LAND TENURE IN THE MIDDLE JUBBA: CUSTOMARY TENURE AND THE EFFECT OF LAND REGISTRATION

by

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LTC Research Paper 104

Land Tenure Center
University of Wisconsin-Madison
December 1990

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GLOSSARY OF SOMALI TERMS USED IN THIS REPORT

darab	A unit of land measurement equal to 40 paces by 60 paces; 6 darabs are considered equal to about 1 hectare.
Dayr	The lighter rainy season, from October to December.
doonk	Inland, higher ground.
dhasheeg	An inland, low-lying area that collects and holds flood and rainwater for long periods of time and is characterized by heavy black and/or red soils.
Gu	The heavy rainy season, from April to June.
jiimɔ	Riverbank land.
Jilaal	The hot, dry season, from December to April.
nabadoon	Historically, the man who was responsible for mediating village disputes and distributing land to villagers. This position has been replaced by the village council.
quintal	A large sack used to measure maize and sesame. One quintal of loose maize is equal to 100 kilos. One quintal of sesame is the same volume, but its weight is unknown.
siimow	Used to describe areas where the river water percolates up through the soil, which is considered beneficial for growing fruit trees but which sometimes causes an area to become swampy.
Somali shilling	(So. Sh.): 100 So. Sh. = US$1.00 (during the period of field research).
Xagaa	The coolest season in the south, from June to September.

PREFACE

This study is part of the comparative research program of the Land Tenure Center (LTC) on the security of tenure and land registration initiatives in Africa. This four-year research program has been carried out under LTC's Cooperative Agreement (ACCESS I) with the Bureau of Science and Technology, Agency for International Development (AID), and has involved a year or more of fieldwork in Somalia, Senegal, Uganda, and Kenya; short-term work in other countries; and an extensive literature review. It has sought to understand, through study of a number of titling initiatives, the actual impacts of such programs. It is in the light of this experience that future proposals for titling programs must be evaluated, rather than solely in terms of a potential indicated by theory. Experience in the end suggests modifications to our theoretical models, more rigorous statement of their assumptions, and an understanding of how far these assumptions apply in the cases which concern us.

Funding for the Somalia research was provided by the Africa Bureau of AID from Strategic Studies funds, from Science and Technology Bureau funds, and by USAID/Somalia through its Policy Initiatives and Privatization (PIPS) project. The Land Tenure Center appreciates the interest and support of many in AID/Washington, including David Atwood and Gloria Steele in the Bureau of Science and Technology; Pat Fleuret, Gerald Cashin, and Curt Reintsma in Africa Bureau; and Joan Atherton in PPC; and in USAID/Somalia, Louis Cohen, Lois Richards, Phil Warren, Mary Warren, Roger Garner, Emily McPhee, Sally Patton, Gladys Gilbert, and the staff of the Jubba Environmental and Socioeconomic Studies (JESS) project.

This study was carried out under the supervision of Michael Roth, LTC staff economist for the Security of Tenure and Land Registration Project. Carol Dickerman of LTC provided editorial comments.

Our thanks to the author and to those to whom she expresses appreciation in the author's acknowledgments.

John W. Bruce, Project Coordinator
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ACKNOWLEDGMENTS

This study was conducted for the Land Tenure Center, University of Wisconsin-Madison. Research was undertaken in Somalia from May 1987 to May 1988 by the author, who was accompanied and assisted by Jorge Acero. Field assistants were Cali Ibrahim, Cabdi Xassan, and Maxamed Maxamed Raghe. Special thanks are given to Michael Roth of the Land Tenure Center, under whose direction this study was conducted, and Carol Dickerman, also of the Land Tenure Center, for editorial advice and assistance. Thanks are also proffered to the staff of the Jubba Environmental and Socioeconomic Studies (JESS) project, Gus and Marie Tillman, Kathryn Craven, Jim and Nancy Merryman, and Ian Deshmukh, who provided invaluable technical assistance and guidance in the field. Gratitude especially goes to the villagers and officials of the Middle Jubba region who provided their time and knowledge for this study. The author, however, takes full responsibility for any errors or omissions in this report.

Catherine Besteman

EXECUTIVE SUMMARY

Land tenure in Somalia is currently characterized by two contrasting systems regulating access to land: customary tenure, in which individuals obtain rights to land through membership in a community; and state leasehold tenure, the only legal form of tenure in Somalia since the Land Law was passed in 1975. The state now owns all land in Somalia, and, through registration, individuals obtain usufruct rights to a specific parcel for fifty years.

The first efforts to regulate tenure were made by the Italians at the turn of the century. Through a series of laws, the colonizers attempted to create a state domain, although the laws were never put into practice. The Land Law of 1975 was the first land tenure legislation since independence. Under the 1975 Law, leaseholds are obtained through registration of up to 30 hectares of irrigated land or 60 hectares of dryland for individuals and up to 100 hectares for banana plantations, with no limit for private companies. Families can register only one parcel, which cannot be sold, leased, or subdivided, and which must be developed for agriculture within two years. According to the law, registration is mandatory for all persons desiring to use land.

Demand for land in Somalia has grown in recent years due primarily to agricultural development, an inflationary economy, a drastic reduction in the export market for live animals, and the liberalization of grain prices. The demand has been concentrated in areas of the Jubba and Shabelle river valleys, and studies suggest smallholders in these areas are losing their land to other people who register the land in their own names. The Middle Jubba region, due to its reputation as a region destined for economic development, is an area where this conflict between customary and state-leasehold tenure is beginning to emerge. This research was carried out to evaluate the impact of the land law on customary tenure and agricultural practices in the Middle Jubba.

Land registration is frequently viewed as a means to increase tenure security. Tenure security is considered essential to investment, development, and access to credit. The issue of whether land registration has increased tenure security and agricultural productivity is thus important in the context of the Middle Jubba.

In the Middle Jubba region, a village was chosen in which to carry out the study. The methodology for the study was a combination of formal and informal interviews of unregistered village smallholders and registered farmers from the nearby town, participant observation, and mapping of parcels. The research was carried out during ten months of residence in the village.

All households in the village depend on subsistence farming of maize and sesame. There is no irrigation. To minimize risk, households generally hold land in three micro-environments: river bank; inland high ground; and inland, low-lying depressions, which collect and hold flood or rainwater. There is an

average of three farms under cultivation per household in any given year, the average total area per household being 3 hectares. Because of lack of labor, most families also hold land currently in bush. Bush farms are an integral part of the farming strategy for village households since parcels are rotated in response to a variety of factors, including seasonality, labor availability, and climatic conditions. The boundaries of bush farms are recognized by the community. While most households use tractors for land preparation, input use is minimal.

Under customary tenure, land is acquired through inheritance, request from the village council, purchase, gift, or, in earlier days, independent clearing and claiming of land. Individuals hold full rights to specific parcels of land and cannot be stripped of these rights. To meet seasonal needs for land, villagers regularly borrow portions of friends' or neighbors' parcels.

Women as well as men may acquire or inherit land, although fewer women hold land than men. Most women control much smaller amounts of land than men (0.09 hectares compared with 2.9 hectares). Women-headed households (10 percent of the village) control an average of 1.2 hectares per household, whereas the average is 3.0 hectares for male-headed households.

Disputes occur over boundaries, inheritance, land that has been lent, crop damage by animals, and outsider claims--through registration--of unregistered land belonging to villagers. The village council mediates most disputes, except for the latter, over which they have no authority. Disputes with outsiders are handled by the regional agricultural authorities.

The incidence of land registration among villagers is very low, only two farms out of approximately four hundred being registered. Villagers recognize the need to register land in order to keep it from being claimed by outsiders; however, the high cost of registration and the lack of familiarity with government bureaucracy serve as barriers to registration for most villagers. Titles are thus being disproportionately issued to outsiders. Of the seven registered farms in the village, five were registered by nonvillagers. In all five cases, villagers had been unwillingly and unknowingly dispossessed of their farmland by the registering party. Fifteen percent of the village sample had lost land in this way to the five registered farms.

As a result, a feeling of tenure insecurity is growing among villagers. The customary tenure under which villagers hold land is overridden by the state's system of leasehold tenure. Land registration policies have provided town dwellers with opportunities to gain access to land while villagers, because their land is unregistered, are experiencing a considerable loss of tenure security.

Case studies of fifteen registered farmers were conducted to determine how registration has affected agricultural practices. One-third of the case studies invested in a pump, but there is little difference between registered and unregistered farmers in terms of mechanization and input use. Villagers are farming a higher percentage of their land and, according to their figures, are obtaining higher yields per unit of land than the registered farmers of the case study. Eighty-seven percent of the registered farmers are entirely

dependent on hired labor for all agricultural tasks, from land preparation to guarding against animals. Registered farmers complain of production losses due to lack of labor. Forty percent of the cases studied had no plans for future investments such as a pump or fruit trees. Most of these farmers obtained land for reasons of prestige, to feed their families, or as speculative investment.

Land grabbing and land speculation are emerging as primary concerns of smallholders since the state leasehold process facilitates speculators' access to large areas of land. Moreover, the registration law is at variance with essential agricultural practices of smallholders: multiple parcel holdings, holding of land in bush, transfers of land between households. Deforestation is already a matter for concern due to the law's provision that all land must be developed. Disparity in holding size between registered farmers, who can register up to 100 hectares by calling themselves a corporation, and smallholders leaves potential for social unrest. Further, the land registration process is inefficient due to shortages of materials and personnel. Finally, agricultural development on both registered and unregistered farms is hindered by inadequate agricultural extension services, the lack of improved seeds and mechanized services, and the poor transportation and communications networks which link the Middle Jubba with the rest of the country.

Land Tenure in the Middle Jubba: Customary Tenure and the Effect of Land Registration

by

Catherine Besteman

I. INTRODUCTION

Land tenure in Somalia is currently characterized by two contrasting systems regulating access to land: customary tenure, in which individuals obtain rights to land through membership in a community, and state leasehold tenure, the only legal form of tenure in Somalia.[1] In 1975, the government of the Somalia Democratic Republic (GSDR) passed legislation giving the state ownership of all land in the republic. All individuals who had been using land were to register their holdings within six months of the passage of this legislation. Individuals currently wishing to obtain access to land are to complete a process of registration, laid out in the law, granting them usufructuary rights to a specific parcel for fifty years. In all cases, individuals holding registered title are tenants of the state and can claim no individual ownership of the land they have registered.

Demand for title to agricultural land has increased tremendously in recent years. Whereas farming used to be seen as a somewhat inferior occupation (especially to pastoralism), Somalis are increasingly turning their interest to agriculture for a number of reasons:

First, the GSDR is placing great emphasis on developing the agricultural sector. Since 1974, a primary objective of the GSDR has been to increase food production and attain food self-sufficiency (Suleyman 1985; Janzen 1983; Varotti 1983). Donor and government funds are being channeled into agricultural improvement projects, encouraging public awareness of and interest in potential economic returns from agriculture.

Second, investing in land may better preserve capital in a highly inflationary environment (over 46 percent inflation per annum between 1980 and 1985) than other financial assets (Besteman and Roth 1988; Fadal et al. 1986). According to Roth (1988, p. 5), financial assets in the form of bank deposits would have yielded a 31 percent negative annual return in 1985, based on the World Bank's figure of a 14 percent nominal rate of interest on bank deposits. Furthermore, investors may be less willing to entrust their funds to banks following the banks' financial collapse in late 1987.

Third, in 1983, Saudi Arabia imposed an import ban on live animals from Somalia. This ban, coming from the largest importer of Somalia's live animals, led to severe resource dislocations in the Somalian economy (Dolley 1987) and

encouraged investors to shift their attention from livestock to crop agriculture (Roth 1988).

Fourth, the liberalization of grain prices and marketing since 1983 has increased returns to crop agriculture. From 1971 to 1984, farmers were required by law (Law No. 51) to sell their crops to the state marketing organization, the Agricultural Development Corporation (ADC). While ADC prices kept up with inflation until 1978, by 1984, the ADC purchase price for maize was 55 percent of the 1971 level in real terms (Holtzman 1987). Markets were liberalized in January 1984, making sale to private traders legal. As a result, open-market grain prices in 1984 soared to ten times the previously controlled prices paid by ADC in 1983 (von Boguslawski 1986). The response by farmers and others interested in farming is notable: total area cropped in maize increased from 149,000 hectares per year in the 1970s, to 207,000 hectares per year in the 1981-85 period, and to 234,000 hectares in 1985 (Holtzman 1987, p. 5). Factors other than prices probably were also important, such as population growth and capital investment.

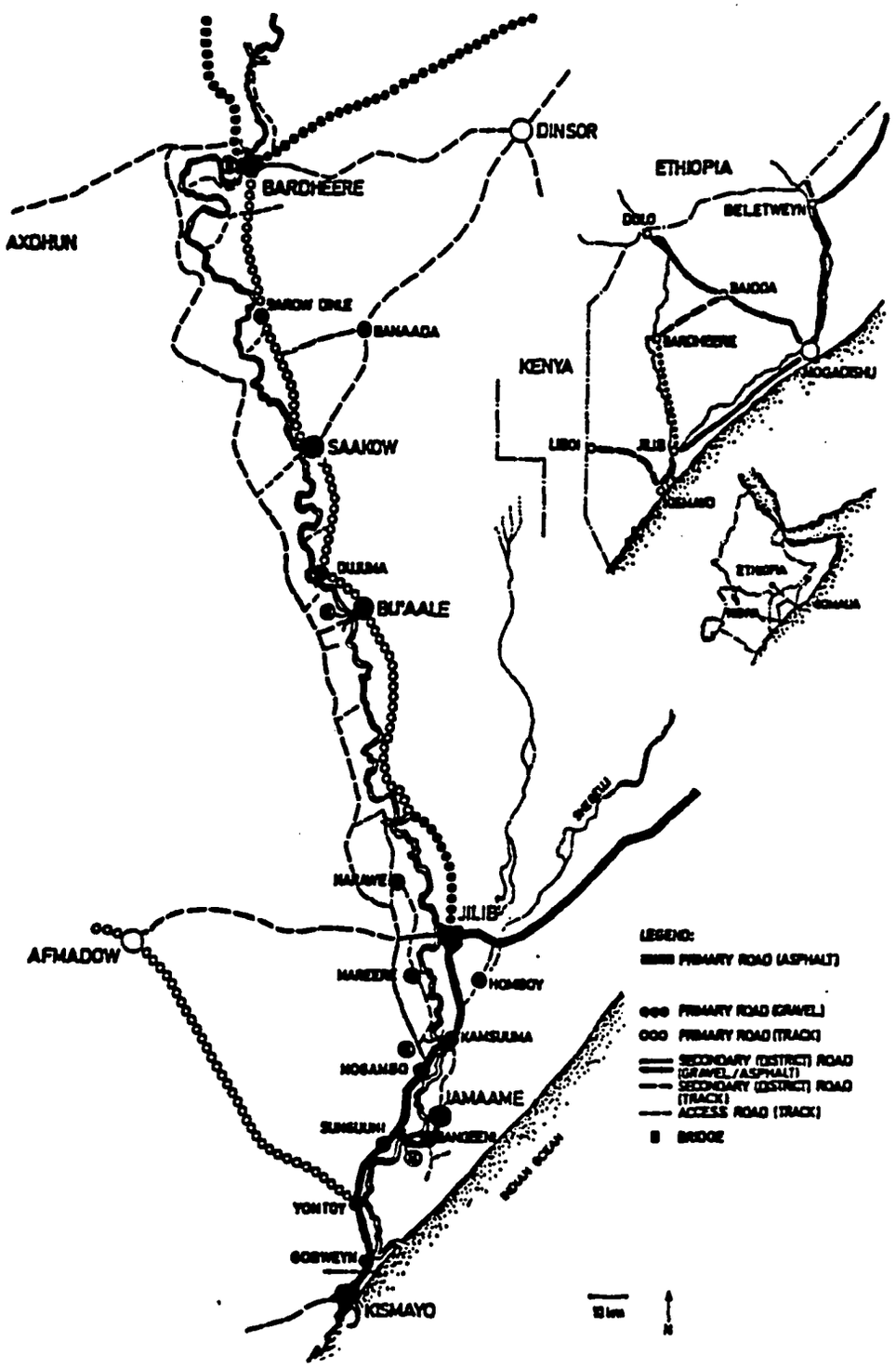
Fifth, holding title to land may provide access to loans intended for agricultural development.

A person may register a parcel either to solidify his or her previous use of the land or to obtain access rights to land for the first time. Statistics imply that there is abundant available land for use by both groups. As an example, Fadal et al. (1986) claim that out of 450,000 hectares of potentially arable land in the Jubba Valley, only 32,000 hectares are under cultivation.[2] Nationwide, only 980,000 hectares out of 8,000,000 hectares which are potentially arable are said to be under cultivation (Conze and Labahn 1986, p. 15), and only 700,000 hectares are under cultivation in any one season (p. 16). While these figures suggest that there is a great deal of arable land available, there are some areas where land is being much more quickly registered than elsewhere. These "hot spots" must have a different set of attributes compared with the other, less disputed areas. In particular, research in certain areas of the Jubba and Shabelle river valleys indicates that agricultural land is quickly being claimed through registration under the land law (see, for example, Hoben 1985; Roth et al. 1987). Studies have revealed that smallholders in these river valleys are losing land to people who, through the state leasehold program, are able to obtain access to land over which they may have held no previous claim. Conflict has emerged between customary tenure and state leasehold tenure, between smallholders and outsiders who are obtaining titles to large areas of land.[3]

The Middle Jubba Region of Somalia is in the initial stages of this conflict. This region has long been characterized by geographical isolation (see Figure 1). Poor communications and lack of transport infrastructure have discouraged large-scale commercial enterprises. Due to the region's isolation and poor access, landholders in the Middle Jubba have so far been spared the widespread displacement and the effects of agricultural policy to the extent experienced in the Lower Shabelle and Lower Jubba regions. This isolation from current economic forces is disappearing rapidly as the Middle Jubba is increasingly perceived as an area for future economic investment, drawing outside interests into the area. With increasing land scarcity and rising land costs in the more commercial areas of the Shabelle farther north, economic

FIGURE 1

Map of the Jubba River Region of Somalia



Source: Heiko Brunken and Wolfgang Haupt, "The Importance of the Juba Valley for the Development of Agriculture in Somalia," in Somalia: Agriculture in the Winds of Change, ed. Peter Conze and Thomas Labahn (Saarbrucken-Schafbrucke: EPI Verlag, 1986), p. 170.

incentives are shifting investors' attention to more remote, less exploited areas. In comparison with the Shabelle River Valley, the Jubba Valley has a relatively rich and unexploited base of land and water resources.

The Jubba Valley has been identified as Somalia's "highest development priority" (ARD 1985, p. 1). Proposed improvements are increasing investors' expectations of economic opportunities in the region. The planned all-weather road between Jilib and Baardheere will ease transportation difficulties, thereby attracting in-migrant populations and reducing costs of marketing, and will generally better integrate the region into the national economy. There are hopes that the proposed dam north of Baardheere will improve flood and water control, decreasing losses to flooding and increasing opportunities for irrigation.[4] The introduction of small-scale pump-irrigation technology is attracting capital to the region and increasing demand for irrigable lands.

