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**Somalia Land Policies and Agrarian Performance:
The Case of the Lower Shabelli**

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Somalia Land Policies and Agrarian Performance:

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Land tenure in contemporary Somalia is in a state of flux. Although most cultivated land and nearly all pastoral land are governed by traditional land tenure arrangements, formal leasehold systems, based on statutory law, are gaining in importance. The influence of traditional law is declining due to economic, social and institutional forces. Rapid population growth, inflationary pressures, foreign development assistance, and shifting price relatives in favor of crop agriculture are increasing the demand for land resources. The supply of high quality land is becoming more inelastic as demand pushes land use nearer the limits of its availability in Somalia's river valleys.

Demand for formal leasehold titles is rising rapidly due to official land policies that promote farming by large government state farms and cooperatives, and increase tenure security and access to credit. The supply of leasehold titles is constrained by government resources, and high costs of leasehold acquisition that bias land registration toward wealthier farmers. Security of tenure under traditional land tenure arrangements is weakening as formal laws usurp the rights of land governance from traditional authorities.

This paper draws on the interim results of LTC research on title security and land registration on irrigable lands near Shalambod on the lower Shabelli. It focuses on the institutional and economic forces that are increasing demand for land in riverine areas; it examines the theoretical and empirical impacts of land policies on sedentary agriculture; and it uses LTC research as a case study of the conflicts that can arise, between formal and customary land tenure arrangements, as a result of land policy reform.

Agricultural Economy

The period from 1960 to 1970, prior to Somalia's major land reforms, is characterized by low economic growth and dependence on outside aid. Somalia's economy, measured by GDP, grew at an average annual rate of 1.0 percent per annum throughout the decade, while agriculture declined 1.5 percent per annum (World Bank, 1981). The average index of food production per capita in 1977-79 was only 85 percent of base 1969-71 productivity. Food imports, largely food aid, represented over 25 percent of all merchandise imports in 1960.

After a decade of reforms and economic adjustments in the seventies, agriculture reversed its decline in the early eighties. Between 1980 and 1985, food production per capita increased marginally while GDP in agriculture increased at an inflation adjusted annual rate of 8 percent. Conversely, GDP in manufacturing and industry declined at average annual rates of 3 to 5 percent, while the service sector grew 4 percent annually (The World Bank, 1987). Food aid imports still averaged 184 thousand tons or 35 kg. per capita in 1982-84 (The World Bank, 1986), but food aid has been cut sharply by donors in more recent years.

Crop agriculture in Somalia has traditionally been a secondary activity in a primarily pastoral economy. Livestock production as a percentage of GDP averaged 32 percent over the 1982-86 period, compared with an average of 15 percent for crop agriculture (GSDR, 1987). However, land resources devoted to the crop sector have been growing almost 4 percent annually since the mid seventies (Conze and Labahn, 1986; GSDR, 1987). Capital investment in land, outside of the commercial irrigated areas, is limited. Somalia has one of the lowest fertilizer use rates in the world (The World Bank, 1987).

If land was homogeneous in quality and population was uniformly

distributed, land accumulation and declining productivity would not be at issue, given Somalia's low rates of cultivation intensity and input use. However, irrigated land is supply-inelastic, and requires high capital investment. Of Somalia's 866 thousand hectares cultivated in 1986, 11 percent was irrigated. With average annual rainfall of less than 430 mm., and poor soils outside of the riverine areas, economic rents to land with good access to irrigation water and public infrastructure are high.

Forces Affecting Demand for Land Resources

Somalia's agricultural sector is undergoing tremendous structural change as a result of several economic forces that are increasing the demand for land resources. These forces are discussed below.

Somalia's high rate of inflation discourages investors from holding financial assets, and increases the incentive for holding land or commodities (i.e. gold or livestock). Price levels, as measured by the GDP deflator, rose at an average annual rate of 10 percent over the period 1965-80, and in excess of 45 percent annually between 1980-85 (World Bank, 1987). Based on a 14 percent nominal rate of interest on bank deposits in 1985 (World Bank, 1987), financial assets in real terms would have yielded a 31 percent negative annual return. The financial collapse of banks in late 1987 further increased investors' concerns about the safety of bank deposits and the transactions cost of dealing with banks with uncertain financial reserves.

