become involved. The debtor himself could be sold into slavery on application by the creditor to the agboni (civil chiefs).

5.2.2. Human pawning. Iwofa (pawns) were those whose labor had been pledged for a debt. Regular labor service by the pawn was taken in lieu of interest until the principal was repaid. In 1936, the Egba District Officer estimated that there were five thousand iwofa in the division.\textsuperscript{125} Some pawns would not intend to repay the loan, but chose instead to live under the protection of a creditor who acted much like a feudal lord.\textsuperscript{126} Richer men could of course acquire more pawns; one informant claimed that his father had 60 pawns working in his farms.\textsuperscript{127} Describing iwofa amongst the Yoruba in general, the Senior Resident at Oyo wrote in 1924 that there were four types of pawn – kosinko or kolojo, agbadako, alagbada or daeka, and ijagba – whose status differed by the amount borrowed and the tasks performed. Of these, the most common was the ijagba, contracted for a debt of £2/10 to £7/10. Critically, he noted that “no one will lend money to a man under the above system unless the borrower is vouched for and can find a surety who is responsible for the repayment of the loan. The guarantor is called onigbowo.”\textsuperscript{128} Discussion of iwofa with a Yoruba informant frequently leads to invocation of the proverb that “the iwofa suffers no inconvenience, it is the guarantor who is inconvenienced”.\textsuperscript{129} The onigbowo was paid a fee of 6d, but became responsible for repayment of the debt if the pawn died or absconded.\textsuperscript{130} The working of the iwofa system depended, then, on having access to a third party whose capacity to monitor and discipline the pawn was greater than that of the creditor.

Although colonial officials viewed iwofa as an institution affecting adult men, the Egba saw it primarily as one involving children and youth. The Alake volunteered the example of a son

\begin{itemize}
\item \textsuperscript{123}NAI, CSO 26 06827 Vol II “Pawning of Children,” 17 Oct, 1924: Resident Oyo to Secretary, Southern Provinces
\item \textsuperscript{124}These are also discussed in Hopkins (1969)
\item \textsuperscript{125}NAI, Abe Prof 2 EDC 30 Iwofa: 12 Nov, 1936: District Officer Egba to Resident
\item \textsuperscript{126}Johnson (1966), p. 126
\item \textsuperscript{127}Interview: Chief J. Adeleye, 2 Sept, 2007
\item \textsuperscript{128}NAI, CSO 26 06827 Vol II “Pawning of Children” 17 Oct, 1924: Resident Oyo to SSP
\item \textsuperscript{129}Fadipe (1970), p. 191
\item \textsuperscript{130}Fadipe (1970), p. 191
\end{itemize}
who pawned himself to save the family head from the disgrace of being a debtor.\textsuperscript{131} One of my informants suggested that:

\begin{quote}

since am polygamist I was then free to take two of my children one from each wives and then go to the money lender that I needed money and so take these children of mine let them be with you to assist you with your work while you borrow me money I will come for them in two or three season time since I did not sell the children to him and by the that time I will also bring the money.\textsuperscript{132}
\end{quote}

There were no specific rules about the tasks performed by pawned for the creditor or \textit{olowo} – an \textit{iwofa} would serve the creditor “in any capacity agreed upon”.\textsuperscript{133} It is clear, however, that they had more bargaining power than slaves. A pawn’s family could negotiate with the creditor about how their relative was treated.\textsuperscript{134} Pawns were given a daily assignment to complete, while slaves were used “to any extent.”\textsuperscript{135} They could successfully refuse to perform transport work.\textsuperscript{136} Various accounts suggest that an \textit{iwofa} might work half-days, from 9AM until noon for the \textit{olowo} (creditor),\textsuperscript{137} nine days out of every eighteen,\textsuperscript{138} one hundred heaps in a four day week,\textsuperscript{139} or one week in three (since three hundred heaps was considered a day’s work).\textsuperscript{140} Commissioner Young wrote that, during his service of 1907-1914, he had seen no examples of abuse of the \textit{iwofa} institution.\textsuperscript{141}