With the opening of the valley, present landholders may benefit from increased investment opportunities, but they will also be exposed to resource dislocations (the development of economic inequalities, inequities in extent of landholdings, variable access to resources such as agricultural inputs, and the like) that will accompany social and economic change. The Middle Jubba region has experienced less economic development than other riverine regions of Somalia and thus will undergo the most drastic changes in land tenure and tenure security resulting from future economic development. The local population is already facing problems of land grabbing, land speculation, and environmental degradation of forest reserves (Deshmukh 1987).

How these problems are managed will depend largely on the efficacy of GSDR land policies in coping with the changes that are emerging within the Jubba Valley. GSDR land policies are also an agent of change. An evaluation of how current land policies are both effecting change and coping with change in the Middle Jubba region is the purpose of this report. Specifically, the research was carried out to: (1) study the nature of the interplay between the state-leasehold-tenure system and customary land tenure and determine the extent to which a transition from customary tenure to state leasehold tenure has taken place; (2) evaluate the impact of the 1975 Land Law on smallholder tenure security; (3) analyze the impact of the land law on agricultural practices and production of registered farms; and (4) evaluate the social and economic impacts of state leasehold tenure in the Middle Jubba, particularly its effect on credit, investment, and land distribution.

The remainder of the paper is organized in the following manner: First, the history of land laws in Somalia, from early colonial days through independence and the revolution, is reviewed. The Land Law of 1975 is explained and the major issues surrounding its implementation, including its significance for tenure security, are discussed. Next, the methodology used for field research is explained. The following section describes the village where fieldwork was undertaken in terms of its demography, landholding characteristics, and agricultural practices. This section includes a detailed description of customary land tenure and dispute mediation. The position of women in the land tenure system is also examined. The next section is an analysis of the local impact of state leasehold tenure and the characteristics of registered farmers and landholdings. The final section summarizes the important land tenure issues in the Middle Jubba, particularly those emerging from the interface between the state leasehold system and customary tenure.

II. HISTORY OF LAND LEGISLATION IN THE TWENTIETH CENTURY

A. Land Legislation in the Colonial Period

Beginning with the colonization efforts of the Italians, over the past hundred years southern Somalia has had a variety of laws regulating rights to land and designating state domain lands. The earliest land law promulgated by the Italians in southern Somalia was by Filonardi, the first Italian administrator of the Benadir, in 1895 (Guadagni 1978). This law, which was the first provision issued by the Italians in Somalia (Article I of the Provisional Regulations), stated: "All uncultivated land not belonging to any adjudicated owner belongs to the Royal Italian Government" (ibid.). While this provision was never put into practice, it served as the basis for the future land tenure policies of the Italian government in southern Somalia.

When the colonial government became interested in the agricultural potential of Somalia in the early 1900s, an area recognized as state domain had to be created. In the next land law, Law No. 161 of 1908, Parliament recognized native customary land rights but upheld the principle of state domain originally created by the 1895 provision. What comprised the state domain was defined in Royal Decree No. 695 of 1911 and Governor's Decree No. 815 of 1912. The 1911 decree indicated that Italians were to be governed by Italian law, and Somalis, by customary law. Italians were granted concessions to which they had full rights, but natives retained rights only to lands which they were "effectively" cultivating or permanently utilizing. All other lands were at the free disposal of the state. In the 1912 decree, the governor articulated his authority to decide which lands were appropriately utilized by Somalis, thereby granting himself the ability to determine where native rights to land under customary law were acceptable to the colonial government. "What was supposed to be the adjudication process of customary land rights became, therefore, a procedure for the assessment of the Somalis' need for land" (Guadagni 1978, p. 23). In recognition of future expansion needs due to population growth, the 1911 decree had allowed for the creation of native reserves out of state land. The Governor's Decree of 1912, however, made it clear that these areas were to remain state lands, thereby freezing the amount of land allowed to Somalis according to the colonial government's interpretation of use and rights under current customary law. As Guadagni (ibid., p. 25) points out, the purpose of the colonial land legislation was to eliminate tribal collective tenure and to set the conditions for individual ownership, particularly by foreigners.

In the 1912 decree, an adjudication process was laid out which contained provisions for local participation in reviewing claims and counterclaims and for the use of the Somali language in announcing the decree. This process was never carried out systematically, being used only in a few areas that Europeans wanted for plantations (often by displacing Somali farmers) (Guadagni 1978). As a result, no state domain was ever actually created in southern Somalia.

Two further decrees regarding the adjudication of lands were enacted by the Italian governors in 1918 (Decree No. 2096) and 1928 (Decree No. 7061). To avoid having to deal with native claims when adjudicating a parcel for a foreigner, these decrees served to remove Somali participation from the adjudication process and to shorten the time period during which complaints could be filed from thirty to ten days.

The land tenure policy of the Italian colonial government allowed for the creation of several large Italian-owned plantations and represented the first attempts at establishment of a state domain and adjudication of individual rights to land. While customary law was recognized and had its place in the land tenure policies of the colonial government, it was clear that the government could overrule customary tenure when it was in its interest to do so.

Following independence in 1960, a commission was formed to propose land tenure reforms. The resulting draft legislation of 1966 never became law. In the first seven years after the October Revolution of 1969, the GSDR passed more than twenty-two laws regulating the agricultural sector (Robleh and Hussen 1977). Among the most important of these are Law No. 73, the Agricultural Land Law of 1975 (presented in Appendix A), and a 1987 circular revising the guidelines for registering land (presented in Appendix B). Other important laws provided for the establishment of farming cooperatives, created a national marketing board, and dealt with the resettlement of nomads and refugees in riverine areas.

B. The Land Law of 1975

The Land Law of 1975 follows in the long line of land legislation, going back through colonial times, which attempted to take control over access to land out of the hands of traditional groupings and place it under the authority of a central government. The law of 1975 goes the furthest by extending state domain to include all lands and by ignoring customary control over and rights to land. (Of course, the major difference between colonial land law and the 1975 Land Law in this regard is that prior legislation involved Italians attempting to control land for European exploitation.) Under its policy of scientific socialism, the revolutionary government was seeking to unify a "faction-ridden" clan society and "to integrate society and . . . act as the central agent of social and economic progress" (Selassie 1986, p. 11). Developing the agricultural economy and increasing agricultural production were primary goals of the GSDR plan for national economic progress. Land reform, within the ideological boundaries of scientific socialism, was seen as critical to the achievement of these goals. Land reform was thus oriented toward "working the land together," emphasizing cooperatives and noncapitalistic forms of development (Ministry of Information and National Guidance 1975). From the viewpoint of production, the land law was an attempt to bring as much land as possible under cultivation and to increase output by equitably distributing land resources for their most efficient use (Robleh and Hussen 1977).

Initially, the emphasis for development was on large-scheme cultivation, that is, state farms and cooperatives. The land law gives preferential treatment to these categories regarding ceilings on size and procedures for leasehold acquisition. The yields of these schemes, however, have been low, far

lower than the national average, despite modern capital investments (Labahn 1986). Currently, more emphasis is being placed on private sector development, including private farmers.

The Ministry of Agriculture (MOA) is responsible for implementing the land law. Concessions may be issued to cooperative societies, state farms, autonomous agencies, private companies, and private individuals. Ceilings on registered land are set at 30 hectares of irrigated land and 60 hectares of nonirrigated land for private individuals. Banana plantations are limited to 100 hectares, and there are no size limitations for cooperatives, state farms, private companies, and autonomous agencies. Only one concession per family (or individual) is allowed. Since it is compulsory to register one's land, this stipulation means that a family can legally farm only one parcel. With the exception of cooperatives and state farms, concessions are for fifty years and are renewable. The sale, lease, rental, subdivision, or mortgaging of a concession is illegal, although heirs may take up the lease after notifying the registry. Subsequent MOA circulars seem to have relaxed provisions banning buying or selling of land or exchange of leases, although it remains unclear what kinds of exchange are allowed.[5] Leaseholders have the right to use their registered land as collateral for credit. Finally, registered land must be developed, for agricultural purposes only, within two years of title acquisition. The government retains the authority to repossess land that is not being managed in accordance with the law.

A 24 May 1987 circular from the MOA on "Guidelines for the Giving of Farm Land" (see Appendix B) revised the registration process. According to the circular, an individual wishing to register a parcel must write an application letter to the District Agricultural Officer (DAO) of the MOA. The DAO is then supposed to post a notice of the application at the District Party Secretary's office, the District Commissioner's office, the Police Station, the Ministry of Agriculture, and the village center where the requested land is located. After thirty days, a committee made up of the Department of Land and Water Resources (DLWR) (now the Department of Irrigation and Land Use) district officer, a district policeman, the applicant, a draftsman, and the chairman of the village committee where the land is located is responsible for adjudicating the claim, marking boundaries, and drafting a map. The DLWR officer and the policeman each write a report to their superiors specifying farm location, area, soil type, and present use, and confirming that the parcel is free of dispute. The DAO sends a report to the Party Secretary for approval.

A district registration number is assigned and all previous reports, the map, and the original application are forwarded to the Regional Agricultural Officer (RAO) for approval and issuance of a regional registration number. The RAO is responsible for taking the documents to the director of DLWR of the MOA in Mogadishu. The director checks the application for conflicting claims before sending the file to the Minister of Agriculture for signing. All leaseholds must then be approved by the minister. Once signed, the registration procedure is complete, and copies are returned to the landholder and various DLWR offices. The registration process may also be started at the national level by an individual or cooperative seeking land. In this case, a letter is written to district or regional agricultural coordinators directing them to find unregistered land.

Nationwide, 12,561 titles, covering 256,000 hectares, had been issued by 1986, 11 years after the passage of the land law (GSDR 1987). Over 75 percent of this registered land is listed as irrigable, though not necessarily irrigated. Land close to a river is usually listed as irrigable but may not actually be irrigated due to lack of capital, technology, or interest on the part of the farmer. Most registered land lies in the river valleys.

According to the regional Ministry of Agriculture office, approximately 300 titles have been issued in Bu'aale District since the first title was issued in 1978, and 779 titles had been issued in the Middle Jubba region through 1987 (Table 1). The figures are somewhat different at the national office in Mogadishu; records indicate that 223 titles have been issued for Bu'aale District and 479 for the region (Table 2). It is difficult to determine the accuracy of these figures due to the disorganized state of record-keeping. It may be that the difference in the number of titles recorded at the regional and national levels is due in part to pending leasehold requests which have been recorded in the regional office but not yet in the national office. It can be seen, nevertheless, that the number of leasehold applications has been greater since 1983 than before, although applications have dropped in number since 1987. (Table 3 shows the characteristics of registered farms in the Middle Jubba region.)

TABLE 1

Number of Farms Registered in the Middle Jubba Region, by Year, as Recorded in the Regional Office*

YEAR	NUMBER OF FARMS REGISTERED
1978	43
1979	12
1980	23
1981	43
1982	17
1983	31
1984	81
1985	247
1986	156
1987	126
Total	779

* Titles registered by year for Bu'aale District alone were not available.

Source: Bu'aale Regional Registry Office, Ministry of Agriculture.

TABLE 2

Number of Farmers Registered in the Middle Jubba Region, by Year and District, as Recorded in the National Land Registry, Mogadishu

YEAR	JILIB	SAAKOW	BU'AALE	TOTAL
1977	1	6	-	7
1978	2	2	42	46
1979	1	1	12	14
1980	7	11	-	18
1981	8	1	5	14
1982	1	3	5	9
1983	12	5	18	35
1984	17	11	40	68
1985	40	6	45	91
1986	58	17	26	101
1987	44	4	28	76
Total	191	67	221	479

Source: National Registry Office, Ministry of Agriculture.

TABLE 3

Characteristics of Registered Farms, Middle Jubba Region, 1988

DISTRICT	NO. OF FARMS	IRRIGATED HECTARES	RAIN-FED HECTARES	TOTAL HECTARES	MALE (#)	FEMALE (#)
Jilib	198	19,362	945	20,307	183	15
Saakow	79	1,423	174	1,597	71	8
Bu'aale	235	7,720	398	8,118	228	7
Total	512	28,505	1,517	30,022	482	30

Source: National Registry Office, Ministry of Agriculture.

C. Registration and Tenure Security

It is often thought that land registration, which is intended to individualize rights to land, will increase farmers' perceptions of their tenure security. Tenure security is defined here as the farmer's perception that s/he will be able to sustain rights to use of the land and obtain continuing benefits from investment in the land. In reality, increased tenure security may or may not be a result of titling programs aimed at increasing individual property rights. In situations of high population pressure, rising land values, land speculation, unequal access to land under customary tenure, or encroaching control over land by a dominant group, legal title conferred by the state may increase tenure security. In other cases, the customary tenure system may provide a high level of tenure security by ensuring publicly recognized individual or user rights to land. State leasehold title may even serve to create tenure insecurity in these cases. Increased tenure insecurity or even loss of rights to land may occur if legal land rights are not clearly defined or effectively enforced by the state or if the legal system allows for individuals to lose their rights to land previously guaranteed under customary tenure.

Increased tenure security is often seen as a prerequisite to increasing agricultural production for a number of reasons: (1) incentives to invest in the land will be greater if a farmer believes s/he is assured of receiving the future benefits of that investment; (2) holding a secure title to land can increase the likelihood of receiving credit against the value of the land (credit is often seen as a critical factor in agricultural development and increasing productivity); (3) farmers will farm the land in an environmentally sound manner if they are assured of continuing future rights to that land; and (4) reduced transaction costs associated with exchange of titled lands will lead to a more efficient farming pattern by facilitating land transfers from less efficient to more efficient users (see Dowson and Sheppard 1952; Miskin 1953 and 1967; Mifsud 1967; Lawrance 1972; Simpson 1976; Henssen 1982).[6]

The effect of the land registration program on tenure security as well as on agricultural productivity is an important issue in the development of the Middle Jubba region. Both state leasehold and customary tenure currently exist in the region. Customary tenure, while nullified under the 1975 Land Law, is still the primary tenure system, but it is being increasingly challenged by the state leasehold system. The effect of the coexistence and conflicts between the two tenure systems on the tenure security of the area's farmers is a primary concern if development is to occur equitably and efficiently.

III. METHODOLOGY

A. Design of the Research

Two primary goals of the research were to test the hypotheses, first, that land registration increases tenure security and, second, that land registration (through enhanced security) encourages agricultural investment and greater productivity. Since the majority of farmers in the Middle Jubba region were not registering their land, a third goal was to determine the issues involved in a farmer's decision to register or not. These issues would include: the appropriateness of state leasehold tenure to indigenous land use patterns, the local farmer's perception of the potential benefits to be gained through registration, and the social factors (financial, cultural, and so forth) that might inhibit a farmer from registering his or her land.

A year-long period of research in a single village, based on continuous residence, would afford the researchers the best access to local registered and unregistered farmers, to understanding indigenous land tenure and land use patterns, and to investigating the questions surrounding tenure security. The ability to observe farming practices over an agricultural cycle, to observe disputes and methods of mediation, and to listen to conversations among local farmers about tenure security and registration, coupled with empirical methods of data collection described below, provided more depth and detail in the analysis of land tenure and land use patterns than a series of short-term visits to a variety of villages would have done.

The study was conducted in one village on the Jubba River, 12 kilometers downriver from the regional capital of Bu'aale. This village was chosen as a research site for several reasons: it is representative of villages and agricultural patterns in the Middle Jubba; it is accessible from the regional capital most of the year; and its proximity to Bu'aale provided the opportunity to study registered farms. The researchers lived in the village for ten continuous months, from June 1987 through April 1988, dividing time between interviews in the village and mapping and observing work in the outlying farms. Arrival at the field site was originally planned for May, but the Middle Jubba region was cut off by extensive flooding until June. The researchers departed the field in late April after the onset of the Gu rains.

With its population of 480 to 500 people (around 83 households), the village chosen for study is one of the larger villages in the region. It used to comprise four separate villages, spaced several kilometers downstream from the present location. After a devastating flood in 1977, the GSDR resettled the four villages to the high ground of the present village to create an administrative center for the area, a beel. The village is the political center for three other, smaller villages in the area, bringing its administrative population to about 1,000 people. Two of these villages are farming communities; the other is a semipermanent nomad settlement located a few kilometers inland from the river.

All cultivated farms used by villagers were mapped for area and location, and all farms in the sample were visited at least once; most were visited several times. Reported areas were obtained by measuring all farms in the sample with a compass and pacer.[7] The cultivated area of a farm in any given season tends to be only a portion of the total parcel area. Of the cultivated village farmland, 50.4 percent was partly cleared and partly in bush. Only the portion cultivated in the 1987 summer season was mapped, approximated as closely as possible, because this was the season for which production data were collected. Area measurements should therefore be taken as a general indication of total area cropped per season. Farms in bush were not mapped for area. The researchers determined that threat of snakes and predators in the long grasses of the bush farms was a sufficient deterrent.

An initial population census was conducted shortly after the researchers arrived in the village. From this census, a sample of forty households was randomly selected for a two-round, formal questionnaire on agriculture, land tenure, and attitudes toward land registration (the questionnaires are reproduced in Appendix C). This sample included thirty-seven households headed by men and three headed by women. Two farmers in the sample had registered land. Formal questionnaires were also administered to the remainder of the female-headed households in the village (five additional households) for information on women's land tenure and economic position. Formal questionnaires were frequently followed up with informal interviews to obtain further qualitative information (on household histories, for example, or on land use histories for specific parcels, opinions on special soil types, and so forth) and to clear up any discrepancies in responses to formal questionnaires. Since the respondent to formal questionnaires was the husband, if present, all wives in the sample were interviewed separately about their landholdings, their borrowed portions, their managerial rights, and their rights to production on their husbands' farms. Group interviews were also conducted in eight other villages in the area on issues of land tenure and registration.

Additionally, a small sample of thirteen registered farmers from Bu'aale was chosen for structured informal interviews. Initially, a random sample using the district registry records was attempted, but due to difficulties in locating many of the selected persons, the sample was redefined to include registered farmers in the nearby Bu'aale area. In addition to these thirteen nonvillage residents, the two registered farmers residing in the village were interviewed, bringing the total to fifteen. The researchers tried to locate and interview all the registered farmers in a defined geographical area (lying between Bu'aale and the study village) in order to give some kind of definition to the sample. Where the titleholder could not be interviewed because he was not living in the area, the person managing the land was interviewed. The researchers' impression, based on village interviews and fieldwork in the eight other villages, is that the interviews are representative of registered farmers in the Bu'aale District. The interviews were approached as case studies. Each respondent was asked a structured set of questions (presented in Appendix D). Rather than providing a set of possible responses, the interviewer asked the registered farmers to respond in as much detail as they could to each question. In this sense the interviews were informal. Such an approach to interviews with registered farmers, it was felt, would elicit better and more accurate responses than using a prepared, standardized questionnaire.

Data on production yields and histories of land use, input use, and agricultural investment were collected from both nonregistered village farmers and registered farmers from Bu'aale. These data will be compared in order to understand if and how registration has altered farming practices, land use, investment, and agricultural productivity in the Middle Jubba region.

B. Other Methodological Issues

1. Women's Farms

It must be noted that the land owned separately by a man's wives is easily missed in a survey of land tenure where the male head of household is the primary respondent. Not a single husband in the sample reported the land his wife owned independently, even when specifically asked about his wife's landholdings. Only by separately interviewing the wives of all the men in the sample was this information obtained (Table 4). These kinds of problems in data reliability should be kept in mind for other land tenure surveys.