The export of live animals has been severely limited by the 1983 import embargo imposed by Saudi Arabia (Somalia's major market for live animals). Exports, which had supplied 79 percent of total export earnings, fell from \$106 m. in 1982 to \$35 m. in 1984. While Somalia has since found other trading partners, trade restrictions have imposed economic losses on the

livestock sector. Consequently, resources previously devoted to livestock have been shifted to crop agriculture.

Public investment in river basin development and land-intensive technology has increased the supply of irrigable lands, and increased investors' expectations of economic returns. Official development assistance, consisting of loans and grants received from donors on a concessionary basis amounted to \$354 m. in 1985 (\$65/capita), or 14.5 percent of GNP (World Bank, 1987). About 132,000 hectares of land on the Shabelli river are now under irrigation (USAID, 1987). Two-thirds of this area is irrigated by canals from 7 barrages (3 of which have been constructed since 1980), and one-third from an estimated 330 pumps that draw water from the river (USAID, 1987).

Shifts in the relative price ratio of grains to non-grain commodities have increased economic returns and the derived demand for arable land. Prior to 1982, farmers were required to sell their crops to the state cereals marketing agency (Agricultural Development Corporation) at artificially regulated prices that were 6 to 8 times lower than parallel market prices (USAID, 1987). In 1981, official prices of sorghum and maize were increased 50 percent and ADC's monopoly powers were eliminated. Between 1980 and 1985, official maize prices increased over 100 percent in real terms.

Cropped area has expanded rapidly as an outcome of these factors. Based on the five year period spanning 1979-81 to 1984-86, total area harvested expanded at a 3.6 percent annual rate (on a basis of 798 thousand hectares in 1979-81); sorghum area declined at an average annual rate of 1.3 percent (478 thousand ha.); while maize area grew at an annual rate of 15.8 percent (151 thous. ha.). Area under bananas (3.4 thousand hectares), Somalia's most important export crop behind livestock, rose at an average annual rate of 9.8 percent. Yet, in 1986, land in cultivation represented only 1.4 percent of

total area, compared with an estimated 13 percent of land resources considered potentially arable (Conze and Labahn, 1986).

With price liberalization came a shift of resources into agriculture. Existing farmers, lacking inputs and land intensive technology, tried to extensify their land holdings, while businessmen and state officials claimed farm land in less developed areas along the Shabelli (Conze and Labahn, 1986). Investment opportunities in other sectors, such as banking, agri-business and industry, diminished due to government regulation and control. Somalia's burgeoning urban population turned to farming for income and farmland for investment, giving rise to a large absentee class of land holders. Munzinger et al. (1984) observed a considerable increase in absentee landlords in two villages on the lower Shabelli, many being traders investing their profits in farmland.

The structural adjustments that have taken place in agriculture as a result of these factors raise two key questions with respect to land policy and land legislation. First, how has formal land legislation exacerbated or facilitated land use planning and resource reallocation in agriculture? Second, to what extent has land legislation provided for secure individual or community property rights in land ownership?

Land Policy

Somalia established its first formal land tenure policies under the colonial regimes of the British in the north and the Italians in the south. Land tenure reforms were drafted by a special commission in 1965, but were never passed by Parliament. Following the socialist revolution of October 1969, the new regime announced a series of agrarian reforms aimed at stimulating growth and economic development.

Between 1970 and 1976, the government passed as many as 22 laws regulating the crop sector. Among the more important land policies were: the Agricultural Land Law of 1975, which established a formal land tenure system for the country; the Law on Cooperative Development of 1973, which established the farm cooperatives; the Agricultural Crash Program of 1974, which established a program for temporarily allocating land to government employees and students from agricultural training colleges; and, the Agency for Resettlement and Community Projects of 1976, which gave the government authority to settle nomads on lands in the riverine areas.