The institution of \textit{iwofa}, then, provided a resolution to both labor and capital scarcity where alternative forms of collateral were unavailable. Like slaves, \textit{iwofa} were futures contracts for labor, though the social constraints on transferability of \textit{iwofa} made them less effective as capital. Oroge (2003) argues that the most common reasons that individuals were pawned in Yoruba society were sieges during war, for the welfare of poor children (as the \textit{olowo} was obligated to care for a child pawn), and the heavy expenses incurred in religious obligations, funerals, marriages and court fines. Creditors preferred to receive the labor services of pawns over the benefits of holding other assets on pawn. There are a handful of cases in the court records in which palms were made part of a debt contract only after an \textit{iwofa} arrangement had broken down.\textsuperscript{142} In a 1915 suit, the plaintiff’s brother had pawned himself to the defendant for £5.\textsuperscript{143} The defendant claimed that, as

\begin{footnotesize}
\textsuperscript{131}NAI, CSO 26/1 03063: Enactment of the Slavery Ordinance (1916); Nov 5, 1915: Secretary Egba Native Authority to Commissioner
\textsuperscript{132}Interview: Chief T. Ojewumi
\textsuperscript{133}Folarin (1939), p. 8
\textsuperscript{134}Interview: R. A. Popoola, Sept 2, 2007
\textsuperscript{135}Interview: I. A. Amosu, 27 July, 2007
\textsuperscript{136}NAUK, CO 147/162: 20 Oct, 1902: Acting Governor to Chamberlain
\textsuperscript{137}NAI, CSO 26/1 03063: Enactment of the Slavery Ordinance (1916): Short Memorandum on the Egba Native Custom of Ofa (by A. Edun Oct 14, 1915)
\textsuperscript{138}Folarin (1939), p. 9
\textsuperscript{139}Byfield (2003), p. 360
\textsuperscript{140}Johnson (1966), p. 126
\textsuperscript{141}NAI, CSO 26/1 03063: Enactment of the Slavery Ordinance (1916): 23 Feb 1916: Commissioner Abeokuta to Secretary, Southern Provinces
\textsuperscript{142}See Abeokuta Civil Suit 631/1915, Abeokuta Civil Suit 631/1915, and Abeokuta Civil Suit 854/1915 for additional examples.
\textsuperscript{143}Abeokuta Civil Suit 538/1915
\end{footnotesize}
no onigbowo could be found, he took over the farm and palms as surety when the iwofa became 
“impertinent.” Although he received repayment of the principal, he told the court that “the nuts I 
reaped I took as my interest.” While palms were abundant, labor was scarce. Even though a pawn 
could abscond, damages could be sought from the onigbowo who, often being a senior relative, had 
authority beyond that of the olowo to compel the pawn to work.

5.2.3. Limited European influence. Egba contact with European merchants did little to ameliorate 
these conditions. Europeans were reticent to lend, because of the risks involved. As early as 1863, 
Europeans in Lagos complained that Africans could escape to Abeokuta, becoming “refugees for 
debt.” In 1912, John Deemin wrote to Ayles, another merchant, that he had advanced £3475 at 
Abeokuta, and after accusing his correspondent of giving loans to risky borrowers, stated that it 
was “easy enough to give out credit, but a very difficult matter to get it paid.”

Together with Egba commercial interests, the European firms in Abeokuta and Lagos led an 
unsuccessful campaign to make urban land attachable for trading debts. Here, however, the ob-
stacle was the combined policy of the colonial government and the EUG that foreigners were not 
to acquire any permanent interests in land. In 1903, a circular published in the EUG Notice stip-
ulated that lands and houses in Abeokuta could not be sold or mortgaged to anyone not a native 
of Egbaland. There is some indication that this prohibition was in force earlier. In a 1902 suit G.B. Ollivant & Co. Attempted to attach Isaac Coker’s houses and lands at Itesi for a debt; the 
court disallowed this, permitting them to send tappers to work Coker’s rubber, but noting that 
“lands and houses are forbidden to be sold in all the Egba United Government territories.” The 
outcome of this inability to provide collateral on loans was perverse; by the early 1920s, demol-
ition of houses for sale as scrap had become widespread. Folarin (1931) wrote in 1930 that “several 
houses in the town have been demolished and the town bore every appearance of warlike dev-
astation and desolation.” In 1922, a petition signed by ogboni (civil chiefs), olorogun (war chiefs), 
parakoyi (trade chiefs), Christians, and Muslims was sent to the Alake and Council asking for the 
ability to attach land for debt. The document carried 800 signatures. The council was aware 
that the destruction of houses was “not good” and that restrictions on attachment had the effect 
of raising interest rates, but still chose to take no action.