TABLE 4

Parcels Reported by Husbands and Wives

NO. OF PARCELS	PARCELS REPORTED BY MALE HEAD OF HOUSEHOLD	UNREPORTED PARCELS REPORTED BY WIVES OF HEAD OF HOUSEHOLD	TOTAL
Cultivated	117	7	124
Bush/fallow	25	3	28
Total parcels	142	10	152

2. Household as Unit of Analysis

A few points must be made about taking the household as the unit of analysis in this research. In order to choose a sample for the formal questionnaires, a household was defined as comprising those individuals who farm together, whether or not they live together. In almost half of the polygamous families, the wives live in separate compounds, maintain separate food reserves, eat separately, and farm separate plots of land; but the separate families and the land farmed by the separate families are managed by one person, the husband. In these cases, the entire polygamous unit is counted as one household. There are other examples of individuals who live and eat with

a relative and the relative's family, but who maintain separate ownership of land. This case is counted as two households. There may be much trading of labor and distribution of food between these households, but landownership is used as the final determinant of what constitutes a household.

A complication to this definition arises when a wife has her own land. In most cases, land is held by men, and a household is then defined by a man's landholdings and by who works and benefits from them as a group. This definition can be easily applied to polygamous groupings. When one wife has her own piece of land, however, her cowife does not work it or benefit from it, and her husband does not control it. The composition of a household defined by landownership thus becomes somewhat less clear. In these cases, the wife's land has been included with the husband's as part of the land of the household.

A final point about households in the village is that they are very fluid in composition. Children may move between households of relatives, elderly parents may move between households of their children, and a high divorce rate contributes to the movement of women between households. By way of illustration, in 31 percent of the village households, the household composition of adults was different at the conclusion of research from ten months earlier, at the beginning of the research. This figure would be even greater if movements of children were included.

These points are brought up to underscore the fact that the definition of a household becomes important in the context of the land law, which states that only one concession per household can be registered. When individuals move between households with such frequency, and when households have such variable composition, determining how to apply this limitation becomes very difficult.

3. Agricultural Production

Two points must be made regarding the collection of data on agricultural production. First, farmers' reports were based on recall. Second, providing a definitive figure for crop yields in **dhasheeg** areas (see section on "Land Types") can be very difficult. Crops are planted as the water recedes and harvested as they mature. Thus, there is no "final harvest." Corn is consumed as it is harvested on a day-to-day basis. Production figures reported by farmers for **dhasheegs** must be considered educated guesses.

Three definitions of terms used elsewhere in this report require careful clarification. A farm or parcel (terms used synonymously) is a unit of landholding that is noncontiguous with any other land held by the household. A household may have one or more farms or parcels acquired through inheritance, purchase, or gift or by claim from idle land. Each farm or parcel may include multiple plots or fields. A plot refers to an area of land within a farm or parcel that is assigned to an individual (generally a member of the household) by the household head. A field refers to an area planted in a single crop or intercrop. A plot may thus contain one or more fields. Two or more plots belonging to the same person cannot be contiguous within a parcel; two or more fields of the same crop cannot be contiguous within a plot. Land measurements by the researchers were made at the parcel level.

IV. RESULTS

This section of the report provides a detailed discussion of land tenure and land use patterns in the study village. Information on land use strategies (of households and of individuals, particularly women) is important for understanding how the registration law will affect these plans of action. This issue will be addressed in section VI. Data presented in this section on land tenure and land use practices of village farmers (tenure security, agricultural yields, inputs, and investments) will be compared with similar data collected from registered farmers in section V.

A. Background and Demography

The first settlers came into the area around one hundred years ago, clearing most of their farms a few kilometers downriver from the current village site. Originally settling in a string of villages along the bank of the river, the population presently lives in one village, as noted earlier. The current population of 480 to 500 people comprise about 83 households, averaging 5.9 people per household (Table 5). The range in household size is great, varying from 1 to 15. Of the households in the sample, almost 40 percent are nuclear (husband, wife, and children), the remainder being polygamous, extended (where married children and their own families live within the household), or some other combination. It is worthy of note that over 20 percent of the households are polygamous. Ten percent of the households in the village are composed of divorced or widowed women with unmarried children.

All households in the village depend on subsistence farming. Within a household, the husband is considered the head of the family. It is his responsibility to ensure that he has enough land to feed his family. If he has more than one wife, the wives and their children may all live together in one compound, or the separate families may live in separate compounds, with the husband residing wherever he chooses. In a nuclear household, the husband and wife farm together. In a polygamous household, the husband assigns to each wife a plot of land which she is responsible for working to feed herself and her children. Each wife's maize harvest is kept in a separate storage pit (bakaar) but remains under the control of the husband. Generally, wives grow only maize on their plots. The husband generally retains for growing sesame one parcel or part of a parcel, on which each wife is expected to work. Occasionally sons will be assigned their own plots (Table 6). The husband decides what is to be grown and when and how to plant, and he retains control over the harvest. A woman cannot sell the production from the plot she is assigned without consulting her husband, although wives on their own can exchange small amounts of corn for meat and milk for the family.

Some men have other sources of income in addition to agriculture, such as carpentry, shopkeeping, or being a sheik, but these activities are secondary to agriculture in terms of both time and income. Some families own a few cows,

TABLE 5

Village Sample Demographic Characteristics

CHARACTERISTICS	DATUM
No. of male-headed households	37
No. of female-headed households	3
Percentage of sample households that are:*	
Nuclear	37.5
Polygamous	22.5
Extended	32.5
Other	12.5
Average family size:	
Adult males	1.7
Adult females	1.6
Children (under 15)	2.6
Total	5.9

* Does not add to 100 because some families are both polygamous and extended.

TABLE 6

Households with Wives', Sons', or Sisters' Plots

	NUMBER IN SAMPLE	AVERAGE NUMBER OF PLOTS PER HOUSEHOLD	AVERAGE AREA OF PLOTS (est. ha)
Households with wives' plots	7*	2.1	0.4
Households with sons' plots	2	5	0.4
Households with sisters' plots	2	1	0.2

* All of these households are polygamous and represent 87.5 percent (7 out of 8) of those polygamous households in which all wives reside in the village. Only 1 polygamous household in which both wives reside in the village did not utilize separate plots for each wife during 1987, although this is their normal practice. One of the wives in this household has her own parcels.

which are kept in the bush by pastoral relatives or friends, but villagers do not consider themselves livestock owners in the nomadic sense of pastoral transhumance, and animals do not represent a major source of wealth for villagers (Table 7). Villagers do interact on a daily basis with the pastoralists, however. Pastoralists visit the village every day and exchange milk and animal products for grain. Once or twice a week a villager may purchase from a visiting pastoralist a cow or goat to butcher and sell. During the dry season, some villagers make a practice of purchasing sick or very weak cows from pastoralists passing through the village. The villager nurses the animal back to health and resells it several months later at a profit. Some villagers also keep goats which provide milk for children. They can sell the goats to pastoralists or to other villagers since village ceremonies often include a feast of goat meat. Table 7 thus provides a picture of one point in time of a dynamic system of buying and selling animals.

The relationship between pastoralists and farmers is important both currently and historically. Italian ethnographers (Ferrandi 1903; Colucci 1924) reported the existence of slavery and clientship in the Jubba Valley in the

TABLE 7

Livestock Ownership
(n = 40)

	VILLAGE SAMPLE	
	Number	Percent
Households that own:		
Cows	11	25.0
Camels	1	2.5
Sheep/goats	5	12.5
Average number of animals per household which owns each type:		
Cows*	3.6	
Camels	2	
Sheep/goats	4	
Percentage of sample households in which at least one member reported having once depended on livestock for his or her livelihood:		35.9

* One household is excluded because it consists of one young unmarried man whose family lives as pastoralists, owning 60 cows. He considers these animals his also. These 60 animals were not included as part of the village herd in the averaging to obtain a figure of 3.6.

early 1900s. Farmers who were settled in the agricultural villages along the river frequently were coerced into becoming clients (or slaves) of pastoralist groups living inland. The farmers would provide grain, labor, and hospitality to the pastoralists, who would in turn provide the farmers with protection. Following independence, all citizens of Somalia were made equal by law, and clientship and slavery were legally abolished. Today, there is no evidence of unequal relationships existing between pastoralists and farmers. The equality policy of the GSDR appears to be quite successful. Whether or not unequal relations based on clientship still exist in the valley was important to determine since such relations could have lasting ramifications with the implementation of the land law.

B. Land Characteristics

Families in the village have an average of three farms under cultivation in any year, the range being one to five farms (Table 8). The average total

TABLE 8

Village Sample Land Characteristics
(n = 40)

CHARACTERISTIC	DATUM
Average number of parcels per household:	
Partially or totally cultivated	3.1
Fallow or bush	0.7
Total	3.8
Average area of land per household:	
Cultivated (ha)	3.4
Fallow or bush (ha)*	1.2
Total (ha)	4.6
Average area of land per parcel:	
Cultivated (ha)	1.1
Fallow or bush (ha)*	1.8

* These figures are presented with two important caveats: (1) the area in hectares was not measured by the research team; the figures reported for bush farms are thus derived from the area in **darabs** reported by the farmers, and so must be taken as loose estimates; and (2) it is certain that farmers underreported their landholdings in bush, due in part to the fact that bushland is seen as susceptible to appropriation by outsiders (discussed below).

area under cultivation per household is 3.4 hectares, or 0.5 hectare per resident. The number of cultivated parcels held depends on the position of the family in its "life cycle"; a young single man or married couple may have just one farm, whereas an older man with two wives and a married son living with his wife and children in the household may have five farms. Tables 9 and 10 demonstrate that the amount of land cultivated by a household increases as the household gets larger and the head gets older. Parcels previously held in bush may be brought under cultivation, or parcels may be acquired through the village council or by purchase.

TABLE 9

Average Measured Cultivated Area Held, by Age of Household Head (n = 40)

AGE OF HOUSEHOLD HEAD (years)	AVERAGE TOTAL CULTIVATED AREA (hectares)
20-29	1.3
30-39	1.9
40-49	3.4
>50	3.7

Most families (65 percent of the sample) have farms currently in bush, in addition to those under cultivation (Table 8). A farm in bush is a farm left uncultivated for a year or longer. Fallowing of land is not generally practiced for fertility reasons, although fallowing probably aids in soil rejuvenation. Soil fertility, even under permanent cultivation, appears to be maintained by periodic river flooding. Depending on its elevation, all cultivated land is flooded with varying degrees of frequency. The survey indicates that the highest land may receive flooding for two to four years out of every ten. A farm is left idle usually due to lack of labor that season or year (for example, a family member may be ill; a son may have married out of the household; a drought may have kept the family from farming the parcel one year, and the group lacks the labor to reclear the bush growth in order to plant). The boundaries of farms currently in bush, while commonly not marked, continue to be recognized by the community. What bushland is owned, and by whom, and what bushland is unclaimed are generally well known by villagers. The average number of bush farms owned by households in the sample is 0.7, with a range of 0 to 3.

TABLE 10

Average Cultivated Area Held, by Size of Household

SIZE OF HOUSEHOLD (no. of members)	AVERAGE TOTAL CULTIVATED AREA (hectares)
1-2	1.3 (1 missing)*
3-5	2.1 (2 missing)
6-8	3.8 (1 missing)
>9	4.8 (3 missing)

* Missing cases indicate those households which held a parcel in **dhasheeg** land which was under water during the period of field research, from May 1987 to May 1988, and thus could not be measured.

While a family will sometimes abandon a farm altogether because of low fertility or lack of labor, it usually keeps tight control over its land in bush since this land provides an important reserve for children who are marrying, for inheritance, or for family members moving into the community. A family's farming strategy for any given year--the parcels it will farm and the crops they will grow--is very fluid and depends on a variety of factors, including labor availability, climatic conditions, prices, what types of land it holds, and how many of its farms have returned to bush and would require extensive land preparation before planting.

C. Agriculture

The primary crops grown by villagers are maize and sesame. Most farmers plant some pumpkin, squash, and beans, and a few plant a small amount of tobacco. Maize is grown for home consumption, and sesame is primarily grown for sale, after household needs for sesame oil have been met. Food security is not guaranteed. Table 11 shows how often farmers reported not being able to grow enough maize to meet the needs of the family. Most families experience a shortage at least some seasons, but only 5 percent reported never being able to grow enough to meet subsistence needs. Animals, insects, and plant-disease problems; droughts or floods; labor shortages; and/or poor health are the usual causes of poor harvests. Most families (70 percent) reported being able to produce a surplus of maize for sale at least some of the time, although few families could consistently produce a surplus above subsistence needs

TABLE 11

Food Security
(n = 40)

	EVERY YEAR	MOST YEARS	SOME YEARS	NEVER
How often do you grow a surplus of maize to sell?	12.5%	7.5%	70%	10%
How often are you not able to grow enough maize to meet the needs of your family?	0%	12.5%	82.5%	5%

(Table 11). Table 12 shows the maize and sesame production figures reported by farmers and sale activity for both commodities. All village farmers are dryland cultivators. There are no water pumps in the village and, therefore, no irrigated land.

Local farmers are, however, quite interested in irrigation possibilities. In early 1988, a group of farmers with contiguous parcels organized themselves, pooled their resources, and intended to make a down payment on a water pump which they would use cooperatively. Certain that they would be able to purchase a pump to be paid for in installments from a local businessman who had fifty pumps for sale, they began digging channels to carry irrigation water from one parcel to the next. To their disappointment, they were turned down by the businessman. One of the village farmers involved then began planning to install a bucket-and-lever system on his riverbank farm to attempt hand irrigation while using the channels already dug. Input use is extremely low, with only three households (7.5 percent of the sample) reporting having ever used any inputs (Table 13).

TABLE 12

Maize and Sesame Production of Sample Households

AVERAGE PRODUCTION/ PERCENTAGE OF HOUSEHOLDS	AMOUNT/ PERCENT
Average maize production per household (ears per darab, as reported by farmer)[a]	358 kilos
Average sesame production per household (kilos per darab, as reported by farmer)	86
Percentage of households which sold maize after 1987 Xagaa harvest[b]	35
Average amount sold per household	0.7 quintals
Percentage of households which sold sesame after 1987 Xagaa harvest	90
Average amount sold per household	3.9 quintals
Percentage of households which bought maize following late 1987 harvest[c]	42.5
Percentage of households which have an additional source of income	35.9

a. One quintal of loose maize (kernals) = 100 kilos. According to villagers, 1 quintal of loose maize = 2 quintals of ears of maize. One quintal of sesame is the same size, but the weight is unknown. One darab is equal to approximately 0.25 hectares.

b. In a devastating flood in the mid-Gu season (May), virtually all the crops of the village were destroyed. Villagers replanted after the floodwaters receded, and they did not harvest until the late-Xagaa season (August).

c. An average per household cannot be calculated because 18 percent of the respondents who reported buying maize said that they did so every day and had no idea how much in total was bought.

TABLE 13

Input and Tractor Use

TRACTOR USE	PERCENT
Percentage of sample households that have ever used a tractor	85
Percentage of sample households that have ever used other mechanized services	0
Percentage of sample that have ever used:	
Fertilizer	0
Pesticides	7.5*
Herbicides	0

* Two households had used rat poison and one household had used a pesticide for insects.

D. Land Types

There are three types of land used for farming: **dhasheeg**, or inland, low-lying depressions which collect and hold floodwater, rainwater, run-off, and underground flow from the river for long periods of time; inland higher ground, called **doonk**; and riverbank land, or **jiimo**. Most farms are primarily of one type. Families place a priority on holding land of all three types to minimize production risks, since each type produces better under different climatic conditions. During droughts, **dhasheeg** land is critical, because the soils (black **aramadow** or a black/red **aramadow/aragaduud** mix) retain water better and longer. "There are no droughts on **dhasheeg** land" is a commonly heard expression. During and after floods, **doonk** land is preferred because the floodwaters drain more quickly from the higher ground, enabling early cultivation. However, **doonk** land produces poorly, if at all, during droughts. Riverbank land is valued for its **siimow**, or underground water, which percolates up through the soil but is otherwise categorized with **doonk** land. It will usually produce something during droughts, although not as well as **dhasheeg** land, and is the best land for fruit trees because of the **siimow**. Eighty-eight percent of the households in the sample have farmland in **dhasheeg**, 85 percent hold farmland in **doonk**, and 85 percent have **jiimo** (Table 14). Figure 2 (p. 25) shows the landholdings of three households. This map illustrates how these three households minimize risk by maintaining farmland of all three land types. Household 1 holds seven parcels of land: three are **doonk**, three are **dhasheeg**, and one runs from the riverbank into the **dhasheeg**. Household 2 holds four parcels: one is **doonk**, two are

TABLE 14

Distribution of Farms and Area by Land Type

	DHASHEEG (n=47)	DOONK (n=41)	JIIMO (n=32)	COMBINATION OF TYPES (n=4)	TOTAL (n=124)
Average area per cultivated parcel (ha)	0.7	1.0	1.6	1.1	1.1
Percentage of total number of cultivated farms	37.9	33.1	25.8	3.2	100
Percentage of total cultivated area	27.6	32.2	37.2	3.0	100
Percentage of households with holdings in this land type	87.5	85.0	85.0	17.5	N/A
Average area per household (ha)	1.0	1.1	1.2	0.1	3.4

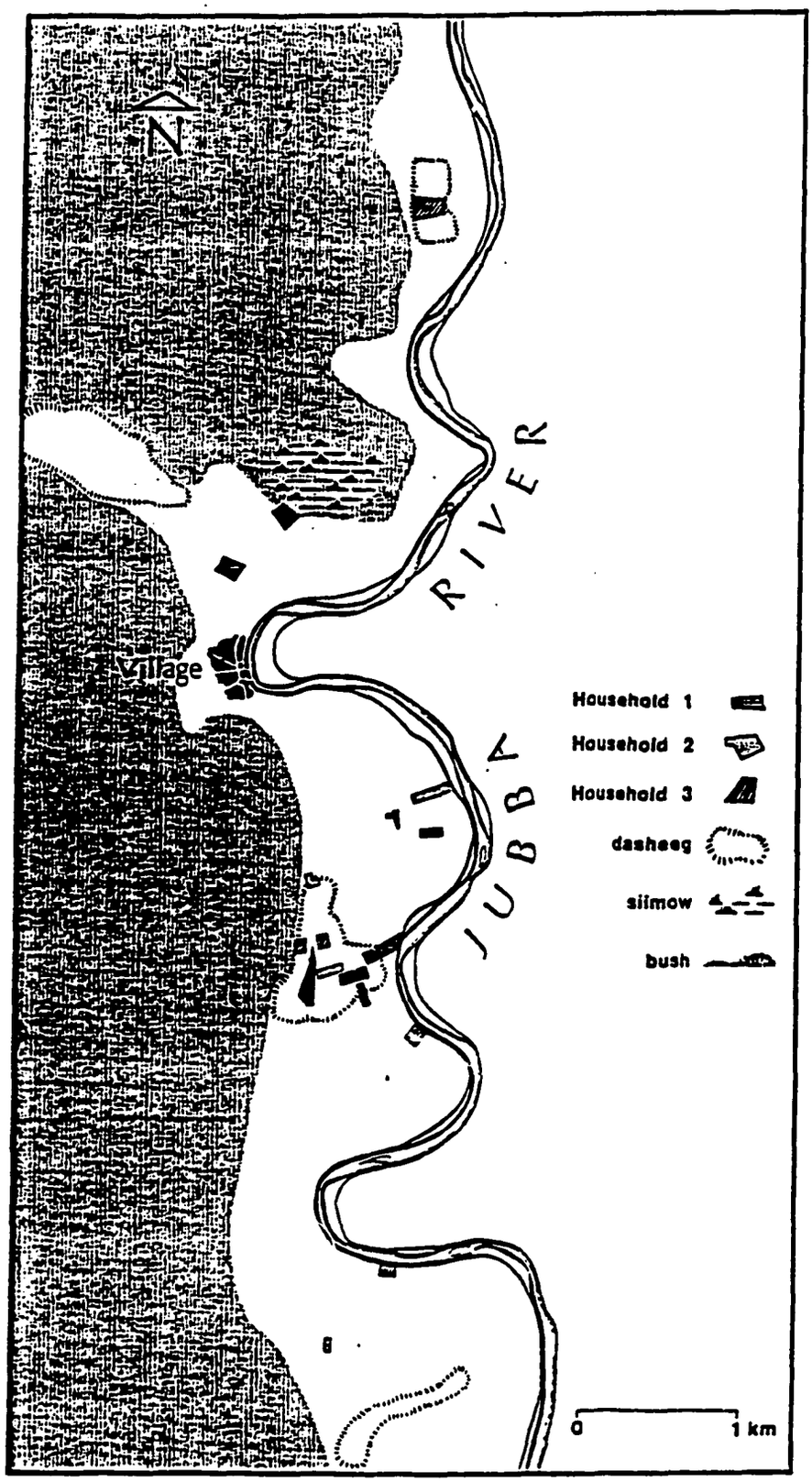
* Five parcels missing. Three parcels could not be measured because they remained under water during the entire period of field research. Two parcels were located in another village across the river and were not included in calculating this average.

dhasheeg, and one is **jiimo**. Household 3 holds six parcels: one is **doonk**, three are **dhasheeg**, and two are **jiimo**.