Along with these land reforms, legislation dealing with water rights and controls over production and marketing was enacted. According to Robleh and Hussen (1977), the reforms sought to promote the importance of agriculture in the economy, tap the under-exploited potential of Somalia's land resources, increase resource efficiency per unit of land, and reduce the country's dependence on food imports. Laitin (1976) saw the purpose of the land reform as replacing an archaic system of communal tenure and nomadic pastoralism with one more economically productive and less destructive of the land.

Planners perceived that common ownership was environmentally degrading, that nomadic pastoralism was unproductive, and that traditional institutions were inefficient and outmoded. The reforms set forth to: (a) place control of land in the hands of the state; (b) draw the population into new occupations (settled farming) that would reduce food imports as a cushion against drought; and, (c) substitute modern institutions of production and marketing for inefficient traditional organizations (Gunn, 1986).

Policy makers saw the solution for the agricultural problems in modern corporate structures. In 1984, government state farms controlled over 45 thousand hectares in the Shabelli valley, and nearly 25 thousand hectares in

the Jubba (Fadal, Shago and Ali, 1986). Areas reserved for the Crash programs contained 20 thousand hectares, and resettlement schemes another 27 thousand hectares. By 1979, there were 233 group cooperatives controlling an area of nearly 35 thousand hectares, and 48 multi-purpose cooperatives with over 32 thousand hectares. Agricultural land legislation gives preferential treatment to state farms and cooperatives regarding land restrictions and procedures for leasehold acquisition.

Agricultural Land Law

The Agricultural Land Law of 1975 and subsequent decrees are the statutes that govern formal land tenure relations in Somalia today (Annex 1). According to this Law, all land resources are owned by the state. Responsibilities for management of land resources and the authority to allocate land are under the direct jurisdiction and control of the Minister of Agriculture. The Minister may issue concessions (leaseholds) on land for agricultural purposes to cooperative societies, state farms, autonomous agencies, local government bodies and private individuals or companies. Since all land is owned by the state, individuals with registered leaseholds are tenants of the state with certain rights and restrictions.

Land registration is compulsory. Any person who did not register his or her land within 6 months of the law's enactment theoretically lost the right to use the land. All land holders, excluding cooperatives and state farms, must voluntarily apply for a variable term lease 50 years in duration, and renewable. An individual or family may obtain only one lease per household. Total land holdings are restricted to ceilings of 30 hectares of irrigated land and 60 hectares of non-irrigated land. Ceilings for banana plantations are raised to 100 hectares, and waived entirely for cooperatives, state

farms, private companies and autonomous agencies. Registered leaseholds cannot be bought, sold, leased, rented, or mortgaged, although rights may be transferred if the lessee is incapacitated or dies. The government may repossess land that exceeds size restrictions, is used for non-agricultural purposes, is not used productively, is unnecessarily fragmented, or is not farmed for a successive two year period.

Leasehold applications, by families or individuals, begin with a letter to the district Department of Land and Water Resource Office (DLWR), in the Ministry of Agriculture (MOA), stating certain minimum information about the applicant and the parcel. The district director visits the parcel to verify the claim and to draw a parcel sketch. The landholder has the responsibility of having the sketch drafted into a formal map. Once drafted, the landholder returns to the district DLWR and submits the map and the original letter of application. The director writes a letter to the police station nearest to the site requesting verification of ownership. The police visit the site and talk with expert witnesses, normally neighbors and village authorities. If no land conflict is detected, a public notice is posted in the village of the applicant for 30 days, to allow time for any land disputes to be brought forward to officials.

After the posting period, an official land title is typed and copies sent to the regional and national offices of the DLWR. The director in Mogadishu checks the application for conflicting claims before sending the file to the Minister of Agriculture for signing. All leaseholds must 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 start 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.

One of the Land Law's most striking features is that it does not recognize the customary rules and procedures of the indigenous institutions that still govern access to land and pasture (Hobin, 1985). Pastoralists are given no tenure rights. Noncompliance with the provision requiring immediate registration has resulted in a large class of landholders without legal rights to land. The 2 year provision on idle land, resulting in state appropriation, places a strong bias towards permanent cultivation, and against conservation. Riddell (1987), for example, has observed an increase in unnecessary forest clearing in the Jubba by registered landholders. Preferences are given to cooperatives and state farms on size of land holdings, length of lease, and resources provided.