5.2.4. The impact of tree crops. Because land was abundant, it made poor collateral. The trees stand-
ing on it, however, could be used to raise capital (though this is not evident for cocoa and kola 
from Table 4). When palms, cocoa, or kola were pawned, no interest was charged, but rather the 
use of the trees was turned over to the creditor until the loan was repaid. In the sample of court 
records it is difficult to identify the specific terms on which palms were pawned; generally a farm

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144 NAUK, CO 147/4, 6 Nov, 1863: Glover to Newcastle
145 RHL, Mss Afr s 1657 John Deemin Papers, Deemin to Ayles, 17 Jan 1908
146 For an analysis of the reasons for this policy, which appeared in various forms throughout West Africa, see Phillips (1989).
147 NAUK, CO 147/166, enc in 9 June, 1903: MacGregor to Chamberlain
148 NAA, ECR 2/1/3 Civil and Criminal Record Book No. III 1902-03, Suit 337: G.B. Ollivant & Co. v. Isaac O. Coker
149 Folarin (1931), p. 115-118
150 NAA, ECR 1/1/19 Egba Council Records Vol 1
151 NAA, ECR 1/1/19 Egba Council Records Vol 1
would be pawned along with them, the capital which exchanged hands left unstated, and in some cases other valuable crops would be included as well. The number of trees given over is only reported once – in a 1917 suit, the plaintiff claimed she had pawned twelve trees for one shilling each.\textsuperscript{152} Still, sixteen clear examples of pawning of land with palm trees, without any other tree crops, and in which the amount received is stated yield an average loan of a little over £6/15.\textsuperscript{153}

Pawning palms to raise capital was, however, problematic. The estimate cited above that the interest on palm trees at Owode was much higher than that on other loans suggests a substantial risk premium. Further, the estimated profit of 26s on 24 bearing trees was very similar to the prevailing rate of 1s per tree in a pawning contract, which encouraged borrowers to redeem their loans as quickly as possible.\textsuperscript{154} One source of risk came from creditors who were unsatisfied with what they had been able to extract; in a 1905 case, the defendant had refused to receive the redemption money on palms which had been pawned, and the Balogun had been unable to offer any remedy to the plaintiff.\textsuperscript{155} The fundamental difficulty, however, was that palms were – like land – everywhere.

Cocoa and kola presented fewer difficulties, though much of the evidence that they were used to raise capital comes from the period after 1914. Ward-Price (1939) argued that the pawning of cocoa farms was common, driven by demand from young men looking for work. In neighbouring Ibadan, Captain Ross reported in 1926 that a loan of £7 could be raised on 100 good cocoa trees – 1.4s per tree.\textsuperscript{156} At Owode during the 1920s, trees were typically pawned for 2/6 apiece.\textsuperscript{157} Seven cases in the records exist in which land with cocoa and without palms was pawned and the amount stated in court; the average sum in these transactions is a little over £5/15.\textsuperscript{158} Each interviewee agreed that individuals could use their cocoa farms as a source of credit. The reasons for this are apparent. The investment of one’s own labor in the creation of a cocoa farm established

\begin{footnotesize}
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\item[152] Ake “A” Civil Suit 590/1917
\item[153] Abeokuta Civil Suit 693/1908, pawned for 40 bags of cowries or £10 to pay medical expenses; Abeokuta Civil Suit 551/1915, pawned at Ilawo for £2/10 some time between 1875 and 1890 while the owner was away; Abeokuta Civil Suit 556/1915 pawned more than seven years prior to the case for £2/10; Abeokuta Civil Suit 561/1915, pawned at Igbo-Oya in 1897 for £10; Abeokuta Civil Suit 631/1915, pawned for £12/10 c. 1914 at Oluwo; Ake Central Suit 548/1905, pawned for £5, Abeokuta Civil Suit 70/1911, pawned less than ten years ago for £2/10 by a man with no right to pawn it, Ake “A” Civil Suit 299/1917, pawned ten years prior for £5; Ake “A” Civil Suit 352/1917, pawned six years earlier for £6 for after plaintiff’s mother died; Ake “A” Civil Suit 590/1917, pawned 12 years earlier for £7/10; Ake “A” Civil Suit 124/1918, pawned for £3/10 a year before at Asaya; Ake “A” Civil Suit 792/1917, pawned for £1/5 17 years and six months before at Olope; Ake “A” Civil Suit 225/1918, pawned at Awowo four years earlier for £7/10; Ake “A” Civil Suit 31/1918, pawned at Agbadu in 1918 for £2/15 to pay damages in a trespass suit; Ake “A” Civil Suit 402/1918, pawned at Ibu four years previously for £3/15; Ake “A” Civil Suit 875/1918, the palm trees alone pawned for £20 at Afojupa 10 years before; Ake “A” Civil Suit 583/18, pawned for £5 at Igboro 18 years earlier. In Ake “A” Civil Suit 130/1918, the defendant claimed the farm at Etepo had been pawned to him for £22/10 a year before, but court was skeptical of the size of the loan and his failure to use the plot for over seven months. This has not been included in the average.
\item[154] NAI, CSO 26 24873 Assessment Report Owode District
\item[155] Ake Central Suit 209/1905
\item[156] NAI, CSO 26 06827 Vol II “Pawning of Children” 30 Aug, 1926: Resident Oyo to Secretary, Southern Provinces
\item[157] NAI, CSO 26 24873 Assessment Report Owode District
\item[158] Abeokuta Civil Suit 740/1908, £2; Abeokuta Civil Suit 790/1908, two farms for £13/15 total (mean used in calculation); Abeokuta Civil Suit 810/1915, £5; Abeokuta Civil Suit 942/1910, £3/15 for 400 trees; Ake “A” Civil Suit 318/1917: disputed whether pawned for £10/15s or £5 (mean used in calculation); Ake “A” Civil Suit 593/1917, £3/15; Ake “A” Civil Suit 1229/1917, pawned for £12/10, approximately ten years earlier.
\end{itemize}
\end{footnotesize}
“Lockean” claims to ownership. This reduced some of the uncertainties involved in pawning palms. Second, as a scarce asset with a higher annual yield, cocoa was simply more valuable than palm trees. Third, during the first decades of the cocoa boom, less time had passed for other claims to have been established on cocoa farms through inheritance and the investment of labor over a period of years. This relative concentration of rights reduced transaction costs between borrowers and lenders. Finally, cocoa farms need not be pawned to be used as sources of liquid capital; as is evident from Table 4 they could also be sold.