Dhasheeg land is considered the most important, because it is the land that assures survival during droughts. Consequently, 38 percent of the cultivated farms in the sample are **dhasheeg** land. (This figure applies to number of parcels, not area.) **Doonk** land comprises 33 percent of the farms in the sample, and 26 percent of the farmland is **jiimo**. The remaining 3 percent is some combination of these types. As **dhasheegs** are limited and every family wants at least one **dhasheeg** farm as a hedge against droughts, **dhasheeg** farms tend to be smaller than **doonk** or **jiimo** farms, as shown in Table 14. Thus, while 38 percent of the cultivated parcels in the sample are **dhasheeg**, only 28 percent of the total cultivated area represented in the sample is **dhasheeg**. A reliance on **dhasheeg** land is seen throughout the Middle Jubba region (GTZ 1984). Many villages are located near **dhasheegs**. Each of the eight villages in the area frequently visited during the course of the research was associated with at least one **dhasheeg**.

FIGURE 2

Map of the Research Area:
Farm Holdings of Three Sample Households



E. Seasonality

Doonk and **jiimo** land are planted shortly after the rains begin, with corn in the **Gu** (the season of heavy rains from April to June) and sesame in the **Dayr** (the lighter rainy season from October to December). **Dhasheeg** land is planted whenever the soil is dry and farmers are reasonably confident crops can be harvested before a possible flood, since **dhasheegs** are much more susceptible to flooding and standing-water retention than either **doonk** or **jiimo**. As **dhasheegs** frequently dry little by little following a flood or heavy rains, planting follows the receding water line. Planting, harvesting, and weeding may therefore go on continuously for three months on a **dhasheeg** farm, with one end of the farm being planted while the other is being harvested. **Doonk** and **jiimo** land can usually be planted all at once because rainwater runs off quickly, and floodwater, if a flood occurs, drains more quickly than on **dhasheeg** land.

Farmers usually plant their **doonk** and **jiimo** farms first, unless there is a serious drought, and wait to plant their **dhasheeg** farms until they are sure the river will not flood or until after the waters from the floods or heavy rains have started to recede. Planting, weeding, and harvesting times are therefore somewhat staggered, although major labor bottlenecks do occur on **doonk** and **jiimo** farms. Labor shortages tend to be more of a problem on **doonk** and **jiimo** farms than on **dhasheeg: doonk** and **jiimo** must be planted quickly at the onset of the rains, whereas **dhasheeg** is usually planted more gradually. While many farmers use tractors for land preparation, usually for just one farm for reasons of cost and limited availability of tractors, this is the only form of mechanization. Planting and weeding and land preparation on the nonplowed fields are done exclusively with the short-handled hoe.

F. Labor

Labor is provided primarily by household members. The husband/father is always considered the head of the household and is responsible for allocating family labor and obtaining outside workers when needed. Needs for additional labor can be met in two ways: through the traditional practice of **goob** and with hired labor. A **goob** is a group of men and women who agree to work for free for a day on a person's farm. The farmer is expected to provide meals, consisting of just cornmeal mush, and there is often much singing and parading by the work group following the day's work. Hired labor is becoming increasingly common, and many village men earn a little extra income through working for fellow villagers or absentee farmers for a few days a year. Wages vary from 20 to 80 So. Sh. per **boosto** (100 So. Sh. = $1.00; 1 **boosto** = 20 paces by 20 paces) depending on the task. No one in the area works strictly as an agricultural laborer. Seventy-three percent of the households had used **goob** labor during the **Gu** and **Dayr** seasons of 1987, and 65 percent had hired labor.

There has lately been an increase in the clearing of **jiimo** and **doonk** farms by villagers. This activity appears to be related to four factors: (a) improved prices for agricultural produce due to the lifting of state controls;

(b) an increase in population; (c) fear of losing the riverbank land to outsiders if it is not cleared, reflecting a realization of its growing economic importance; and (d) the recent village relocations in the area. Farmers are still adjusting to the 1977 change in location, abandoning some of their old farms, which are located several hours' walk from the village, and clearing new ones closer to the village. The land near the village is poorer in quality than the land they had previously farmed, but some farmers have been forced to choose closer farms because of labor constraints. The land along the riverbank nearest the village has been a prime area for clearing of new farms as a result of this move.

G. Customary Tenure

Historically, land was cleared by the original settlers of the area wherever they wanted it and as they needed it. As settlers began forming villages, the lands of neighboring villages were delineated with boundaries, which are recognized to this day. As populations grew, the village nabadoons (literally, peace-bringers) took on more responsibility for providing newcomers with land. Nabadoons were community leaders trusted with mediating disputes and presiding over village affairs. They were also responsible for assisting farmers in obtaining land. According to Colucci's 1924 treatise on Somali customary law (1924, pp. 255-61), while land within the village boundaries was considered village land and could be allocated by the nabadoon, it was not farmed communally. Once a man had cleared a portion of land, it was considered his and could not be repossessed by the village. The farmer could sell, lend, give, or leave the land in fallow, and it was inherited by his progeny or kin. The community apparently retained some control over the alienation of land in that a person could not sell his land in order to vacate the village. So while each village held its own area of land, portions of which could be allocated by the nabadoon, farmers held individual rights to specific parcels, thus retaining almost all the characteristics of personal property.

This customary way of acquiring land has changed somewhat over time. Since the 1977 relocation to the present village site and the government-mandated creation of the guddiga tuulada (village council), anyone desiring land must request it through the village council. The village council, appointed by the government, replaces the nabadoon. In the study village, input from villagers was requested in the selection of the members of the village council. (This may not be the case for other villages, however.) The village council is responsible for handling village matters such as land allocation and dispute mediation. An individual desiring land may either ask the village council to identify an available parcel or find a piece of land which he or she would like and then request that land from the council. Allocation can thus either precede or follow occupation. The council is responsible for making sure no previously existing claims exist for the land and for determining the boundaries of the parcel if it adjoins another farm. Twenty-six percent of the parcels in the sample had been acquired through the village council, 58 percent of the sample households having obtained land through the village council. (See Table 15 for a breakdown of how land was acquired by number of parcels and by households and Table 16 for a breakdown of mode of acquisition by land type.)

TABLE 15

Mode of Acquisition by Percentage of Total Number of Parcels and by Percentage of Households

MODE OF ACQUISITION	PERCENTAGE OF TOTAL NUMBER OF PARCELS (n=152)	PERCENTAGE OF HOUSEHOLDS WHICH ACQUIRED LAND THIS WAY (n=40)
Inherited	48.7	72.5
Village council	26.3	57.5
Purchase	14.5	42.5
Gift	7.2	22.5
Cleared on own	3.3	15.0

TABLE 16

Land Type by Mode of Acquisition (percent)

MODE OF ACQUISITION	DHASHEEG (n=53)	DOONK (n=49)	JIIMO (n=42)	COMBINATION (n=8)	TOTAL (n=152)
Inherited	66.1	38.8	38.1	50.0	48.7
From village council	15.1	30.6	35.7	25.0	26.7
Purchased	9.4	18.4	14.3	25.0	14.5
From gift	9.4	8.1	4.8	0.0	7.2
Cleared on own	0.0	4.1	7.1	0.0	3.3

The existence of the council allows the community to retain a very limited degree of control over village lands, but the current role of the village council regarding matters of tenure is largely limited to dispute mediation, generally over boundaries (discussed below). The council has no authority over sales, outsiders' acquiring land, or land use. If a farmer has a very large parcel and is not farming a portion of it, the council may ask him if he would be willing to give up a portion for reallocation to another villager, but the council has no way to enforce the request. Generally the farmer will agree, however, in the interest of good village relations. Similarly, if a farmer has a parcel or a part of a parcel which he no longer wants, and has no one to whom to give, lend, or sell it, he may tell the village council that they can allocate the land to someone else. As in the past, while village lands are recognized by boundaries to the north and south (to the east is the river and to the west is uncultivable bush), land is considered to be held individually, with full rights maintained by the farmer.

As a brief example to illustrate the rights held by individuals to specific parcels of land, a villager who held a large riverbank farm was forced to leave the community because he had committed a moral outrage. His kin (he had no immediate family) harvested the maize in his field and used the production to pay his debts. After harvest, a relative used the field for his own crop. Half a year later, the farmer returned, again took up residence in the village, and returned to farming his original field. The village council had never discussed what was to be done with his land after his departure or his right to it once he returned, since this was considered a matter for the farmer and his extended family.

In addition to the individual clearing of land which took place in the past and the past and present practice of seeking land through the **nabadoon** or village council, there are a number of other ways that land can be acquired under customary tenure, inheritance being foremost. Forty-nine percent of the parcels in the sample had been acquired through inheritance, and 73 percent of the sample households had acquired at least one parcel through inheritance.

When a man dies, his land passes to his children, even though the Koran says the widow is to inherit her own personal portion (all Somalis are Muslim). Generally under customary practice, only sons expect to inherit land, despite the fact that both Islamic law and state law (Law No. 23, Article 155) stipulate that daughters must inherit land as well. If there are a number of sons remaining in the village, they may choose to divide equally each of their father's farms, or they may agree on a way to divide the farms between them, keeping each farm intact. The village council intervenes only in cases of disputed inheritance. Less than half of the inherited parcels in the sample (41 percent) had been subdivided at inheritance (Table 17). (Of all farms in the sample, 36 percent had been divided at the time of acquisition.) The manner of division is dependent upon farm size, location, land type, and number of sons. If there is only one son remaining in the village (because the others are living elsewhere), the resident son assumes control of all his father's land. The other sons will receive their share if they return to the village. If the sons are young at the time of their father's death and there is a grown daughter and no widow, the daughter may manage the farms until her brothers come of age. If there is a widow, she may farm her deceased husband's land

TABLE 17

Breakdown of Parcels Which Were Divided at Acquisition
(percent)

TYPE OF LAND	MODE OF ACQUISITION				
	Inherited	Village Council	Purchase	Gift	Cleared on Own
Dhasheeg	20.0	0	21.4	36.4	0.0
Doonk	11.6	0	21.4	18.2	0.0
Jiimo	8.3	6.7	7.1	18.2	25.0
Combination	0	0	0	9.1	0.0
Total	39.9	6.7	49.9	81.9	25.0

"in trust" for their children, or the man's family (his brothers or older sons by another wife) may take the entire farm and keep it until the children are old enough. In the latter case, of which there were two in the study village, the widow is nearly destitute and completely dependent on her family or other relatives for support until her children come of age (and inherit the land to support her) or until she remarries.

Another way of acquiring land is through purchase. Buying and selling of land occur despite provisions in the 1975 Land Law banning such transfers. Sales have always been allowed under customary tenure practices, and the restriction on sale in order to vacate noted by Colucci is no longer in force.[8] Currently, when a landholder is leaving the area for good, he usually sells his land. He can sell to whomever he wishes, including nonvillagers. A farmer desiring more land, or wanting land of a particular type, may purchase a farm rather than borrow to gain the tenure security that accompanies purchase. Fifteen percent of the parcels in the sample had been purchased, and 43 percent of the households in the sample had bought land.

In the past, the only outsiders who wanted to buy (or acquire) land were those who wished to settle in the village. Within the last twenty years, outsiders moving into the village, usually pastoralists wanting to take up farming after losing their livestock to drought or disease, often could obtain land only through purchase. Only within the past few years have outsiders who had no intention of living in the village begun purchasing land. Whereas in the past, outsiders who bought land became villagers, the social dynamics of buying land have begun to change.

Land sales are becoming increasing important in the pattern of land ownership in the area, because outsiders eager to obtain land are willing to pay

villagers who may otherwise never have considered abandoning their land. Whereas land sold to villagers in the past went for a nominal fee, landholders are currently able to get higher prices due to the growing interest of outside investors in the area. While so far only a few local farmers have sold land to outsiders who intend to stay outsiders, sales of this kind are certain to become more common in the near future, particularly during times of hardship.

Giving of land is also an option. A man with more farms than he can manage may give a farm (or a portion of a farm) to a friend in need of land. This transaction is recognized by the community as a legitimate transferral of tenure rights. Twenty percent of the sample households had received land as a gift, totaling 7 percent of the parcels.

Borrowing a farm or a portion of a farm is a common strategy for meeting seasonal land needs. The majority of families in the village will borrow a portion of a friend's or a relative's farm during the course of a year. The motives vary: after a flood, people try to borrow more high land; during a drought or the Jilaal (the hot, dry season from December to April), **dhasheeg** land is in high demand; when a young girl becomes engaged, she may borrow a small portion of land to earn some income for household items for her wedding. No payment is required; land is lent on the understanding that the loan will be reciprocated if the lender this season must become the borrower next season. Farmers recognize that there is risk in lending land to borrowers (friends or relatives) who may later try to claim it. This problem is partially offset by the manner of lending; usually just a portion of a parcel is lent, and lending is almost always for one season only. From July 1987 to January 1988, 55 percent of the households in the sample borrowed land, and 62.5 percent lent land. Of those lending land, 42.1 percent of the loaned plots were to family and 57.9 percent were to friends. Land rental (for a fee) currently does not occur.

Customary land tenure is thus characterized by individual control over land, which can be obtained through allocation by the village council, inheritance, purchase, or gift.[9] Each village has its recognized area of village lands, within which villagers are expected to make and cultivate their farms and over which the village council has allocation authority and mediates disputes. Farmers typically maintain more than one parcel, deciding seasonally which parcels to cultivate based on labor availability and climatic factors. Land left in bush by a farmer cannot be claimed by anyone else unless the farmer has made it clear that he intends to abandon the parcel. Multiple parcel ownership, including retaining rights to parcels in bush, is a critical aspect of the land-tenure and land-use pattern of the area. Over 97 percent of the sample households have more than one parcel, with 55 percent having four or more (Table 18).

In addition to the right to inherit, sell, give, lend, cultivate, or leave land uncultivated, each farmer has the right to determine who can graze their animals on his land. In the **Jilaal**, many nomadic groups move into the area in search of pasture and to be near the river for water. Farmers can make individual arrangements with pastoralists, allowing a particular family grazing rights on a specific piece of land. The village council does not have the authority to overrule these contracts or to force any farmer to allow grazing rights to anyone. Pastoralists often will petition the village council for

TABLE 18

Breakdown of Number of Parcels Held per Household

LANDHOLDINGS	PERCENTAGE OF SAMPLE
One parcel only	3.0
Two parcels	15.0
Three parcels	22.5
Four parcels	32.5
Five parcels	17.5
Six parcels	7.5
Seven parcels	0.0
Eight parcels	2.5
Total	100.0

the right to herd their animals along the paths on village land as they move their herds through the area. Granting pastoralists access to pathways, however, does not mean granting them grazing rights on the parcels which border the pathways. For grazing rights, pastoralists must contract with individual farmers. These arrangements are usually made between families who have a history of interaction or between families who are related. Pastoralists benefit by gaining access to browse for their animals, and farmers benefit from the manure left behind in their fields and because the foraging of animals reduces the amount of wild growth they will have to contend with at planting time.

Finally, trees may be owned by an individual exclusive of the land on which they are planted. Thus a parcel can be alienated separately from any trees which grow on it and vice versa. This is not uncommon in the village.

H. Household Budgets

A detailed account of family income and expenses was collected from several households in the study village. Presented below are sample budgets collected from two families for the Gu year 1987 to 1988. These budgets were collected to determine what financial resources households have available during the course of a year. The first case is a farming family that is relatively well off. The second case is a family of average income (100 So. Sh. = US$1.00).

	So. Sh.
Case 1	
Income	
Farm:	
Sesame	80,800
Beans	6,400
Honey	32,000
Corn stalks	1,500
Total income	120,700
Expenses	
Farm:	
Sesame seed	2,400
Hired extra labor	35,000
Tractor	3,000
Medical needs	6,250
Clothing (for 5 people)	10,180
Household items (bed, bowls)	4,300
Religious contributions	2,600
Goats (12 á 3,000)	36,000
Food (sugar, meat)	21,820
Total expenses	122,550
Case 2	
Income	
Farm:	
Sesame	8,000
Maize	2,200
Honey	5,400
Carpentry	1,000
Agricultural labor	6,400
Total income	23,000
Expenses	
Farm:	
Hired extra labor	1,000
Sesame seed	400
Clothing (for 3 people)	4,540
Medical needs	500
Religious contributions, pilgrimage	2,300
Chickens (4 á 250)	1,000
Food (tea, sugar, oil, wheat flour, meat, extra maize)	17,320
Total expenses	27,060

As can be seen, in Case 1 the household's expenses came to 4,060 So. Sh. more than its income. The farmer has a loan outstanding which he was planning to pay back after his next harvest. He was unable to produce enough maize to meet the needs of the family, a shortage due in part to the delay in harvesting caused by the 1987 Gu flood.

These examples are quite representative of other households in the village and underscore the subsistence orientation of local farming families. There are no wealthy families which could be considered a rural elite. The families closest to destitution are generally widows or divorced women with small children who must seek the assistance of their brothers or the brothers of their deceased husbands in order to meet minimal food needs.

I. Women's Land Tenure

The position of women deserves special mention because it has never been described in the literature on land tenure in Somalia and the rules governing women's access to land are different from those pertaining to men.

As noted above, women do not generally inherit farms. However, there are women who have farms of their own. Twenty-three percent (n = 10) of the wives in the sample had their own farms at the time of the interviews. All of these women had inherited farms from their fathers, and one woman had also bought two farms in addition to those she had inherited. Almost a third of these women (3 out of 10) plan to hand their farms over to their younger brothers when these boys become old enough to farm for themselves. The woman who had purchased farms is cultivating them with her grown son; he will inherit her farms.