Manipulation of registration procedures is commonplace (Hobin, 1985; Roth et al. 1987). It is generally accepted that personal connections and unofficial gratuities are essential to obtain a lease. Farmers may register different landholdings under different kin members' names. Groups of farmers sometimes pool money and register a block of land under one farmer's name, despite the apparent risk of losing their land. Individual(s) may form a company which is not subject to size restrictions, and use formal leasehold statutes to claim unregistered land. The MOA, on the other hand, is not equipped to detect multiple leaseholds registered under different family members' names, or to prevent a speculative land market.

Formal Land Tenure

Government land registries in 1986, 11 years after passage of the Land Law, showed that 12,561 titles, covering 256 thousand hectares, had been issued by the government (Table 1). This area represents 0.5 percent of

Table 1: Land Characteristics Including Total Land Area, Area Cultivated, Irrigated and Rainfed, Registered and Unregistered, Somalia, 1986.

	Total Land Area	Cultivated Area Under Rainfed Ag.	Cultivated Area Under Irrigation	Rainfed Land That Is Titled	Irrigable Land That Is Titled	Number of Registered Farms	Reg. Area (ha.) Per Farm	Unreg. Area (ha.) Per Farm
	'000 ha	'000 ha	'000 ha	'000 ha.	'000 ha.	farms	Reg.	Unreg. c
North West Regiond	4,480	90.3	-	24.3	8.5	2,927	11.2	6.4
Central and N.E. Regions ^e	32,260	32.5	-	22.3	2.2	2,651	9.2	1.0
Hiraan	3,400	15.3	13.0	0.5	15.8	325	45.8	2.5
Middle Shabelle	2,080	86.8	26.9	-	56.1	1,474	38.0	5.0
Banadir	80	-	-	-	-	-	-	-
Lower Shabelle	2,770	167.2	29.8	16.4	129.6	3,361	43.5	3.0
Lower Jubba	4,900	10.3	16.2	4.4	12.6	501	33.8	1.3
Middle Jubba	1,670	49.7	4.9	3.9	15.9	376	52.6	4.0
Gedo	4,470	37.8	1.6	-	10.5	540	19.4	2.2
Bay	4,120	244.4	-	12.3	5.4	377	46.7	4.3
Bakool	2,630	38.9	-	-	-	-	-	-
Total	63,060	773.2	92.4	84.1	256.4	12,561	27.1	3.3

- a. Cultivated land is distinguished from cropped land in that it includes arable land, perennial crops, and fallow land.
- b. Includes land irrigated by pump irrigation, and controlled and uncontrolled gravity irrigation.
- c. Cultivated area divided by total number of farms (MOA, 1987, p. 5), registered and unregistered.
- d. Includes the districts of Togdheer, Sanaag, Sool, Bari, Nugaal, Mudung, Galgaduud.
- e. Includes the districts of Togdheer, Sanaag, Sool, Bari, Nugaal, Mudung, Galgaduud.

Source: Ministry of Agriculture, Department of Planning and Statistics, "Yearbook of Agricultural Statistics 1986/87", Mogadishu, 1987.

Somalia's total land area, and 39.3 percent of land area cultivated. Registration has been most active in the river valleys, particularly on irrigable lands. Over 75 percent of all registered land is irrigable. Districts along the middle and lower Shabelli river, representing the most accessible and commercially developed areas, have 2.7 to 5.3 percent of total land registered.

Registered farms tend to be large units, usually with state or cooperative affiliation. Leaseholds averaged 27 hectares per farm nationally in 1986 compared with an average of 3 hectares for all farms, registered and unregistered. Registered farms along the Shabelli are in excess of 40 hectares. Fadal et al. (1985), using MOA data, estimate that 18 percent of registered areas in 1984 were controlled by state farms, 5 percent by the Crash Programs, 7 percent by resettlement schemes, 19 percent by Cooperatives, 5 percent by medium scale private farms (20 to 200 ha.), and 46 percent by small scale farms. Medium scale private farms, mostly banana plantations, are probably the most productive as Somal-fruit provides the necessary inputs and marketing for banana production.