6. Conclusion

This study has used a sample of court records from the early twentieth century to argue that the economic institutions adopted by the Egba at Abeokuta during their period of independence from 1830 to 1914 were shaped largely by their relative endowments of land, labor and capital. While land could be obtained virtually freely, strategies used to defend claims to land responded to the specific endowments of certain parcels. While sale of land did not become widespread in practice or acceptance until after the cocoa boom took hold, the initial land scramble facilitated its emergence. Labor scarcity and land abundance together prevented the existence of wage-labor, and so the market for labor was cleared through the creation of rights over persons and reciprocal obligation, through the use of slaves, kin, and cooperative work groups. Capital too was scarce, as reflected by the very high interest rates charged on loans, and the punitive measures for recovering debt made simple loan transactions unattractive. Rather, the principal means of raising capital was through the institution of *iwofa*, which interlinked claims over labor and capital, resolving the scarcity of both.

The link between geography and institutional developments has been reinforced, and this paper has noted several important aspects of this relationship. Relative factor endowments are not fixed, and they are altered by more than just population growth. Political circumstances affected the availability of land for the Egba, while the introduction of cocoa and kola shifted the supply of credit outwards. Austin (2008) has stressed that the “factor endowments” view of African history has neglected capital, the value of specific parcels of land, and seasonal fluctuations in the scarcity of labor. All of these have been shown to have shaped Egba economic institutions. While Binswanger and McIntire (1987) and Binswanger and Rosenzweig (1986) assume away the problem of slavery, forced and unfree labor were important means of coping with labor scarcity for the Egba; compulsion and intra-household violence remain very real aspects of everyday life in agrarian societies, and should be understood as such. Finally, this study has proposed that contractual interlinking can be explained as a strategy for responding to scarcity of both labor and capital, and need not rely on exploitation of one party by another nor on the presence of informational asymmetries.

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159 Besley (1995)
160 Berry (1988)
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In the Native Court of Abeokuta Thursday the 4th day of March 1909 Before A.B. Green and S.J. Peters, Judges.

137/09 Odunusi of Ake vs. Taiwo of Kemta

Recovery of farm land at Olugbo property of the pltff

Odunusi sworn on Bible states: I am of Ake am a Farmer - my father Durojaiye of Ake took this farm at Olugbo in dispute as farm forest – after the Abo war – I accompanied my late father there together, with my brother Fatoki and two pawn men of my father. Lukosi of Kemta father of Deft Taiwo came to this farm 3 years after us, my late father Durojaiye gave portion him Lukosi some portion of his own forest farm to work upon – One Daresu an elder brother of my father Durojaiye had some forest farm Darun in his life time worked some portion of this and died, this Darun’s portion both Irapa + forest was taken now by Deft Taiwo as farm belonging to his late father Lukosi – Durojaiye and Darun were brothers of the same parents. Darun had children as my self + Fatoki are sons of Durojaiye. The farms of Durojaiye and Darun are now being claimed by Deft – which has no right to do.

Deft – Taiwo sworn on the Bible States: - I am of Kemta, am a farmer. One Ande of Kemta took my father Lukosi of Kemta to this farm at Olugbo about the Abo war. Durojaiye father of pltff first got to this farm, and first took his portion of forest, then my father took next then Lukosi’s boys, about 13 boys then serving my late father in this farm. I never heard of the name of Darun in this farm during the Ibadan warfare against the Egbas bother my father + Durojaiye pltff’s father left this farm and never returned to the place till about 12 years ago when my father’s people and pltff returned to the farm – but I did not for pltff laid hold of his father’s farm and my father’s boys laid hold of my father’s. There is the Porogun trees planted on the boundary of the farms of Durojaiye and Lukosi till today. It was the plaintiff who trespassed on my father’s land. I never knew any farm belonging to Darun in this part.