Depending on the family, a woman's farms can be inherited either by her brother (and consequently his children) or by her children. As noted above, in some cases a woman will inherit a portion of her father's land, but only until her brother is old enough to take over all the family farms on his own. When a daughter is an only child, or when she successfully argues to be included in her father's inheritance, she prefers having her land pass to her sons because this ensures her support in old age. Women are keen to help their sons get land, because their sons will have responsibility for them when they can no longer work for themselves. Women who want to inherit land from their fathers' estates are not always successful, however, because women are seen as being the responsibility of their husbands and therefore not necessarily entitled to land of their own.

The vast majority of women who have their own farms manage and maintain their farms separately from their husbands and their husbands' farms. The men could not and did not interfere with their wives' land. The only influence a husband can wield over his wife's farm is not to allow her enough time to work it herself. When a woman marries, her primary obligation is to her husband's farms. Only if she has enough time or labor at her disposal (which usually means older children) can she farm her own land for herself. The husband does not control either the production or the profits from his wife's farm, although she will consult him about selling the production if she wants cash (as opposed to using the production solely for household consumption). As a woman grows

older and functions more as a unit with her grown son, she is able to operate with greater autonomy from her husband and invest more time and energy (primarily that of her sons) in her own farms.

Two wives in the sample (22.2 percent of the wives who had inherited land) farmed their inherited land jointly with their husbands; their land was considered part of the pool of resources of the household, headed by the man, and not as a separate resource held by the wife. In both of these cases, the women were single wives, not cowives. Those women who managed their inherited farms independently tended to be one of two or three wives of the same man.

Households headed by women comprised 10 percent of the households in the village (8 out of 83). These women are either widows or have husbands living elsewhere. (All divorced women in the village live with their brothers or father.) There tend to be very strong relationships between women who are heads of households and their grown sons, who have inherited the father's land. While the land is ostensibly owned by the sons, in all cases the mother and son stressed their equality in managing the farm together. Decisions about the farm are made jointly; work is shared and profits divided. One woman said about her grown son's share of the profits from their jointly held farm, "It's his money but I'm the bank, so I keep it all."

From their husbands, all women are entitled to a **meher**, or wedding payment, which may be money or land. Men may make this payment at any time during the marriage but are obligated to give it in the event of divorce--but only if the husband wants the divorce and the wife does not. If the wife initiates the divorce, she forfeits her right to her **meher**. There were no divorced women in the village who had received land as their **meher** at divorce, although one woman was borrowing a small portion of her former husband's farm, which she was working alone to support their young children. At divorce a woman goes to live with her brother, and he is responsible for providing her with land which she uses to feed herself and her children. As the women say, "We are wives. We don't have our own land. When I marry, I farm my husband's farms; when I remarry, I will farm my new husband's farms."

As can be seen from Tables 19 and 20, women control a minimal amount of land. Among the wives who hold land, their average parcel size is half that of their husbands'. The total area held by land-holding wives is almost one-sixth that of their husbands'. If the area is averaged among all wives in the sample, then women are seen to control an average area of .09 hectares each. Finally, comparing the average area controlled by the sex of the household head, Table 20 shows that male-headed households control almost three times as much land as female-headed households. Of course, these figures also reflect the fact that male-headed households are larger and have more labor than female-headed households and thus require more land.

Women who do have full rights over land--either temporarily because their brotners will reclaim the land when they come of age or permanently--thus control much smaller areas than men. Most women will never have their own farms, however. Under the customary system, a husband must provide his wife with enough land to feed herself and her children. This is a very important aspect of customary practice, because it provides women who would not, under customary

TABLE 19

Farm Holdings of Husbands and Wives[a]
(hectares)

FARM HOLDINGS	PARCELS CONTROLLED BY WIVES WHO HOLD LAND	PARCELS CONTROLLED BY ALL WIVES IN SAMPLE	PARCELS CONTROLLED BY HUSBANDS
Average parcel size[b]	0.5	N/A[c]	1.1
Average total cultivated area	0.6[d]	.09	3.5

a. Of the 40 wives in the sample, there are 7 wives who hold land and 37 husbands.

b. As defined earlier (pp. 13-14), a household may hold several different parcels of land.

c. One parcel of one of the households was under water during the period of field research and could not be measured.

d. Since most wives in the sample do not hold parcels of their own, this figure cannot be calculated.

TABLE 20

Average Cultivated Area by Sex of Household Head
(hectares)

HOUSEHOLD HEADS	AVERAGE CULTIVATED AREA
Female-headed households (n=8)	1.2
Male-headed households (n=37)	3.0

tenure, have access to land with a means to support themselves. While a woman may be assigned a plot on one of her husband's farms, however, she has no independent control over the production from her plot and makes no management decisions on her own.

In order to gain some independent control over land, women frequently borrow a portion of a friend's or relative's farm for a season, a year, or longer. Women can plant what they want and assume control of the production from these borrowed plots, using their production either for household use or for petty cash. As in the case of a farm owned separately by the wife, the husband will not interfere with his wife's management of her borrowed plot. Women say that they borrow land with such regularity in order to "get something of their own."

J. Dispute Mediation

Land disputes are generally of five types: (1) boundary disputes, (2) inheritance disputes, (3) disputes over land that has been lent out, (4) disputes with pastoralists whose animals have damaged a farmer's crop, and (5) disputes caused when an outsider registers a farmer's unregistered parcel under his own name. Disputes are fairly common, with 63 percent of the sample reporting their having been involved in a dispute (Table 21). Moreover, it is likely

TABLE 21

Disputes

TYPE OF DISPUTE[a]	NUMBER OF DISPUTES	PERCENTAGE OF DISPUTES	PERCENTAGE OF HOUSEHOLDS
Reported disputes	N/A	N/A	62.5
Boundary disputes	16	61.5	40.0
Inheritance disputes	2	7.7	5.0
Disputes over borrowed land	2	7.7	5.0
Disputes with outsiders registering land	6	23.1	15.0
Total	26[b]	100.0	65.0[b]

a. Disputes with pastoralists whose animals have entered a farmer's field without permission occur frequently, and farmers were unable or unwilling to recall all the incidences.

b. One household reported having been involved in two different disputes.

that farmers underreported their past involvement in land disputes. Farmers tended to report only those land disputes which they won, except in those cases where the farmer's land had been registered by someone else. It is unlikely that farmers remember or considered it relevant to report disputes that happened longer than a few years ago. For some farmers, it appeared to be a matter of pride to claim never to have been involved in a land dispute. Nevertheless, Table 21 provides a good indication of the kinds of disputes that have been prominent in the village in the past few years.

Boundary disputes are frequent, usually caused when one farmer plants on another farmer's parcel. Boundary disputes also occur when a farmer clears an area in bush, encroaching on a bush area claimed by another farmer. Forty percent of the sample reported having been involved in a boundary dispute. In such cases, the village council is usually called upon to establish the original boundaries. With witnesses, the two disputing farmers present their cases before the council. The village council looks at the area under dispute, then sets the new boundary or determines tenure rights. Their decision is almost always respected by both parties. Occasionally a farmer who is unhappy with the council's decision may go to the district police or to the regional Ministry of Agriculture office to argue his case further. These bodies were involved in only two of sixteen reported boundary-dispute cases in the sample. The village prefers to have all matters settled within the village, and people are generally reluctant to involve district or regional officials in local disputes. Similarly, governmental offices generally prefer to have local matters settled locally and will sometimes refer a case back to the village council for further discussion rather than take it on themselves.

Dispute mediation is frequently handled by the village council in conjunction with recognized elders of the village. There are also three village judges (garsoore), in addition to the village council members, who may be called upon to assist the council in reviewing a case. These judges are considered to be unbiased and fair men and are frequently involved in handling administrative and judicial matters of the village. Occasionally disputes will be mediated by elders or friends of both parties with or without the involvement of the village council. Elders or judges were involved in mediating a third of the reported boundary disputes.

Inheritance disputes between coinheritors are rare, only 5 percent (n = 2) of the households reporting disputes of this nature. Elders and relatives mediated these disputes with members of the village council.

Occasionally a dispute arises when a man who has been borrowing a farm or a portion of a farm tries to claim it as his own. These disputes are rare, representing only 5 percent (n = 2) of the households. In one case, the landowner went straight to the police, who called the village council as a witness. In the other case, the regional MOA officials were called because the man trying to claim the land was from another village and therefore not subject to the authority of the local village council.

Disputes with pastoralists occur daily during the **Jilaal**, when many have moved into the area to be near the river and **dhasheegs**. The wronged farmer and the village council try to determine who is responsible for the animals

which damaged the farmer's crops, and, if the person can be found, a fine is usually demanded. In very serious matters, such as when a physical confrontation has occurred between a farmer and a pastoralist, the village council and village elders will meet with the elders of the pastoralist's group to determine fault and payment. These disputes are never over landownership or boundaries, just over unauthorized grazing and crop damage. Since these disputes occur with such frequency, farmers were unable or unwilling to remember all the incidences of disputes with pastoralists. Thus this category is not included in Table 21. Suffice it to say that squabbles with pastoralists, ranging in severity from the farmer's taking no action, to the exchange of a few harsh words, to the infrequent occurrence of physical confrontations, are a part of daily life during the Jilaal.

The final kind of dispute is perhaps the most serious. Fifteen percent of the farmers in the sample reported losing a farm (unregistered) to someone who had registered the land in his own name. The village council and the regional MOA officials were involved in all of these cases, but the final authority rested with the regional officials. The village council is powerless to argue successfully on behalf of the village farmer in such cases, because they have no legal basis for making a claim to unregistered land. The most the village council can do is to find another parcel of land for the farmer. This situation is discussed in detail in the following section.

V. STATE LEASEHOLD TENURE AND LAND REGISTRATION

There appear to have been few problems with the customary tenure system prior to 1975. Population pressure was low, and demand for land by immigrants was not high due to the region's remoteness. Agricultural land was available to anyone who wanted it through agreement with the **nabadoon** or by purchase, and disputes were resolved at the village level by the elders. In 1975, the new land law was introduced, and in 1978, the Middle Jubba region was created with Bu'aale as its capital. In 1977, the populations of the four villages downriver from Bu'aale were relocated onto one site. The impact of these population and policy changes, coupled with widely known plans to build an all-weather road through the area, has produced a situation where conflicting tenure rules under customary and state leasehold tenure are causing tenure insecurity and uncertainty about the future for the area's permanent farmers.

In this section, I discuss the effects of registration on the study village, describing some attempts by local farmers to register their land and examining why most local farmers are not pursuing title registration. I then examine how "outsiders" are able to use the 1975 Land Law to claim land not previously theirs, and how this process of expropriation is producing tenure insecurity for local farmers unable to register their land.

After demonstrating that the land registration process is actually increasing tenure insecurity for the majority of local farmers, I analyze the agricultural practices of registered farmers to determine if registration is encouraging agricultural investment and increased productivity.

A. Tenure Security

In the study village, only two of the 400 or so farms (including bush farms) owned by villagers were registered. The village lands contained six farms, all registered, held by outsiders (town dwellers from the regional capital or Mogadishu). Village farmers are well aware of the land registration law and know they should register their farms to comply with the law and to avoid losing their land. In January 1986, the regional agricultural office had a smallholder registration drive and collected 217 applications. Many villagers (60 percent of the sample) made this initial application. However, the applications have gone no further and have been sitting in the district office for the past two and one-half years awaiting action. Many of the villagers who made this initial application believe they have registered their land. Those who did not participate in the drive give several reasons for why they are not actively pursuing registration. Cost is the primary reason, given by 71 percent (11 of 16) of the sample who had not begun the registration process. Farmers who pursued registration following their applications during the registration drive were told that they had to pay more for the process to continue. Based on the experience of others and on what some farmers were told by authorities, village farmers say the process would cost 3,000 to 8,000 So. Sh.

per parcel (100 So. Sh. = US$1.00). This cost would cover unofficial gratuities, payments to witnesses and the draftsman, and a possible trip to Mogadishu to complete the process. Most local farmers do not have the means to cover such an expense (recall the household budgets presented on p. 33) and do not have the clout or connections to get the process done for free, as the law states.[10]

Lack of knowledge is another reason why village farmers have not registered their farms: unfamiliar with the workings of government, farmers do not know how to pursue the complicated registration procedure. Government officials and others who are more knowledgeable about the registration process and government practices are in a much more favorable position to register land. Finally, some farmers say that they should not have to register their land with the government because their families have always held this land without a title and they do not need one now. A number of farmers said that if someone wanted to register their land, then it would be "God's will."

There is one area of land south of the village which villagers have registered as a cooperative. When the government-mandated consolidation of villages occurred, the southernmost village had to move several kilometers north of its farmland. Since this land was among the best in the area, many farmers tried to continue cultivating their farms to the south. Because of the long distance between the village and these farmlands, however, farmers gradually were forced to allow their southernmost farms to revert to bush. When the GSDR began promoting cooperative farming in the late 1970s, a group of about thirty village farmers who had land in this southernmost area formed a cooperative. They joined their farms together in one large area, organized labor on a rotating basis, and shared harvests. After a few years, some traders (distantly related to the villagers) offered to register the cooperative for the villagers. The traders explained that registration would benefit the villagers by providing tenure security (no one else could "steal" the land) and by offering the possibility of capital improvements through loans, and that the traders would be responsible for undertaking the registration because they understood the registration process. The villagers agreed. In return for registering the cooperative, the traders said that their (the traders') names would be included on the cooperative membership list and that they would take 6 percent of the cooperative's maize harvest for that season (that is, 23 quintals of the 400 quintals harvested) to pay the costs of registration. They took the harvest and have never returned. Demoralized and faced with a drought, villagers abandoned most of the land in the cooperative within a year. Early in 1988, some bank representatives came to the village wanting to see the land held by the cooperative. The traders had applied for a loan, using the cooperative land as collateral. In checking the registry records at the regional MOA office, it had been determined that the villagers' names were included among members of a 200-hectare cooperative, thus making them liable for the loan as well. Nervous about the situation, and believing that the loan was not requested with the intention of using it for capital improvements for the cooperative, the villagers demurred from showing the farm to the bank representatives. The loan situation was unresolved at the conclusion of field research, but several villagers had individually begun farming the area again, clearing and planting their original farms. This case and the response to the registration drive illustrate that villagers have made the effort to register but that, in at least one instance, the result has not been a happy one.

Despite the fact that locals generally are not registering their land, land registration is becoming more widespread in the district and the region. Titles in the district are being issued disproportionately to newcomers to the area and not to people who are permanently settled farmers. In the sample of registered farmers in the Bu'aale area, 73 percent (11 of 15) were newcomers. Indeed, the biggest fear of local farmers is that their land will be "stolen" by an outsider who registers their farm in his own name. Ninety-eight percent of the village sample said that they thought there was a "very serious" threat from outsiders coming to the area and taking people's land. When asked who represented the biggest threat to keeping land, 82 percent of the sample said "outsiders" and 15 percent said "officials"[11] (Table 22). All the registered farmers interviewed were, or had been when they registered, government officials. One villager responded that he thought the village council represented the biggest threat, because they could give land away (or sell land) to outsiders. Another villager responded that local people feared that their enemies in the village would tell outsiders where their land was located, especially their bushland, so that the outsider could claim it through registration.

Farmers perceive that the threat of losing land to outsiders will only increase in the future. Seventy-three percent of the sample said that they thought it was "very likely" that more farmers in this area would lose their land in the next ten years. Seventy-two percent of the respondents said

TABLE 22

Tenure Security Questions of Sample Households

QUESTION	RESPONSE	PERCENT
How much of a threat do you think there is from outsiders coming here and taking peoples' land?	Serious threat	97.5
	Not so serious threat	0.0
	Not a problem	2.5
Who represents the biggest threat to keeping land?*	Outsiders	82.1
	Officials	15.4
	Village council	2.5
	Enemies	2.5
How likely do you think it is that more farmers in this area will lose their land to outsiders in the next 10 years?	Very likely	73.0
	May happen	13.5
	Unlikely	13.5
How worried are farmers in this area about losing some or all of their land?	Very worried	72.5
	Somewhat worried	10.0
	Not worried	12.5

* Does not add to 100 because two respondents named more than one.

that the area's farmers are "very worried" about losing all or some of their land (Table 22).

Tenure insecurity is increasing as a result of the spread of state leasehold tenure. Since the vast majority of farms are unregistered and are operating under customary tenure arrangements, the potential loss of tenure rights is considerable. A farmer's rights to a piece of land, under customary tenure, was a community affair; these rights were secured through community recognition and by the **nabadoon** or village council in particular. In the past, newcomers to the community could obtain land comparable in size to other farms in the area by request from the **nabadoon** or village council or by purchase. Farmers knew that their land could not be claimed by another person, particularly not by an outsider.

In the presence of state leasehold tenure, customary tenure is more uncertain. A person can appear in the village and claim ownership to land which includes villagers' farms, and the villagers have no recourse if title has been granted. While notices which inform the public of any application are supposed to be posted so that counterclaims, if they exist, can be made, such notices are posted only in the registry office, a half-day's walk away, and not in the village. In most cases of villagers' losing land to outsiders, the outsider (5 out of the 7 cases) bought or had been given by a villager a small piece of land on the riverbank, the boundaries of which were recognized by the village. In registering the new purchase, the owners registered a much larger area than had actually been bought, claiming land 1,000 paces or more inland from the river. When villagers learned that their land had been registered by someone else and tried to make a counterclaim, they were told by the authorities that they were too late and had lost their rights to the land. Fifteen percent in the village sample had lost land in this way to five registered farms, one household having been dispossessed of two farms (Table 23).

So far, primarily land currently in bush is perceived as being threatened, largely because of the 1987 Ministry of Agriculture decree, Guidelines for the Giving of Farmland (see Appendix B), which states that bushland cannot be held in a way not in accordance with the land law (Art. 18). This means that land in bush cannot be legally claimed by anyone, and that land which is in bush at the time of registration must be developed for permanent cultivation within two years. The perception that bushland is more threatened remains, even though 10 percent (4 farms) of the farmers in the study sample had lost cleared land to registered farms. There are extreme cases of cleared and cultivated land being registered by outsiders. In one instance, a group of people from the regional capital registered 200 hectares of land as a cooperative. Local farmers had been cultivating this land, which is a major field system for one village, for years. The farmers learned that their farms had been registered as a cooperative by local townspeople, and they wrote to the MOA requesting that they be included as cooperative members. They were turned down on the premise that titles cannot be altered. The people (from Bu'aale) who registered the land as a cooperative say that they did so to keep it from being claimed by people from Mogadishu.

Thus, while land registration policies have provided town's dwellers with opportunities to gain access to land, villagers have experienced increased

TABLE 23

Registered Farms in the Village

INFORMATION RELATIVE TO REGISTRATION	NUMBER/ PERCENT
No. of farms in village not held by villagers	7
No. of registered farms held by outsiders	7
No. of farms held by villagers	400
No. of registered farms held by villagers	2[a]
% of village sample households who lost land to outsiders through registration:	
Land in bush[b]	5
Cultivated land	10
Total	15

a. Excluding the cooperative.

b. One household lost two bush farms to registered farmers.

tenure insecurity due to the threat of land expropriation. Land registration has introduced a new set of tenure rules which are at variance with, and can--and do--supersede, customary tenure.