The Land Law and Cooperative Development Law have provided urban based speculators with the institutional credibility to procure land (Gunn, 1986). A large number of companies applied for leaseholds on unregistered irrigated lands immediately after liberalization. While establishment of state and cooperative farms increased the area under corporate agriculture, it is questionable whether it contributed to an expansion of cropped area. Since the most fertile areas were already settled, the establishment of state and cooperative farms on the best land probably resulted in the transfer of land rights from existing landholders to new leaseholders. Small farmers, lacking in financial resources, unfamiliar with land registration procedures, or

unaware that their customary rights were no longer valid, frequently found themselves displaced by corporate agriculture. State farms have displaced small farmers from their lands in the lower Jubba (Riddell, 1987).

However, state and cooperative structures now appear to be declining. Despite preferential access to machinery, fertilizer, seed and labor, state farms have not demonstrated greater efficiency (Hoben et al. 1983). Roth et al. (1987) observed state and cooperative farms that were under-capitalized, severely lacking in human and technical resources, and poorly managed. Most of the land in Crash programs and some of the land in resettlement areas and cooperatives have now been redistributed to private farmers.

Land Tenure in the Lower Shabelli

The Shalambood research site (SRS) consists of a rectangular 8,500 hectare area on the lower Shabelli river at the heart of Somalia's most important food and export crop producing region. The Genale dam, constructed by the Italians in 1926, rests at one corner of the scheme. The town of Shalambood, with a population of 22,240, is located on the opposite corner. Enclosed within these boundaries are 63 formerly Italian-owned *aziendas*. Since the departure of the Italians, landholdings have been transferred to small holders, state owned farms, state cooperatives, or large private farms. Irrigation water for the scheme comes from the Genale barrage. Water is distributed by gravity flow through a web of primary, secondary, and tertiary canals.

LTC, with funding from USAID, began research in the area in January 1987. The interim results presented here are based on a land tenure profile of the area, and a pilot study of 56 smallholders. The research methodology included a formal questionnaire to elicit responses from a randomly selected

sample of small farmers, and key-informant interviews. Detailed findings from this research are reported in Roth et al. (1987).

Land Concentration

Land distribution is skewed towards large state, cooperative and private farms (Table 2). Independent smallholders control 20 percent of land resources, agricultural cooperatives control 14 percent, large group cooperatives make up 14 percent, Crash program farms represent 26 percent, state farms control 10 percent, and large private farms (in excess of 30 hectares) make up 16 percent. Large private farms, including one farm belonging to the Palestinian Liberation Organization, range in size from 30 to 300 hectares, with average land holdings of 96 hectares/farm. Group cooperatives average 240 hectares, and state farms, 218 hectares. Small farmer holdings, including independent farmers and members in agricultural cooperatives, average 1.0 to 1.3 hectares.

The term cooperative, implying a group of individuals taking collective action on input procurements, selling, or cropping decisions, is misleading in the SRS context. The National Petroleum Cooperative operates as a firm without members. Profits go to the National Union of Cooperatives (NUC). The Charcoal Cooperative operates as a limited partnership. Its 114 members invested equal contributions of capital to finance the development of the farm. Profits are shared equally with a fixed percentage going to the NUC. The Public Transport and Building Cooperative also operates as a limited partnership formed by members of the building and trade professions. Starting with 1000 hectares, the cooperative has shrunk to 50 hectares due to inadequate capital. The remaining land was transferred to the Ispahaysi agricultural cooperative.