For pltff Fatoki sworn on cutlass states: - I am of Ake, am an Ifa priest and son of Durojaiye. Ande of Kemta and my father Durojaiye started at the same time for this farm region the same day Ande took his portion and Durojaiye this portion side by side. My father Durojaiye first got to this farm, three years after Lukosi father of Deft came, my father there gave him the forest farm of one Sholoye which my father had taken for him and he never turned up. After the warfare Lukosi people and my father’s people had to leave this farm. At the return Lukosi people laid claim on our father’s farm . by trespassing over the boundary. I heard at a time the Kemta planted Porogun trees on the boundary. Darun an elder brother of Durojaiye my father had a farm, which is now being claimed by Deft in conjunction with Durojaiye’s.

Aboni sworn on Cutlass States: I am of Kemta. One Faroubi of Kemta took us to this farm. We were there for good length of time before Durojaiye Father of pltff came. Durojaiye came of himself but Ande of Kemta gave him forest. Lukosi father of Deft came two years after Durojaiye, Lukosi took portion of farm Durojaiye had reserved for one of his people but it was forest. The farm in dispute is part of Lukosi’s farm. Lukosi’s farm is in the middle of Durojaiye’s farm and Igbonla – on the other side of Durojaiye is Ogunbiyi’s farm. At a time when there was a dispute
of boundary between Lukosi and Durojaiye’s farm, the Kemta chiefs settled it then by planting porogun trees. These trees are there till today.

For Deft Sanyaolu sworn on cutlass states: I am Kemta am a carver and a hunter. Ande of Kemta was my grandfather who took Durojaiye father of pltff to this farm and allotted to him portion of forest farm land. This Ande took Lukosi father of Deft to this farm Olugbo and gave him forest farm. This was at the Ijaiye war. I was then present. I was as old as I am during the Abo war of 1857.

I say the court after cross examination that I am telling a lie.
Case adjourned till Monday Mar-8-09
A.B. Green Pres.
Saml J. Peters

[Page 515]
In the Native Court of Abeokuta Monday the 8th day of March 1909 Before A.B. Green and S.J. Peters Judges.
137/09 Oduwusi of Ake vs. Taiwo of Kemta
Recovery of farm land at Olugbo property of the pltff

Dagin sworn on cutlass states: I am of Kemta. I know the farm in dispute at Olugbo. The farm was originally taken Lukosi of Kemta during the Abo war. I know that the farm was originally taken by Lukosi because I accompanied them there 17 days after – Ande, Ogunbiyi and Durojaiye father of pltff each took portion of this farm alongside one another. Ogunbiyi was in the middle of these people. Durojaiye being on one side Lukosi father of Deft is on the right hand of Durojaiye, Lukosi gave his left to Igbo Inta. The land mark between Durojaiye and Lukosi was made by planting Porogun trees by the Kemta people when there was difference on this land at a time Durojaiye father of pltff had a farm there and Lukosi father of Deft also had a farm.

Aruno sworn on cutlass states: I am of Kemta. I was slave of Lukosi father of Deft. This farm was taken during the Abo war. I did not go with them but afterwards I went there after two years Lukosi got there. Durojaiye was the first to get to this farm then Lukosi my master. When Lukosi came he took the forest next to Durojaiye. Durojaiye never ran away from this farm, but died.
Case adjourned till Wednesday when escort will be sent to this farm to see the porogun trees planted by the Kemta people.
A.B. Green Pres.
Saml J. Peters

[Page 536]
Oseni sworn on the Koran states: I am police no. 29 EUG. I was sent by the court to the farm in question at Olugbo. I summonsed the villagers. I found the two farms of pltff and deft side by side. The boundary was marked by Porogun trees from one end to another, these porogun trees were planted by Chiefs of Kemta, when there was a fight on this subject once. Pltff showed me two porogun trees which one was in the middle of Defts farm, and one in some part of a road which he said was boundary. I found it was no boundary and the villagers said the same that boundary is the straight demarcation in which porogun trees were planted straight from one end
to another. It was pltff who trespassed into Defts farm. The porogun trees in the boundary are about 24. The poroguns are about 5 years old. The two poroguns pltf showed me were trees of themselves of no object.

Judgment – Court decides that the boundary as marked by the 24 porogun trees planted by the authorities of Kemta should from now be taken as boundary between the land farms of late Durojaiye of Ake and Lukosi of Kemta. No notice should ever be taken of the two accidental porogun trees pointed out by pltff. Judgment for Deft.