B. Registered Farmers

For those farmers who have registered, the question is whether registration has had the often-predicted impact on their farming practices of encouraging capital investment and higher productivity by providing a higher degree of tenure security. Based on a sample of fifteen registered farms in the Bu'aale area, these effects do not appear to have definitively resulted.

The study of registered farms provides the basis for important general observations, discussed below. Moreover, three representative cases within the study reveal certain overall characteristics of the registering farmers.

For 79 percent of the registered farmers sampled (11 of 14, with 1 missing), the registered area represents their first farm. In the registry, the sampled farmers recorded parcels between 20 and 100 hectares in size (some had

registered more than one parcel) yet were cultivating only 2.5 to 50 percent of their registered land base (one farmer in the sample was not cultivating his farm at all). The owners of 27 percent of the registered farms in the sample (4 of 15) had been transferred to new locations, with their farms being managed by friends or relatives. At least one farmer had registered his parcel as a private company, consisting of himself, his mother, and his son. Another respondent had a similarly registered parcel elsewhere in the river valley, the private company consisting of himself, his wife, and their son.

An important point regarding the registration of land areas must be made here. Land areas recorded in the registry tend not to correspond with the areas actually cultivated. It appears that a person will register whatever he can, having little idea of exactly what land the registered area actually encompasses. For example, a dispute occurred in the village over the boundaries of some farms that had been left in bush for several years. One villager suggested that these farms were within the boundaries of a large registered farm in the village. The owner of the registered farm had no idea if the farms in question were part of his land, but he said that if they were, then no one could farm them. The village committee, the disputing farmers, and the owner of the registered farm subsequently had to check on exactly what total area had been registered to ascertain which lands it included.

Because titled farmers do not have a clear idea of how much land is registered, they also do not know precisely what proportion of their registered farm is being farmed. Land registry records give one set of figures, the farmer provides another set, yet actual measurements of cultivated area correspond to neither. This confusion is caused by several factors: (a) a registered area is recorded in hectares at the land registry, whereas the local system of measurement is the **darab** (60 paces by 40 paces; 1 **darab** equals about 0.2 hectare), thus forcing people to register land in a measuring unit with which they are unfamiliar; (b) the maps included with the registration application tend to be poorly made--usually only free-hand sketches of the parcel and river--and are uninformative as to exact parcel location; and (c) there is no overall map that shows which areas have been registered in the Middle Jubba registry office.

TABLE 24

Input Use: Comparison of Registered Farmers with Unregistered Village Farmers

RESPONDENT	PERCENTAGE OF FARMERS WHO HAVE USED:			
	Pesticides	Herbicides	Fertilizer	Tractors
Village farmers	7.5	0.0	0.0	85.0
Registered farmers	20.0	0.0	0.0	86.6

Thirty-three percent of the sample (5 of 15) had invested in water pumps and were attempting to grow, with varying degrees of success, irrigated crops such as onions in addition to the traditional crops of maize and sesame. Only two farmers in the sample (13.3 percent) actually worked on their farms themselves while also hiring labor: the rest were fully dependent on hired and/or sharecropped labor for all agricultural tasks, from land preparation to watching (guarding against animals).

In their farming practices, registered farmers are not significantly different from smallholders; most use tractors for land preparation but use hand labor for all other tasks. The use of fertilizer and herbicides is nonexistent among both groups, although registered farmers have greater access to pesticides through the regional agricultural office (Table 24).

Three case studies illustrate the varying level of success of farmers who have registered their land:

Case 1

The farmer is a young official who acquired his farm seven years ago, two years after moving to the area. He registered it first, and five years later began clearing. Registration was free because he is connected to the registry office. His registered area is 30 hectares, of which 10 hectares are cleared and only 5 hectares are planted. He is a successful farmer in that he is able to produce enough to cover the cost of his expenditures and earn a profit. After acquiring a water pump, at a cost of So. Sh. 170,000, he produced 80 kilos of loose maize per **darab** (1.6 quintals of ears of maize per **darab**).[12] The following season, he planted onions and produced 8.3 quintals per **darab**. At the time of the interview, his onions were ready to harvest, but due to the rains, the roads were impassable and he was very worried about getting his onions to market. He planned to rent a large truck and a tractor to carry his produce to Mogadishu (because of the poor conditions of the roads in the valley, a tractor would be necessary to pull the truck through particularly muddy spots). His greatest concern is with transportation for his crop. He hires all his labor and has never used inputs.

Case 2

The farmer is a middle-aged government official who acquired and registered his farm five years ago when he was transferred into the area. He obtained a farm because all government officials had land, although he had "never thought of farming before." This is his first farm. He registered the land to ensure that it was his. He completed the registration process himself, including a trip to Mogadishu, which cost him So. Sh. 10,000. He registered 52 hectares and claims to have cleared 16 hectares, although the researchers measured the cultivated portion of his farm at 14 hectares. He is a moderately successful farmer in that he is usually able to produce enough to earn a profit. For his first season, his production was 120 kilos of loose maize per **darab** (2.4 quintals of ears of maize per **darab**). In his second season, the farm had a poor return of 50 kilos of loose maize per **darab** (1 quintal of ears per **darab**), causing him to lose most of the So. Sh. 70,000 he had spent on seeds, rental of a tractor and a bulldozer, and hired labor. To explain his poor harvest, he cited problems of weeds due to a shortage of labor The last

season's sesame harvest was 0.8 quintals per darab. He had spent So. Sh. 90,000 for seeds, a hired tractor, and hired labor, and earned So. Sh. 97,600 from his harvest. He also had planted mango trees which were destroyed by monkeys, lemon trees which dried up, and tamarind which was pulled up by the tractor. He has never used inputs and relies on hired labor for all his farm work. His biggest complaint was losses due to insects and poor weeding. He is interested in acquiring a pump so that he can grow fruit trees.

Case 3

The farm is owned by a government official who had been transferred to another town. The leaseholder's wife's relatives, who hold professional jobs locally, have been farming the land for the past three years. The registered area is 100 hectares, of which 10 hectares are being farmed. This is not a successful farm. In the 1987 postflood season, the harvest was 10 kilos of loose maize per darab (0.2 quintals of ears of maize per darab), a very poor harvest due to weeds and monkeys. The entire harvest was consumed by the farmers, and they received no monetary return to offset the So. Sh. 35,000 spent on seeds and hired labor. The crops planted prior to the 1987 flood, at a cost of So. Sh. 25,000, were destroyed in the flood. The 1986 Dayr season yielded 25 kilos of loose maize per darab (0.5 quintals of ears per darab), another poor harvest, and no sesame, because it all died. The total amount spent for seeds and labor was So. Sh. 50,000, none of which was recouped. Of his experience, the farmer said, "We always put money in and get nothing out." They have used no inputs and do not have a pump.

In comparing the registered-farmer case studies with the village sample, it is illustrative to note that the unregistered villager farmers are farming a much higher percentage of their household land base and are receiving, on average, higher yields per unit of land. Village farmers reported producing an average of 180 kilos of loose maize per darab (3.6 quintals of ears of maize per darab). For sesame, villagers obtained an average yield of 0.9 quintals per darab). Appendix E shows the production figures reported by the fifteen registered farmers. Averaging the figures reported by registered farmers for their last harvest provides some comparison. Average figures show that registered farmers without a pump produced 100 kilos of loose maize per darab (n = 7) and 0.58 quintals of sesame per darab (n = 7). Registered farmers who used pump irrigation averaged 90 kilos of loose maize per darab and 0.35 quintals of sesame per darab, though it is unclear why those using irrigation would produce less. (As with the yields presented above for unregistered village farmers, these figures are based on the registered farmers' reported yields per reported darab and are not based on measured area. These figures are intended only to be suggestive, since they are not representative of any single harvest season and because the sample number was small.)

Registered farmers, because they are not working the land themselves, face difficulties not experienced by the smallholders. There is no pool of available landless labor for hire in the area, and registered farmers complain of production losses due to poor weeding and lack of labor to guard against crop pests (baboons, monkeys, warthogs, and hippos). Because of high cash expenses (on hired labor, hired tractors, and seed) and low returns, two registered farmers in the sample plan to abandon their registered farms.

With their problems of labor shortages, their lack of interest in farming the land themselves, and, for 40 percent, their disinclination to invest (in such items as a pump or fruit trees), it is important to note the reasons given by these registered farmers for why they obtained a farm. The demand for land by outsiders stems from a number of factors. Farming may not be financially profitable for most registered farmers, but there are few other economic opportunities in the area and there is widespread belief that the Middle Jubba is destined to prosper with an all-weather road and future development projects, which will cause land values to soar. One registered farmer, who obtained his 20-hectare farm for free, said that he was recently offered So. Sh. 700,000 for it (or So. Sh. 35,000 per hectare; yet before the land law, villagers had sold each other farms for about So. Sh. 1,000 per hectare). The farmer thinks the value of his land will reach 2 to 3 million shillings in the future. Second, a farm provides the means to feed a family, an important consideration for poorly paid civil servants. By producing food crops, a farmer assures a food supply for his family, though perhaps not a surplus for sale. Finally, prestige is a very important motivation for obtaining a farm. All government officials transferred to the area register a farm. As Case 2 put it, "I had never thought of farming before, but when I got here, I saw that all government officials had land, so I got a farm too." It usually costs them very little, since they are able to get the land for free or for a nominal price. They can process the registration papers in Mogadishu when they are there on official business. Although it is unlawful to sell land, this has not kept a land market from developing, and many registered farmers consider their land an investment.

VI. CONCLUDING COMMENTS

Until recently, the customary tenure system provided a high degree of security of access to land and water (the latter in the form of **dhasheeg** land). Security was provided by communal recognition of landownership. Ownership was claimed by investing one's labor in clearing a parcel; by inheritance, purchase, or gift; or by acquisition through the **nabadoon** or village council. Settlement was relatively dispersed; thus population pressure on land resources was not critical. New land could be obtained easily, and land transfers by sale, gift, and especially borrowing allowed people to meet their long-term and seasonal needs through multiple parcel use. Threat of land usurpation was practically nonexistent, because the area was of little interest to investors, land speculators, or developers. Almost all the respondents in the random sample said that land scarcity and land disputes are more significant now than in the past, due largely to the inflow of outsiders interested in acquiring land. By using the formal land registration procedure, outsiders are able to acquire previously untitled land, thereby circumventing the land allocation process of the customary system.

Land grabbing and land speculation are emerging as primary concerns of smallholders. Since the Middle Jubba is slated for economic development, this situation might have been inevitable, but the formal land-registration system has facilitated the process by providing speculators with an official means to get large areas of land. The tenure insecurity of local farmers has increased as a result. Almost all farmers in the sample said that they feel a serious threat from outsiders' taking farmland, and that farmers in the area will very likely lose their land in the next ten years. While most farmers say that the threat encourages them to work harder (to clear more land), growing tenure insecurity is taking a social toll by decreasing landholders' confidence in the future.

The state leasehold system is undermining the tenure security provided by customary land allocation, but it does not offer an appropriate alternative to the system it is replacing. First of all, the land registration system itself is not easily accessible to smallholders, due in large part to constraints of time, knowledge, and money. Second, the rules of the 1975 Land Law regarding land use are at variance with the practices of smallholders in several important ways:

1. Multiple parcel ownership is an important risk-avoidance strategy for smallholders. While newcomers may register one large parcel which encompasses two or three land types, smallholders hold separate farms, each primarily of one land type. Insisting on limiting household registration to a single parcel would either force a farmer to choose only one land type or encourage a massive reallocation and consolidation of landholdings such that every farmer had one parcel with multiple land types. The latter is neither ecologically nor socially feasible.

2. Because of the fluid nature of households, the rule of only one concession holder per household could jeopardize the rights of other household members. Women, in particular, are assured access rights to land under the customary system. Under that system, a woman is guaranteed use rights to land to provide for herself and her children (if a man does not provide his wife with enough land, this is sufficient grounds for divorce). Thus, under customary tenure, while men ostensibly control land, this control is reflected only in their management of land use. Men do not hold a monopoly over access to land. If state leasehold tenure were enforced and only men's names were recorded as titleholders, male managerial rights would be transformed into ultimate rights governing both use and access. Thus men would be given more control over land than they hold under customary tenure, and women would have no legal recourse if access rights were denied by the titleholder. Since titles to land are almost always issued in the husband's name (Table 3), women stand to lose their security of access to land. Such a result has been well documented for other African countries (Palmer 1985). As Hahn (1984) notes, "Land registration dispossesses women of the security of tenure that they had in family holdings."

3. Many smallholders and all villages maintain a reserve of bushland. This land is critical to the future of the village--for population growth, for inheritance reserves, and for offsetting potential soil-fertility losses on cultivated land. The 1987 circular stating that no one can claim rights to bushland is constraining families and villages in their planning for present and future land needs. In the study village, several families with small children had already lost bushland, which represented the children's inheritance, through registration by outsiders. Land reserves might eventually disappear anyway because of population growth, but the leasehold process has greatly accelerated land reserve depletion, causing anxiety among villagers.

4. Local farmers have always utilized a strategy of land transfer, in the form of gifts, purchases, and borrowing, to meet their seasonal needs. Such transfers are not allowed under the land law.

Three further aspects of the 1975 Land Law and its registration process are also relevant:

1. Deforestation, potentially caused by provisions in the land law that require all land to be developed and used, holds serious consequences for land conservation. Under the law, registered farmers must clear their entire farm or risk having the land expropriated by the government. Unregistered farmers say that they are working hard to clear all their bushland to prevent others from registering it. Increasing rates of deforestation in the Middle Jubba have already been noted by researchers and locals (Deshmukh 1987; Riddell 1988). The effects of land use provisions on deforestation, permanent cultivation, and land fertility will become particularly relevant with the construction of the dam at Baardheere, since flood control curtails fertilization of the flood plain.

2. Farms in the Middle Jubba tend to be small, usually a few hectares. Single families, on the other hand, by calling themselves private companies, can register more than 100 hectares of land under the state leasehold system.

This has occurred in the study area. A vast discrepancy thus results between landholdings of the majority of farmers in the region and those of newcomers. Enormous welfare losses can ensue from farmer displacement if land is transferred from villages to single individuals. Unless appropriate policy measures are undertaken, land distribution will become more concentrated as economic development accelerates, with greater wealth inequities appearing.

3. The land registration system is inefficient because of administrative problems in the registry offices. There is very little funding to cover implementation costs (for paper, pens, and ink, for example; for copying and typewriter parts; or for vehicles and fuel for travel both to the areas to be registered and to Mogadishu for final processing). The salaries of civil servants are extremely low, around So. Sh. 2,000 per month, thus necessitating unofficial gratuities. There are insufficient trained personnel for drafting and surveying.

For those who have registered their land, the question is whether or not the registration process has produced the results frequently envisioned by planners, that is, increased investment and access to credit, more efficient land use, and improved productivity. So far the formal leasehold system appears not to have had a major impact on encouraging capital investment in the Jubba. While registered farmers are investing more capital in the form of hired labor, productivity per unit of land is lower than for smallholders. The majority of the registered farmers interviewed are inefficient producers, holding large areas of land which they cannot farm effectively. One reason for this low productivity lies in their motivation for acquiring land, that is, their speculation on the assumption that land values in the Middle Jubba will increase dramatically. Another reason is the few opportunities available for investment in the region. Communications and transport infrastructure are practically nonexistent. There is no agricultural extension program, few available inputs (such as fertilizer, pesticides, herbicides), little access to improved seed varieties, no banks and therefore no credit facilities, only six tractors to serve the entire district, and frequent diesel shortages.

To conclude, the results of this research suggest that land registration has not been appropriate in the Middle Jubba region. Registration is often considered beneficial in areas characterized by high population pressure, numerous disputes over farmland, land speculation, increasing commercialization, and breakdown of customary tenure. While it may be debatable whether title registration is the best way to mitigate these problems, it is clear that they did not exist in the Middle Jubba prior to the introduction of state leasehold tenure. To the contrary, this research suggests that problems of tenure security, land speculation, commercialization, and disputes have resulted from government intervention in the form of titling programs.

There are several possible alternatives which could be employed to rectify the present situation. First and foremost, the GSDR must have a very clear idea about the purpose of land registration. Carrying out an assessment of title registration in the Middle Jubba was somewhat hampered by the fact that the researchers were unable to determine the exactly motivation for implementing land registration in the area. The desired results (for example, increasing production, creating a tax base, and so on) of such a costly program should

be well articulated. If land registration is not necessary for achieving certain well-defined results, it should not be implemented. If the GSDR determines that land registration is essential for producing some desired end, then it should be carried out systematically, not sporadically as was the case. Titling programs can be undertaken on a systematic basis in those areas in which it has been determined that registration is the key to some clearly stated, desired result.

Furthermore, alternatives to individualized titling should be explored. One alternative would be to register land at the village level, allowing customary tenure to continue to govern control of and access to resources. Multiple parcel holdings, bushland, and sales would be allowed; women would retain access rights to land; and equity could be maintained. The RMR project organizing the relocation of families from the inundation zone to other sites in the valley (RMR 1989) proposes providing pumps, inputs, and institutional assistance in the village. Systematic registration at the village level would thus mesh well with inputs already provided. Such a method of registration would also reduce the cost involved, since village lands are clearly demarcated in the Middle Jubba. This alternative would thus utilize existing social structures for combining title registration with customary tenure.

In sum, land registration, as it has been implemented in the Middle Jubba, has not been successful. A clear determination of whether title registration is a national priority is a first recommendation, and, if it is, the definite identification of desired results should ensue. If title registration is desired for some particular reason, then it should occur systematically, and perhaps only in those areas where a need clearly exists. As already recognized (see Roth et al. 1989), the 1975 Land Law governing registration must be rewritten. In so doing, alternatives to individual title, such as village title, should be considered. Finally, a change in land tenure does not necessarily produce a change in land use. To effect a change in land use, the resources made available to farmers must be improved.

NOTES

1. This section draws from Besteman and Roth (1988, pp. 1-5).

2. Arable land in Somalia is defined by von Boguslawski (1986, p. 25) as "those areas which receive above 400 mm of annual precipitation." The maximum average annual precipitation in the interriverine area of southern Somalia is 600 millimeters (ibid.).

3. The term "outsiders" is sometimes used by local landholders when describing nonresidents, usually traders, businessmen, or government officials from Mogadishu or regional capitals, who seek to acquire land in the area through the state leasehold process.

4. Since this report was first written, widespread civil unrest in Somalia has caused the World Bank to cancel funding for the proposed dam.

5. Point 16 on the 24 May 1987 circular from the Ministry of Agriculture on "Guidelines for the Giving of Farm Land" says, "The changing of hands of farmland and changing of certificate will be executed by the Ministry after the two parties reach an agreement between themselves and bring a notarized agreement" (English translation). It is unclear what "agreements" are allowed under the circular.

6. There is a growing body of literature disputing the viewpoint that title registration programs aimed at increasing tenure security through individualization of land tenure will effect these results. The interested reader is referred to the following sources: Brock (1969); Gershenberg (1971); Okoth-Ogendo (1976); Coldham (1979); Haugerud (1983); Phipps (1984); Thome (1984); Shipton (1988).

7. While almost 70 percent of the measurements were within a 10 percent error, the rest were between 10 and 25 percent. Mapping some farms was extremely difficult due to highly irregular boundaries defined by bush and shin-deep mud and large areas of standing water left from the 1987 Gu flood.