A.B. Green Pres.

Saml J. Peters.
<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
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Notes: "Water" indicates a stream, river, marsh or swamp. "Cocoa," "Kola" and "Palm Trees" indicate that these are stated to exist on the land in dispute. "Previously Taken to Chiefs" indicates the dispute was previously taken to the township chiefs. Events such as "Land Pawned" or "Juju Placed" indicate that these occurred at any point in the land's history.
<table>
<thead>
<tr>
<th>Part of Tour</th>
<th>Land Use</th>
<th>Soil Type</th>
<th>Crops Grown</th>
<th>Crop Rotations and Fallow</th>
<th>Farm Size</th>
<th>Tree Crops and Palms</th>
<th>Forest</th>
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</thead>
<tbody>
<tr>
<td>First four miles from ABEOKUTA to ONIBODE</td>
<td>&quot;ASHALE PAPPA...cultivated plots are separated by large stretches of ASHALE...&quot;</td>
<td>[A] poor ILERO OLOKUTA very much used...</td>
<td>Water yam, sweet potatoes, cassava, ground nuts, cucurbit, and beans. &quot;Maize and the better classes of yams do not grow.&quot;</td>
<td>CROPPED for two years, then fallow for three to four years.</td>
<td>Not many palms. &quot;Cotton, Cocoa or Coffee would not thrive.&quot;</td>
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<td>Remaining distance from ABEOKUTA to ONIBODE</td>
<td>&quot;[T]he country changes from ASHALE PAPPA to ASHALE IGBORO...&quot;</td>
<td>Red ILERO and some EBOLE</td>
<td>&quot;[C]rops improve. Sweet potatoes disappear.&quot; Cassava a &quot;subordinate crop.&quot; Maize, male yams (AKOSHU), replace the water or female yam (EWURA or ABOISHU).</td>
<td>Usual&quot; rotation of &quot;maize followed by yams, with a pulse between each crop as a dry season crop.&quot; Mixed crop the following years until fallow. Many intercropped farms of maize, yams, cassava, and beans. &quot;The land is degenerating, though at one time it must have been good, especially the EBOLE soil.&quot; Mer one farmer who had cropped for seven years and intended to let his plot fallow for 5-6.</td>
<td>Palms &quot;very numerous.&quot; No coffee or cocoa. Ceara rubber at ONIBODE. Orange trees &quot;plentiful&quot; despite mistreatment.</td>
<td></td>
<td></td>
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<tr>
<td>ONIBODE to KAJOALA</td>
<td>&quot;[T]he country is still ASHALE IGBORO.&quot;</td>
<td>[N]ot so good.&quot; Dark ILERO &quot;very much exhausted.&quot;</td>
<td>Cotton not grown because of low prices, poor transport, lack of labor, and unsuitable soil.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
| KAJOLA to ABERUAGBA         | "[S]tilt ASHALE IGBORO."
"[P]oor ILERO...The ABERUAGBA people call their land EBOLE, but I don't think they like to recognize how poor it is. It is really ILERO OLOKUTA and poor at that...The farmers at ABERUAGBA state that the soil of their district although superior to that close round ABEOKUTA is not to be compared to the soil round ASHA (in the forest). Forty years ago their soil was as the soil of ASHA is to-day." | Country food crops. | Three years of alternating yams and maize. Land then fallow four years, followed by three years' crops and then allowed to go into ASHALE indefinitely. "They are aware that the soil generally is deteriorating and that short fallows do not restore its condition, yet no attempt is made at manuring." | | | |
| ABERUAGBA to ORILE IJEUN    | "The Country is all ASHALE IGBORO."         | Mostly dark ILERO. At some distance from ABERUAGBA it becomes ILERO OLOKUTA, and then ILERO YENREN. Some NYOGILE soil at MAGBON. | "[V]ery poor. Maize absent or very unthrifty" AKOSHU yams giving way to EWURA yams. | At ITOKU, "we were told the farms further back from the road were in better condition, those along the road having been used too much." | | |

Table 2: Observations made by Cyril Punch, Superintendent of Forests, in Egba Country (August 1902)
ORILE IJEUN to ASHA

"Both soil and country change." Mixture of forest and farms, "[s]omething between IGBO [and] ASHALE."

Maize "flourishes," good crops of AKOSHU found. "Crops are not so mixed as in the poorer land." No market for cotton.

Bale of ASHA estimates there are 2800 farmers, cultivating 17 acres each. Cocoa and ceara rubber present. Rubber yields too low for tapping to be worthwhile. "Every farmer" planting cocoa, kola, and ATARE along the banks of streams. Cocoa on Bale of ASHA's farm planted 3 feet apart. "Yams, Maize, beans, bananas, everything seems to be planted among the cocoa and coffee." Bale estimates 10,000 cocoa trees in area.