8. Colucci (1924, pp. 256-57) reported that when a villager abandoned his location in this area, he lost any right to personal property acquired since settling in the village. Leaving a village was seen as betraying an obligation to the community. Sale of hut or land was not allowed, and in this sense the community held the final and ultimate authority over all village territory.

9. Land tenure practices evolved out of the individualized settlement pattern in the valley, beginning about 150 years ago. As people first moved into the valley to take up farming, they cleared their separate areas of land. Later, as villages formed, community elders began exerting more control over land access. Tight communal restrictions never evolved in the Middle Jubba perhaps because of the low population density. The individualized nature of

Islamic land law appears to serve more as a reinforcing ideology than as a cause. Further evidence for this secondary influence of Islam on land tenure is provided by the fact that Islam was introduced into the valley only within the past 100 years, after present land tenure patterns were already in place. For a full discussion for the Lower Jubba, see Cassanelli (1987) and Menkhaus (1989).

10. Unofficial gratuities were considered essential due to the low salaries of government officials. A regional agricultural officer's monthly salary is the equivalent of US$20.

11. A few factors which may be influencing the answers provided to some of these questions deserve mention. At the time of the interviews, a major land dispute between an outsider and two local families in the village was under way. The outsider was attempting to register a very large tract of land which included several villagers' farms. This case may have influenced farmers to place more emphasis on the threat of land expropriation by outsiders. Some villagers were also suspicious of the researchers' motives, fearing that the investigators may have been intending to steal their land. Nevertheless, none of these caveats should diminish the fact that villagers in this area are extremely worried about losing their land to outsiders.

12. These calculations are based on the assumption that 2 quintals or ears of maize = 1 quintal of loose maize = 100 kilograms of loose maize. Quintals were not actually weighed by the researchers, however. The weight of 1 quintal of sesame or onions is unknown.

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APPENDIX A

Somali Land Legislation Relating to Law

This document was translated at the Land Tenure Center, University of Wisconsin. To the best of our knowledge, no official English translation of this land legislation exists. This is an unofficial translation and has no legal authority. While it gives a good understanding of the land law, no one should act on the basis of this translation without having a Somali lawyer consult the originals.

Law No. 73 of 21st October 1975

AGRICULTURAL LAND LAW

The Chairman

SUPREME REVOLUTIONARY COUNCIL

Having seen: the First and Second Charters of the Revolution;

Recognizing: the necessity of issuing a Law that organizes agricultural land in order to achieve the economic development and production of Somali farms;

Considering: the decision of the Supreme Revolutionary Council and that of the Council of Secretaries;

HEREBY DECREES

The following Law:

PART I: GENERAL INTRODUCTION

ARTICLE 1: Definitions

The following words are intended to mean:

1. LAND: Any type of land that is farmed;
2. CONCESSION: Permission to use agricultural land for a fixed term;
3. CERTIFICATE: A document evidencing the right to use the land;
4. SECRETARY: The Secretary of State for the Ministry of Agriculture;
5. GOVERNMENT REGULATIONS: Government Regulations to explain and implement this law;
6. FAMILY: A household comprising the husband, his wife and their children who have not reached the age of maturity;
7. COOPERATIVE: Recognized agricultural cooperatives;
8. THE FAMILY: The person who is responsible for the management, etc., of the farm under concession and the payment of the tax on the farm.

ARTICLE 2: Land Ownership

Having regard to the tenets of this law, land of the Somali Democratic Republic irrespective of whether it is used or not is the property of the State.

ARTICLE 3: Land Administration

The Secretary of State for the Ministry of Agriculture is vested with the power of supervising the land as well as the responsibility for its management in accordance with this Law.

PART II: CONCESSION OF AGRICULTURAL LAND

ARTICLE 4: Grant of Concession

The Secretary of State has the authority to grant concessions of agricultural land to Cooperatives, State Farms, autonomous agencies, municipal governments and private farmers whether an individual, family or company while observing the conditions specified by this Law.

ARTICLE 5: Previously Owned Land

1. All those who have concessions of agricultural land prior to this Law should apply for a new concession to the Secretary of State for Agriculture within six months from the operative date of this Law to enable them to re-register it.

2. A concession that has not been re-registered shall be cancelled on the expiry of the period mentioned above.

3. This Article does not apply to Agricultural Cooperatives established by Law No. 40 dated 4.10. 1973.

ARTICLE 6: Limit to Concession

Each family or individual can only be issued one concession. It is not permitted for a family or an individual to be granted two or more concessions in the district in which he resides or in any another. Likewise, it is not permitted to grant a concession to absent persons.

ARTICLE 7: Term of Concession

Having regard to the provisions of this Law, the term of the concessions will be as follows:

1. For private farmers whether Somalis or aliens (an individual, family or a company) the term of concession is fifty years which is renewable.

2. Concessions for Cooperatives, State Farms, autonomous agencies and local governments shall have no time limit.

ARTICLE 8: Size Limit of Concessionary Land

1. An individual or a family can be granted 30 hectares of irrigated land or 60 hectares of rainfed land excluding banana plantations, and the like.

2. The size of banana plantations and the like that can be granted to an individual or a family is 100 hectares inclusive of the perimeters. Land that could be granted to special agricultural companies will be specified later in Government Regulations.

3. These size limitations do not apply to State Farms, Cooperatives, local governments, autonomous agencies and private companies.

4. Those who are in possession of land in excess of the size limitations specified in this Article will be permitted to continue using it for 2 years commencing from the operative date of Law.

ARTICLE 9: Expropriation of Excess Land

1. Any land in excess of the limitations specified in paragraphs one and two of Article eight shall be expropriated within two years from the operative date of this Law by the Ministry of Agriculture under a decree from the Secretary.

2. The procedure of expropriation and the party paying the compensation for the expropriated property will be provided for in the Government Regulations.

ARTICLE 10: Expropriation for the General Good

1. All land whether farmed in the past or present could be the subject of expropriation for the general good.

2. The procedure for the expropriation of the land for the general good and the payment of compensation shall be provided for in the Government Regulations.

ARTICLE 11: Redistribution of the Land

1. With respect to Articles 9, 10 and 15 of this Law, expropriated land shall be distributed among the landless farmers, Cooperatives or State Farms.

2. Regional, District and Village Revolutionary Committees shall be responsible for the task of redistribution of the land.

ARTICLE 12: Restrictions on the Concession

1. Land granted under this Law cannot be transferred, sold or leased.

2. If the concession holder suffers a permanent injury so that he is unable to farm the land, then he can transfer ownership of his farm to the State or his heirs.

3. Partition of the land is prohibited.

ARTICLE 13: Rights of the Farmer

The person tilling the land has the right to:

1. Range of Activities:

   a. plant the land and produce, and bring out its blessings;

   b. plant perennial crops;

   c. build a home or other buildings for the services and development of the farm;

   d. rear animals on his farm and provide all services they need;

   e. join an agricultural cooperative by contributing his land;

2. Legal and Financial Aspects:

   a. the right legally enjoyed by a person granted the right to the use of his goods;

   b. all the rights permitted by this law including the use of the produce which shall be his property;

   c. he is entitled to defend his rights in the courts and in other State offices and is, further legally entitled to obtain their protection and support without any discrimination on the basis of his birth, citizenship, religion or any sort of racial discrimination;

   d. he may borrow money from banks on the land, based on the value of his farm;

   e. he is entitled to be treated under the benefits granted by the Law on foreign investments giving him the right to repatriate a portion of his profits from the farm if the money expended on the farm and related services originated from abroad.

ARTICLE 14: Obligations of the Farmer

1. The farmer has the following obligations:

   a. he should not use the land in a manner different from the terms of the concession;

   b. he must farm the land in the most efficient manner thereby increasing its blessings and producing the highest yield;

   c. he must not transfer or sell to any other person or rent to another;

   d. he must not partition the land except for the portion that he ought mandatorily to exploit;

   e. if he has employees, he must give them, as provided by the law, adequate remuneration commensurate with their work and he is barred from levying on them customary charges;

   f. he must pay the land taxes provided for in this Law or in the Government Regulations.

2. The conditions which govern the concession of land shall be spelled out in the Government Regulations.

ARTICLE 15: Revocation of the Concession and Its Transfer

1. The concession could be withdrawn from the holder when the following reasons are found:

   a. when the government expropriates the land in accordance with Article 10 of this Law;

   b. when the user of the land contravenes this Law or the Government Regulations;

   c. when the user of the land fails to fulfill the conditions of the concession;

   d. when the inheritor of the concession holder has no desire to cultivate the land as provided in Art. 16 of this Law;

   e. when the concession holder fails to cultivate or abandons his land for two years after obtaining the grant;

   f. when the user of the land transfers, sells, or leases the concession to another as provided in Art. 12 of this Law;

   g. the concession holder's title can be transferred when the State expropriates a portion of his land as provided in Art. 9 of this Law.

2. The land from which the concession has been revoked shall be redistributed as provided in Art. 11 of this Law.

ARTICLE 16: Inheritance

1. Upon the death of the concession holder, title to the concession devolves to those entitled to inherit from him.

2. In such an event the names of the heirs to the concession shall be entered in the land register.

3. If the heirs do not desire to cultivate the land in accordance with the terms granted to the concession holder, the concession will be revoked from them and the land will be redistributed to the landless peasants resident in the area. The new beneficiaries shall reimburse the dispossessed for any expenses incurred.

PART III: TAXES AND OTHER EXPENSES

ARTICLE 17: Payment of Taxes

1. Every user of the land is obliged at all times to pay the land taxes of the State and all other types of taxes imposed on the land.

2. Taxes will be levied per hectare according to the fertility of the land.

3. Conditions for the payment of tax and the procedure for payment will be provided for in the Government Regulations.

ARTICLE 18: Expenditure on the Development of the Land

1. If the land which is the subject of a concession has previously been developed by the State, local government or an autonomous agency, the new title holder shall reimburse them.

PART IV: REGISTRATION

ARTICLE 19: Land Registration

1. The Ministry of Agriculture shall have a Register for Agricultural Land in which is entered the names of the users of the land and the conditions of their concessions.

2. The representative of the Ministry of Agriculture of each district shall register the agricultural land in the district.

3. Having regard to this Law all entries in the land register shall be based on the concession deed, an official document or a court decision concerning the land.

4. Any entries made in the register should be agreed upon by the District Commissioner and the Regional Agricultural Coordinator of Agriculture.

5. Upon arriving at a decision relating to the entries in the land register, the concession holder will be issued with a certificate enumerating the details of the land.

6. The District Representative of the Ministry of Agriculture shall then transmit to the Ministry of Agriculture a copy summarizing the above mentioned matters.

ARTICLE 20: Inspection and Certification of the Land Register

Any interested party can examine the land register during office hours upon payment of fees to be stipulated in the Government Regulations if he wishes to obtain a written certificate.

PART V: MISCELLANEOUS PROVISIONS

ARTICLE 21: Exclusion of Land for Security Reasons

The Chairman of the Supreme Revolutionary Council having heard the opinion of the Secretary of State for Agriculture and the advice submitted by the Secretaries of State for the Interior and Defense, can exclude by decree any given land from private farming for reasons of national security.

ARTICLE 22: Delegation of Authority

The Secretary of State for Agriculture can delegate the authority vested in him under this Law to the heads of the Ministry of Agriculture in the regions and districts.

ARTICLE 23: Penalties

Any one who contravenes this law shall be liable to punishment of imprisonment from two to ten years or a pecuniary fine of Sh. 2,000/- to Sh. 10.000. The concession shall also be revoked.

ARTICLE 24: Competence

The ordinary courts are competent to adjudicate on suits arising under this Law where the State is not a party.

ARTICLE 25: Government Regulations

The Chairman of the Supreme Revolutionary Council, after hearing the advice of the Secretary, is empowered to issue Government Regulations to explain this Law.

PART VI: FINAL PROVISIONS

ARTICLE 26: Repeal

Any law that is in conflict or incompatible with this Law is hereby repealed.

ARTICLE 27: Entry Into Force

This Law shall enter into force on the date of publication in the Official Bulletin of the State.

The Chairman
Supreme Revolutionary Council
Maj. General Mohamed Siad Barre

MOGADISHU, 21.10.1975

APPENDIX B

Ministry of Agriculture, May 24, 1987, Circular on Guidelines for the Giving of Farm Land

SOMALI DEMOCRATIC REPUBLIC
MINISTRY OF AGRICULTURE

Mogadishu, 24-5-1987

Number: WB/XW/F-95/796/87

Regional and District Secretaries of the Party
Their Centers
Regional and District Chairmen of the Government
Their Centers
Commandants of the Sections and Stations of the Regions and Districts
Their Centers
Regional and District Coordinator of the Ministry of Agriculture
Their Centers

cc: The First Minister of the S.D.R.
Mogadishu
The Minister for Internal Affairs
Mogadishu
The Assistant Secretary General of the Somali Socialist Revolutionary Party
Mogadishu
The Department of Organization and Public Awareness of the Somali Socialist Revolutionary Party
Mogadishu
The Organization of the Somali Cooperative Movements
Mogadishu

SUBJECT: GUIDELINES FOR THE GIVING OF FARM LAND

As everyone knows for some time now the Ministry of Agriculture suspended the registration and concession of farm land (circular reference WB/XW/F-95/157/87 of 16/2/87 and WB/XW/F-95/541/87 of 12/3/87) so as to finalize the suits and conflicts that have arisen over cultivated land and farm land used as reserve or grazing land, and also to give priority to small scale farmers with land of 1-12 ha or less in the registration of farm land. Now that the objectives of these affairs are being realized (the suspension of registration), the administrators who are involved or participate in the registration are being informed that starting from the day May 19, 1987, registration of farm land is open using the following guidelines:

1. Registration Request

Anyone who is a Somali citizen whether using farm land or not, can request the use of such land by writing an application with a legal stamp to the Coordinator of the Ministry of Agriculture for the district in which the requested land is situated.

2. Size of Land to be Allocated

The size of the land to be allocated will be based on the 8th article of the Land Law, number 72, which is:

a. The size of land permitted and that will be allocated to a person or family is 30 ha. of irrigated land and 60 ha. of dry or rainfed land.

b. The size of land permitted for banana or fruit tree cultivation that will be allocated to a person or family will be 100 ha. including the boundaries of the land. The land that will be given to private companies and cooperatives will be stated in the clauses of this guideline.

c. Notice of the Land: for a period of 30 days the land requested must be pinned on the notice boards of the District Party Secretary's office and the offices of the District Chairman of the Government, Commander of the Police Station, Coordinator of the Ministry of Agriculture for the district in which the land is situated, and the centers of the village and community.

3. Boundary Making

When the notification period is over a committee made up of the following will go together:

a. The Land and Water Officer of the district;

b. A policeman from the police force of the district;

c. The registration applicant;

d. A draftsman;

e. The Chairman of the committee of the village in which the land is situated.

The committee will first make a boundary for the farm using a bulldozer if the land has trees (cutline); if the land is bare a ditcher will be used. Then the measuring will be done by the land and water officer, who will be responsible and answerable to any error in the measurement or overlapping with another farm, and a draftsman; they will face appropriate measures should this happen. The draftsman will make an actual farm layout with the exact area, its angles and hectares. The draftsman must render an actual farm layout ("plan meteria") bearing his stamp, signature, name and date. A farm without boundaries as indicated above or does not exist shall not be registered.

4. Land Officer's Report

Following the delimitation of the boundary, the Land and Water Officer will send to the Coordinator of the district for the Ministry of Agriculture a report defining the following:

- the village where the farm is;
- the distance from the village or a fixed landmark with a name or meaning;
- number of hectares;
- the type of soil in his opinion;
- if it is a previously cultivated farm, how it was used under this law, if it exists, or if it is new;
- that it is not the subject of a dispute.

It is the responsibility of the Coordinator of the Ministry for the district to verify the report.

The Police representative should send a similar report, for security purposes, to the officer in command of the police station. Then the Commanding Officer, if convinced, will send to the Secretary of the SSRP, the Administration Chairman and the Coordinator of the Ministry of Agriculture for the district a report stating that there is no dispute over the land.

5. Order to Register

The Coordinator of the Ministry of Agriculture will order the Land and Water Officer to begin the registration, receive and verify that the layout conforms to the measurement previously made out by him. At the same time the Coordinator will write a report to the Secretary of the SSRP and the Administrative Chairman who will then take into consideration the reports of the Coordinator, the commanding police officer, the situation of the area, the peace and scope of production, and will then confirm the registration of that farm.

Petitioner's Declaration: The Petitioner after reading or having someone read for him the obligations written on the back of the Land Certificate shall sign in front of the Coordinator of the Ministry of Agriculture that he accepts and will abide by them.

6. Giving of District Registration Number

After the Petitioner signs the Land Certificate the farm will be given a district registration number.

7. Giving of District Registration Number

The Coordinator of the Ministry of Agriculture of the district will forward in writing (it cannot be given to the Petitioner), once every two weeks, all the farms that have completely satisfied the requirements stated above of the district which consists of:

a. the registration request of the Petitioner;

b. the farm layout;

c. the Land and Water Officer's report;

d. the report of the commanding police officer;

e. the confirmation of the Secretary of the SSRP and the Administrative Chairman of the district;

f. the certificate (original) and three signed copies;

g. the report of the Coordinator of the Ministry of Agriculture of the district.

The Regional Coordinator, if satisfied by the documents he receives and considering the regional plans, will then order the Regional Officer for Land and Water to issue a regional registration number.

8. Forwarding to the Headquarters

The Regional Coordinator for the Ministry of Agriculture, especially the regions of Hiran, Lower Shabelle, Middle Shabelle, Gedo, Middle Jubba and Lower Jubba will take at least on the first of every month to the Directorate of Land and Water of the Ministry of Agriculture the documents (the Petitioner cannot handle them) which have been verified. The Directorate will issue a note acknowledging that the documents have been received showing clearly the number, names and districts. The registration and holding of documents of the region will be complete when the Regional Coordinator hands over the delivery note of every farm and his signature.

9. Forwarding for Signature to the Ministry of Agriculture

The Director of Land and Water, after verifying that the preceding requirements have been completed for every document, will forward in writing to the Minister stating that the documents are complete and the farm is not on government land or land held for national use (in the near or distant future) and that there will be no problems arising in the area.

10. Company Registration

The companies that want to cultivate farm land will have to follow the procedure contained in Articles 1, 2, 3 of the S.D.R Decree No. 23 of 16-10-1976 on Agriculture. After satisfying Article 3 the company will apply to the Minister so that he can allocate the size of land that will be given in accordance with Article 4 of the Decree. The companies that do not satisfy these requirements will not be given farmland.

11. Registration of Cooperative Farms

Since farm cooperatives are mostly multi-purpose and have formed a cooperative on farm land, their registration will be as follows:

a. every member's land will be registered in the normal manner of every citizen;

b. after every member has a farm land and certificate they will then collectively apply to be registered as a cooperative in the district and region;

c. the Regional Coordinator will enclose the other documents and his report so as to issue a Ministerial Decree;

d. after the Minister signs and the Auditor General confirms it, it will be sent to the National Cooperative Organization so that it can register and issue the certificate of the Cooperative Organization.

12. Registration of Farms Situated in Towns

The land in the urban areas comes under the responsibility of the authorities of the area and can be issued as a farm land by the Mayor and will be registered on his permission stating that it will be used for cultivation.

The Mayor can be involved in the registration of farm land in this case only.

13. The Opening of New Land

New land that has not previously been cultivated cannot be opened without the following procedures:

A committee consisting of the Coordinator of the Ministry of Agriculture, Coordinator of Livestock, National Range Agency, Secretary of the SSRP, the Administrative Chairman and the Community Chairman must write a report to the region taking into consideration the balancing of benefits, natural changes, desertification, protection of livestock and wild animals, climatic changes and the economic activities of the people living in the area and their neighbors. They will then forward their decision to the Ministry of Agriculture, Livestock, and Internal Affairs to confirm or to submit their views.

14. The Registration of Farm Land in the Regions of Rangelands

Land for farming cannot be granted in the rangelands since normally their rainfall is less than adequate for rainfed cultivation and desertification is rapid. Since the towns of these regions and districts need vegetables for a balanced diet, the towns that have permanent water (all year round) or where underground (well) irrigation is possible, land can be allotted up to 0.25-0.5 ha. in which vegetables will be grown and the land should not be beyond the town limits.

15. Boundaries of Land Irrigated by the Shabelle River

Since the land that can be irrigated in the Shabelle Valley is more than the volume of the seasonal amount of water available and the capacity of the water administration and the protection of the grazing land, it is not permitted to have a canal parallel to the river exceeding 20 kms. Land beyond this limit should be used as rainfed land or grazing.

Registration Priority: Small scale farmers with land of 1 - 12 ha or less will have first priority in registration.

16. Settling of Farm Land Disputes

The Settling of disputes over farm land is the responsibility of the disputes committee of the inter-riverine areas at the district, regional and national level that already exist.

17. Transfer of Farm Land

The transfer of farm land and changing of certificate will be executed by the Ministry after the two parties reach an agreement between themselves and bring a notarized agreement.

18. Expansion of Residential Zones

Land that was previously farmed cannot be converted to land for residential purposes without permission from the Minister of the Ministry of Agriculture.

19. Reservation of Land

Bush land cannot be held as a reserve for a village, community or person in a way that is not in accordance with the land law.

Finally the officials to whom this circular is addressed are being informed that they should broadcast this to the public and that they (officials) are responsible for the implementation and safeguarding of these guidelines.

Good Execution,

Minister of the Ministry of Agriculture
(Abdirazzak Mohamed Abukar)

APPENDIX C

Two-Round Questionnaire Asked of Village Sample

No. Name Place an * next to Respondent's name	Relationship to Respondent	Age	Date of Current Marriage (Season/yr)	Does s/he Work on the Farms (Often, Sometimes, Rarely)	ASK THESE QUESTIONS TO MEN ONLY Names of Former Spouses	Date of Former Marriages (Season/yr)	Date of Divorces (Season/yr)
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							

Name	What seasons does s/he live in Banta?	Where is s/he the rest of the year? (village, district, country)	What is s/he doing there? Reason for leaving?

Name	What seasons does s/he live in Banta?	Where is s/he the rest of the year? (village, district, country)	What is s/he doing there? Reason for leaving?

Who in the family shares baqars? _____

_____

_____

How many farms are you cultivating this year? _____

Do you have any farms that are being entirely farmed by someone else right now? YES NO Number _____

Do you have any farms which are entirely in fallow or bush right now? YES NO Number _____

DRAW A ROUGH SKETCH SHOWING THE LOCATION OF ALL THE FARMS THE FAMILY CURRENTLY OWNS, RENTS IN, BORROWS, AND FARMS THAT ARE RENTED OUT OR GIVEN OUT. BE SURE TO INCLUDE ALL LAND THAT IS IN FALLOW, IDLE, OR HAS NEVER BEEN CULTIVATED. SHOW PROMINENT LANDMARKS (RIVER, DESHEK, ETC.).

N

W --------- E

S

A. ASK THESE QUESTIONS FOR ALL FARMS SHOWN ABOVE.

Where is the farm located? _____ (Farm No. _____)

How much of the farm is in: ( ) Deshek ( ) Doonk ( ) Riverbank

How large is the farm? _____

How much of the farm is currently in bush? (include units) _____

If some is in bush, is the land: ( ) in fallow ( ) never cleared

Are you currently lending out the farm to any person who is not a member of your household? YES NO

When did you acquire this farm? (season/year) _____

Was it cleared or in bush when you acquired it? _____

How did you acquire this farm? ( ) Bought ( ) Inherited
( ) Borrowed ( ) Rent-in ( ) Village Council
( ) Cleared it ( ) Other (note if farm came through wife)

IF INHERITED: Who did you inherit it from? _____

Relationship _____

IF BORROWED:

Who are you borrowing this farm from? _____

Why did you need to borrow a farm? _____

Why did you borrow rather than buying or clearing land from the bush?

_____

Will you continue to borrow this farm next year? _____

Do you do anything in return for using the land? YES NO

What do you do? _____

IF BOUGHT:

How much did you pay? _____

Who did you buy it from? _____ Relative? _____

Why did you buy the farm rather than borrowing land? _____

_____

Why did you buy it rather than clearing it from the bush? _____

_____

IF FROM THE VILLAGE COUNCIL:

Why did you request a farm from the village council rather than buying or borrowing a farm?

_____

IF CLEARED FROM THE BUSH:

Did you need to ask permission to clear it? _____

If yes, who did you ask? _____

IF RENTED IN:

Who do you rent it from? _____

How are you paying for it? ( ) cash: amount _____

( ) in kind: what paid _____

(If in kind, ask for an estimated cash value) _____

( ) sharecropped: farmer's share _____

( ) free

What is the arrangement you have with the owner of the farm? _____

_____

Why are you renting rather than buying or clearing land? _____

_____

Will you rent this farm next year? _____

Was this farm ever cultivated before you acquired it? _____

If yes, when was the last time, and for how many years had it been cultivated?

_____

Who was cultivating it? _____

When you acquired this farm, was it part of a larger farm that you acquired a portion of? YES NO

Have the boundaries of this farm changed since you acquired it? YES NO

If yes, when? _____

Is the farm larger or smaller than it was before? _____

B. **ASK THESE QUESTIONS ONLY IF THE WHOLE FARM IS BEING LENT OUT**

Farm No. _____

Do you lend this farm out every year, most years, some years, only this year? _____

Why are you lending it out? _____

Is it being rented out: ( ) on a cash basis: amount _____

( ) on an in kind basis: amount _____

( ) sharecropped: amount _____

( ) free

In what season and year did you last cultivate this farm? _____

Have you ever lent part or all of this farm to anyone else? YES NO

When? _____ To Whom? _____

When? _____ To Whom? _____

When? _____ To Whom? _____

When? _____ To Whom? _____

When? _____ To Whom? _____

When? _____ To Whom? _____

When? _____ To Whom? _____

If farm is currently cultivated, have you ever fallowed this land?

YES NO

What season and year did you put it in fallow, and for how long?

_____

C. **ASK ONLY FOR FARMS THAT ARE CURRENTLY IN FALLOW OR HAVE NEVER BEEN CLEARED**

In what season and year was this farm last cultivated? _____

Why is this farm in fallow/never cleared? _____

_____

When will you clear it? _____

In what season and year was this farm cultivated? _____

Why is this farm in fallow/never cleared? _____

_____

When will you clear it? _____

D. **COMPLETE THE FOLLOWING FOR ALL FARMS.**

In the past ten years, which GU and DAYR seasons were you not able to farm this farm or some portion of it (because of floods, droughts, etc.)?

	DAYR	GU
SEPTI (1986-87)		
JIMCO (1985-86)		
KHAMIIS (1984-85)		
ARBACA (1983-84)		
TELAADA (1982-83)		
ISNIIN (1981-82)		
AXAD (1980-81)		
SEPTI (1979-80)		
JIMCO (1978-79)		
KHAMIIS (1977-78)		

E. **HAVE YOU EVER BORROWED LAND FROM ANYONE IN THE PAST? YES NO**

When? _____ From Whom? _____

When? _____ From Whom? _____

When? _____ From Whom? _____

When? _____ From Whom? _____

When? _____ From Whom? _____

When? _____ From Whom? _____

When did you first take primary responsibility for a farm? _____

How much land did you have then? _____

F. **HAVE YOU EVER HAD ANY OTHER FARMS THAT YOU NO LONGER HAVE BECAUSE YOU SOLD THEM, GAVE THEM AWAY, OR FOR ANY OTHER REASON? YES NO**

1. Reason farm no longer owned? _____

   When did you get rid of the farm? _____ Size? _____

   To whom did the farm go? _____

   Was it cleared or in bush? _____

   When was the last time you farmed it? _____

   How did you acquire the land? _____

2. Reason farm no longer owned? _____

   When did you get rid of the farm? _____ Size? _____

   To whom did the farm go? _____

   Was it cleared or in bush? _____

   When was the last time you farmed it? _____

   How did you acquire the land? _____

QUESTIONNAIRE II MIDDLE JUBBA

Name of Respondent _____ HH _____
Q1 _____

DRAWING OF FARM

1. Farm Location _____ 2. Land Type _____

3. Estimated Area _____

4. Who is primarily in charge of this farm? _____

5. Portions lent out during first planting after the Gu flood to persons not living in the household:

   Name _____ Area _____

   Name _____ Area _____

   Name _____ Area _____

   Area farmed by family _____

6. Do members of your household have their own portions of this farm?
   YES NO

7. Draw a map of the farm marking:

   a. dotted line to mark desheeg

   b. family members' plots

   c. plots lent to nonhousehold members

   d. general soil types

FOR EACH PLOT BELONGING TO A FAMILY MEMBER IDENTIFIED IN THE DRAWING, ANSWER THE FOLLOWING QUESTIONS (IF PARCEL IS NOT DIVIDED INTO PLOTS, SKIP TO #19):

8. Whose plot is this? _____ Plot # _____

9. Estimated area of plot? _____

10. Who is primarily responsible for deciding what crops are grown on this plot? _____

11. Who decides who works on this plot? _____

12. Who usually works on this plot? (List in order of most often to least often.): _____

_____

13. What crop(s) were grown on this plot in the first season after the Gu flood? _____

14. Second season after the flood? _____

15. Two Gu's ago? (if this same plot was farmed) _____

16. Who has control of the harvest from this plot? _____

17. If maize, is the harvest from this plot kept and stored separately from the production of the other plots, or is it lumped together with all production? _____

18. Does (person in ±8) have the right to sell any of the produce from this plot? YES NO

If yes, how much? _____

Questions 20 through 63 refer to the parcel level.

PHYSICAL CHARACTERISTICS OF THE PARCEL

19. Describe the soil types on this parcel (from the drawing): _____

_____

20. Answer the following questions for each land type on the parcel:

_____ _____ _____

easy to till

average

difficult to till

21. very fertile

average

not very fertile

22. Does this parcel produce better

( ) after a flood ( ) with rains

23. How is the production on this parcel after a drought compared to after a wet season?

( ) the same ( ) poor, but get some production ( ) none

24. On this parcel, how serious a problem to productivity are each of the following?

	Serious	Average	Not Serious
Waterlogging/swampiness	( )	( )	( )
25. Soil compaction	( )	( )	( )
26. Cracking	( )	( )	( )
27. River deposits	( )	( )	( )
28. Weeds	( )	( )	( )
29. Animals	( )	( )	( )

30. How would you describe the quality of soils on this parcel compared with other land in the Banta area?

( ) better in quality ( ) about the same ( ) worse

INVESTMENTS IN THE LAND

31. Have you ever cleared this land by machine? YES NO

32. If yes, when? _____

Cost? _____

33. Have you ever had any other mechanized services on this farm? YES NO

34. What type? _____

35. When? _____

36. Cost? _____

37. Have you ever used: YES NO

Manure

Fertilizer

Pesticides

Herbicides?

38. Are there any fruit trees on this parcel which you own?

Type	Number	Did you plant?	Average age of trees	Last harvest

39. Do you own any other fruit trees which are located on land which you do not own?

Type	Number	Did you plant?	Average age of trees	Last harvest

PRODUCTION

(Crop refers to sum of fields within the parcel which are planted in the same crop.)

For the first successful planting after the Gu flood, as the following:

	Crop 1	Crop 2
40. What crop was cultivated? (If intercropped, state the main crop first followed by secondary crops.)		
41. What is the area planted?		
42. Is this your usual cropping pattern for Gu?		
43. What type of soils is this field? (Skip if only one type or only one crop.)		
44. How many shots of the main crop did you plant?		
45. If intercropped, how many shots of the secondary crop did you plant?		
46. When did you start planting?		
47. Did you plant all at once or continuously as water receded?		
48. What was the production of the main crop?		
49. What was the production of the secondary crop (if intercropped)?		
50. Where did you get the seed?		
51. Did you apply fertilizer, herbicides, pesticides, or manure to this crop?	YES NO	YES NO,
52. If yes, state type, quantity, and price paid.		

	Crop 1	Crop 2
53. How many times did you weed this field?		
54. How many total days were spent on:		
Land preparation:		
55. Planting:		
56. Weeding:		
57. Harvest:		

58. Did you ever have a Gob? YES NO Task _____

_____

59. Did you ever hire labor? YES NO Tasks _____

Total cost _____

60. After this Xagaa harvest, did you plan again? YES NO

61. What crop(s) was planted? _____

62. Area? _____

63. Amount of seed? _____

Questions 64 through 102 refer to the household level.

64. Did you borrow or clear any other land for this Jilaal or did you lend out any land this Jilaal?

	BORROW	CLEAR	LENT OUT
65. What kind of land?			
66. Where?			
67. Area?			
68. Crop planted?			

TITLE SECURITY

69. Have you or any member of your household ever had a dispute about land ownership or land boundaries? YES NO

70. If the answer is YES, who was involved and what was the dispute about?

_____

_____

71. If the answer is YES, what parcel was involved? _____

72. Who was involved in resolving the dispute (check any that apply)?

( ) resolved ourselves
( ) village chief
( ) village committee
( ) police
( ) witnesses
( ) other _____
( ) religious leader
( ) district court
( ) regional court
( ) MOA

73. What was the decision? _____

_____

74. Are disputes over land ownership?

( ) more serious now than in the past
( ) not as serious now as in the past
( ) not a problem

75. Are disputes over parcel boundaries?

( ) more serious now than in the past
( ) not as serious now as in the past
( ) not a problem

76. How much of a threat do you think there is from outsiders coming here and taking people's land?

( ) serious
( ) not so serious
( ) not a problem

77. Who presents the biggest threat to keeping land (for example, family, neighboring farmers, outsiders?) _____

78. If a farmer has lent a piece of land to someone for along period of time, does he run a risk that the borrower may try to claim it?

( ) high risk
( ) low risk
( ) no risk

79. If there is a risk, how many years are considered risky? _____

80. If a farmer has registered his land, what is the possibility that someone else can take it?

( ) not possible
( ) may be possible
( ) very possible

81. What is the most serious type of land dispute that farmers face in this area? (Rank if two or more types of dispute are mentioned.)

_____

82. Do these disputes discourage farmers from investing labor in their land? YES NO

83. How likely do you think it is that more farmers in this area will lose their land to outsiders in the next 10 years?

( ) very likely
( ) may happen
( ) unlikely

84. How worried are farmers in this area about losing some or all of their land?

( ) very worried
( ) somewhat worried
( ) not worried

85. Do you think there is any particular type of land that is more likely to be stolen than other types of land (for example, jimce, land in bush)? Explain. _____

86. How often do you grow a surplus of maize to sell?

( ) every year ( ) most years ( ) some years ( ) never

87. How often are you not able to grow enough to meet the needs of your family (due to drought, flood, etc.), meaning you have to buy or receive aid?

( ) every year ( ) most years ( ) some years ( ) never

88. How many quintals of sesame or maize have you sold since the Xagaa harvest?

	Quintals Sold	Price Received	To Whom Sold
Sesame			
Maize			

89. How much maize have you bought since the Xagaa harvest? _____

90. Does your family have any other source of income (other than farming)?
YES NO

91. If YES, what is it? _____

92. Is this income greater or less than what your family earns from farming?
GREATER THE SAME LESS

93. Does your family own any livestock? YES NO

	Number
94. Camels	
95. Cattle	
96. Sheep/goats	

97. Where kept? _____

98. If YES, how many were acquired, born, sold, lost, or died during the past year?

	ACQUIRED	BORN	SOLD	LOST OR DIED
Camels				
99. Cattle				
100. Sheep/goats				

101. If NO, have you ever depended on livestock for your livelihood?
YES NO

102. When? _____

APPENDIX D

Structured Questions Asked of Registered Farmers

Name:

Position/Occupation:

Age:

Place of birth:

Length of time lived in this area:

Farm: When acquired?

Registered size and amount currently cleared?

How acquired and was permission to acquire necessary?

Was farm in bush or cleared at time of acquisition?
If bush, when cleared?

How did you choose this piece of land?

Type of land?

Have you ever farmed before? If so, where, and what happened to the previous farm?

When registered, cost, and why registered?

Use since registered:
seasons planted, size planted, crops planted, costs of inputs (seeds, labor, pump, tractors, other inputs), amount harvested, amount sold, to whom, price received

What kind of labor arrangements used each season?

How are crops marketed?

Any investments: pump, ditches, ridges, fertilizer, manure, pesticides, herbicides?

If so, history of investment use and where obtained?

Any fruit trees and if so, age of trees?

Future investment plans?

Ever used land as collateral?

Ever lent out portions? If so, what were the arrangements?

Did talk of road or dam influence you to obtain land?

Ever had a dispute? Describe.

APPENDIX E

Reported Production of Registered Farmers

The figures below are those reported by the registered farmers for their last harvest, the date of which is listed below the production amount (production is in quintals). A zero means the crop was planted but there was no harvest.

CASE	NO PUMP		PUMP			
	Maize ears/darab	Sesame /darab	Maize ears/darab	Sesame /darab	Onion /darab	Tobacco rolls/darab
Case 1	-	-	1.6 Gu 1987	-	8.3 Jilaal 1988	-
Case 2	1 Gu 1986	0.8 Gu 1987	-	-	-	-
Case 3	0.2 Gu 1987	0* Dayr 1986	-	-	-	-
Case 4	1.6 Gu 1987	0* Gu 1987	-	-	-	-
Case 5	-	-	-	.06* Jilaal 1987	11.3 Jilaal 1987	-
Case 6	-	-	0 Dayr 1984	0 Dayr 1984	-	0 Dayr 1984
Case 7	-	-	-	-	-	-
Case 8	-	-	2 Gu 1987	-	10 Gu 1987	50 Gu 1987
Case 9	-	-	-	-	-	-
Case 10**	-	-	3.6 Gu 1987	-	20 Jilaal 1988	-
Case 11	3.6 Xagaa 1987	0.7 Xagaa 1987	-	-	-	-

CASE	NO PUMP		PUMP			
	Maize ears/darab	Sesame /darab	Maize ears/darab	Sesame /darab	Onion /darab	Tobacco rolls/darab
Case 12	-	-	*** Xagaa 1987	1* Xagaa 1987	8.7 Xagaa 1987	-
Case 13	5 Gu 1986	1.5 Xagaa 1987	-	-	-	-
Case 14	1.6 Xagaa 1987	0.7 Xagaa 1987	-	-	-	-
Case 15	1.3 Xagaa 1987	0.4 Xagaa 1987	-	-	-	-

* Got disease.

** Does not own a pump but uses water from his neighbor's pump.

*** Did not know his harvest.