The country is forest but much cut up by farms and the forest belt is yearly decreasing. ...In a few years it will be open country, now it is forest but with many farms. ASHA is in the centre of a large forest stretching from ORILE IJEUN to the OSHUN River, in which the IBADAN forest reserve is located.

ASHA to ILOGBO

At first "good dark ILERO," but becomes "rich red EBOLE" on nearing ILOGBO. Some rice. Yams and maize "flourishing." Cotton grown but no market. Olofin of ILOGBO estimates 800 farms in the area, averaging 3 acres. All land bordering streams planted with cocoa, believes Bale of ASHA's estimate of 10,000 trees is "below the mark." Mr. SHASHEGBON at ILOGBO has at least 10,000 coffee trees, allowed to revert to ASHALE because of low prices. Cocoa is planted 4-6 feet apart. Kola present. "The road from ASHA to ILOGBO is through forest with increasing number of farms."

ILOGBO to Coker's farm

Changes from EBOLE "to a fairly good ILERO." Newly cleared forest cropped 4-6 years then fallowed 5-6, then cropped 3-4 and left for ASHALE. Isaac Coker has a farm three miles from ILOGBO with ceara rubber, and cocoa planted 3-4 feet apart. Rubber yields are low. Three miles of forest land "getting more and more broken up by farms."

Coker's farm to ASHERO

After Coker's farm, country becomes ASHALE IGBORO with some forest "here and there." Crops improve once NYOGILE is reached. EBOLE forest land can be cropped 5-6 years then fallowed 5-6 after which cropped 3 years then reverted to ASHALE for 10-20 years. ILERO soil would not last as long. PAPPA land cannot be worked for long without fallow. About 30 villages around ASHERO have 40 farmers in each, and others 10-21 farmers. Average farm about 3 acres. Farm villages every mile, and cocoa planted 3-4 feet apart. Impossible to estimate how much. Palm kernels plentiful, though trees not as numerous as between ONIBODE and ABERUAGBA. Cocoa very young.

ASHERO to MOKOLOKKI-IRO

"After ASHERO the land is all farms or ASHALE IGBORO some of which is old enough to be classed almost as forest." Red ILERO "and in a fair condition judging by the crops grown." Not much ceara rubber or cocoa and coffee, probably because few streams. Cocoa and coffee farms that do exist have large trees. Passed a cocoa farm of 30-40 acres planted in straight lines but only 7 feet apart.

MOKOLOKKI-IRO to OKENLA

ASHALE with "farms at intervals." In some places the ASHALE "is almost old enough to be classed as forest, at others it gives way to PAPPA fields."

Light colored clay, changes soon to ILERO "which one would think poor, but crops seem good perhaps because the tillage is more thorough than in most places." Subsoil is a gravel or red sandy loam (ILEPA) sometimes mixed with ironstone (NYOGI). Maize not seen, but "good" yams, pulses, cassava and okros in evidence. Cotton only grown on EBOLE, and prices too low.

Palms used for thatching. No coffee or cocoa until OKENLA.
<table>
<thead>
<tr>
<th>OKENLA to ITORI</th>
<th>Mostly PAPPA.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Varies from light EBOLE to sandy light colored ILERO known also as TARA. Stiff red sub-soil is EBOLE, almost clay.</td>
<td>Yams and pulses, little if any maize.</td>
</tr>
<tr>
<td>Sub-forest skirts the streams.</td>
<td></td>
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</tbody>
</table>

**Explanation of Terms:**

Punch gives the following descriptions of soil types and land use in Egba territory.

**Soils of the Egba District**

Where rocks appear as at ABEOKUTA or OLOKE MEJI they are gneissic or porphyritic with veins of quartz. Railway cuttings show strata of breaking down felspars from which clay is being formed. In places yellow to red loamy soil is being formed in situ on a laterite sub-soil. There is also a red loamy sand formed I think simply from the breaking down felspar. Prevailing colour of soil is red, there is also dark or light sandy surface soil not red, but the sub-soil is then mostly red and appears as such when thrown up in the termitie heaps. There is no limestone. At places especially near OLOKE MEJI there is a peculiar white soil formed in situ from a breaking down mineral, perhaps hornblende. It has the appearance of chalk but is crystalline and gritty to the touch and wears into sand though probably yielding a good deal of kaolin. In the river beds there is clay but with much sand. There is little if any limestone and lime is undoubtedly wanting in the soil. The boilers of any locomotive fed with river water do not soon foul.

Clay is called YORUBA ‘AMO’ and two kinds are known the common kind is yellow to brown found in most riverbeds and is used for making coarse EWARE. A white kind of purer clay ‘AMO' FUNFUN, is found in small quantities only and is used for making finer earthenware and some house tiles are made from it at ABEOKUTA.

A dark coloured clay mixed with more sand is called TARA. It cracks during dry season. Specially found at OLOKE MEJI and in the ITORI plains. At former place there is a gravel sub-soil, at latter there is either a stiffer clay or a red loam.

Soils are divided generally into ILEPA (red soils) and ILEDU (black soils).

Both ILEPA and ILEDU have a large proportion of clay sufficient to make sunburnt walls of.

ILE ILORADUDU is not universally known and is merely descriptive of dark clayish soil.

EBOLE is really an approximate translation of the English term loam. While it is generally red, a stiff TARA soil might very likely be called EBOLE. It really means stiff enough to make a hard floor. The EBOLE soils are most prized. When newly cleared of forest they are the most fertile and they undoubtedly bear cropping for longer than any other kind.

ILERO is a sandy loam and may be either red or black (ILEPA or ILEDU). Newly cleared ILERO is fertile and grows good crops but is sooner exhausted than EBOLE.

OLOKUTA stony is used as an adjective with any of the above. EBOLE OLOKUTA - a stony loam.

**Descriptions of Land**

IGBO means high forest say of 80 years growth. ODAN is open country with solitary trees... PAPPA open grass land. ASHALE is the term corresponding to fallow, land out of cultivation and may be reverting to forest in which case it is ASHALE IGBORO... If it is exhausted grass land it is ASHALE PAPPA. OKO is farmland. PAPPA that has had a long fallow say twenty years can be cropped for 3-4 years and then fallowed for 3-4 and then after a crop or two be left for a long term of ASHALE.

Poor Pappa land is cropped for only two or three years and then left for a long fallow. Rotations do not seem to be much followed. In the poor land cassava (BAGUDA) sweet potatoes and water yams are grown very much as mixed crops with ERE beans also themselves with pulse as a dry season and cassavas subsidiary crop. Cotton does not thrive except in quite new Pappa land or stiff TARA land. OKROS are subsidiary to all crops.

FOREST LAND (IGBO) is cleared during dry season and planted with maize followed by a pulse in the 2nd rains.

2nd year: Yams 1st rains, pulse second rains.
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Absolute value of t or z statistics in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Notes: Column [1] is OLS. Columns [2]-[7] are probit, with marginal effects reported. "Water" indicates a stream, river, marsh or swamp. "Cocoa," "Kola" and "Palm Trees" indicate that these are stated to exist on the land in dispute. "Previously Taken to Chiefs" indicates the dispute was previously taken to the township chiefs. Events such as "Land Pawned" or "Juju Placed" indicate that these occurred at any point in the land's history.
<table>
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<td>Damages or</td>
<td>Land Pawned</td>
<td>Land Sold</td>
<td>Boundary Made</td>
<td>Destruction of</td>
<td>Previously Taken to Chiefs</td>
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<td>[0.23]</td>
<td>[2.91]***</td>
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<tr>
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<td>0.002</td>
<td>0</td>
<td>0.003</td>
<td>-0.001</td>
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<td>[1.15]</td>
<td>[2.22]**</td>
<td>[2.61]***</td>
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**Table 4: Plot Characteristics and Land Tenure Outcomes - Full Sample**

Absolute value of t or z statistics in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

Notes: Column [1] is OLS. Columns [2]-[7] are probit, with marginal effects reported. "Water" indicates a stream, river, marsh or swamp. "Cocoa," "Kola" and "Palm Trees" indicate that these are stated to exist on the land in dispute. "Previously Taken to Chiefs" indicates the dispute was previously taken to the township chiefs. Events such as "Land Pawned" or "Juju Placed" indicate that these occurred at any point in the land's history.
### Table A1: Plot Characteristics and Land Tenure Outcomes - Complete Cases Only

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<td><strong>Damages or Value Claimed</strong></td>
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<td>0.063</td>
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<td>[0.13]</td>
<td>[0.49]</td>
<td>[1.36]</td>
<td>[1.69]*</td>
<td>[2.34]**</td>
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<td>Palm Trees</td>
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<td>[1.86]*</td>
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</tr>
</tbody>
</table>

Absolute value of t or z statistics in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%

Notes: Column [1] is OLS. Columns [2]-[7] are probit, with marginal effects reported. "Water" indicates a stream, river, marsh or swamp. "Cocoa," "Kola" and "Palm Trees" indicate that these are stated to exist on the land in dispute. "Previously Taken to Chiefs" indicates the dispute was previously taken to the township chiefs. Events such as "Land Pawned" or "Juju Placed" indicate that these occurred at any point in the land's history.