Table 2: Number of Farms and Area, Land Controlling Institutions, Shalambood Study Area

	Number of Farms	Total Area Controlled	Avg. Area Per Farm
	farms	ha.	ha./farm
1. Independent Smallholders^a			
Surveyed Areas with Complete Data	1,386	1,390	1.0
Areas with Incomplete Farm Data		290	
2. Smallholder Ag. Cooperatives			
Ispahaysi Cooperative	800	950	1.2
Dayax Cooperative	48	60	1.3
Matrico Cooperative	159	158	1.0
3. Large Group Cooperatives			
National Petroleum Cooperative	2	690	
Charcoal Cooperative	2	458	
Building and Public Transport Coop.	1	50	
Sample Average			239.6
4. Crash Program Areas		- 2,285	
5. State Farms			
AFMET Demonstration Farm	1	400	
Kamiro, MOA Ag. Strengthening Farm	1	100	
Prison Farm	1	310	
Police Farm	1	60	
Sample Average			217.5
6. Large Private Farms	14	1,342	95.9
7. Total		8,543	

a. 'Surveyed' means that area data were verified by either LTC (1987), TAMS (1986), or McGowan et al. (1986). Remaining areas were inferred from maps of the area, but number of farms are unknown.

Source: Roth et. al. "An Analysis of Land Tenure and Water Allocation Issues in the Shalambood Irrigation Zone, Somalia," 1987.

Agricultural cooperatives are distinguished from other institutions by their small farmer membership. Cooperatives are mandated to assist smallholders with fertilizers, pesticides, seeds, and mechanized services. But lack of capital severely constrains the amount of inputs provided. Cooperatives (i.e., management) maintain that land, registered in the name of the cooperative, is owned by the cooperative, not by the member farmers. Farmers with cooperative land have security against outsiders' claims, and are spared the costs and inconveniences of individual registration. However, farmers prefer individual leaseholds, due to the possibility, however slight, of being expelled from the cooperative.

Large commercial farms, state and private, normally give land to permanent and seasonal farm laborers for personal use. Although laborers lack individual leasehold rights, evictions are rare. The fact that land-giving is so prevalent suggests that plantations are willing to pay a high premium to recruit and keep good workers. While payments vary from farm to farm, farm laborers receive between 0.25 to 1.0 ha. on average. Based on this estimate, 15.6 percent of the 3,410 ha. held by large commercial farms are cultivated for personal use by the farms' laborers.

Smallholder Land Tenure

Smallholders in the LTC sample include both individual landholders and those from the agricultural cooperatives. Land holdings average 2.2 hectares (Table 3), about twice the average for the SRS (Table 2). Land holdings are fairly uniform, although women tend to hold fewer parcels and less land. Despite the Land Law's restrictions of one parcel per household, multiple parcel ownership is common. Twenty-five percent of farm respondents held 2 parcels of land, while 7 percent had 3 or more parcels. Multiple parcel

Table 3: Land Tenure Characteristics, LTC Smallholder Sample, 1987

	Male Respondents	Female Respondents	Total Sample
1. Number of Respondents	44	12	56
2. Total Family Size	9.0	6.5	8.3
3. Farm Size Distribution (farms): ^a			
0.0 to 0.99 ha.	6 (13.6)	5 (41.7)	11 (19.6)
1.0 to 1.99 ha.	19 (43.2)	6 (50.0)	25 (44.6)
2.0 to 4.99 ha.	11 (25.0)	1 (8.3)	12 (21.4)
5.0 plus	8 (18.2)	0 (0.0)	8 (14.3)
4. Mean Average Farm Size (hectares)	2.61	0.87	2.24
5. Number of Farms with: ^a			
1 parcel	27 (61.4)	11 (91.7)	38 (67.9)
2 parcels	13 (29.5)	1 (8.3)	14 (25.0)
3 or more parcels	4 (9.1)	0 (0.0)	4 (7.1)
Average Parcels per Household	1.5	1.2	1.4
6. Average years parcel has been held ^b	18.2	13.8	16.0
7. Main parcel was acquired by: ^{a, b}			
Inheritance	6 (13.6)	4 (33.4)	10 (17.9)
Settled from unclaimed land	8 (18.2)	3 (25.0)	11 (19.6)
Bought	5 (11.4)	1 (8.3)	6 (10.7)
Allocated by govt. following failure of Crash program	4 (9.1)	3 (25.0)	7 (12.5)
Allocated by Govt after departure of Italian owners	21 (47.7)	1 (8.3)	22 (39.3)

a. Figures in parentheses are percentages of total respondents in each category.

b. Figures for parcel acquisition refer to the main parcel only, thus data may underestimate the incidence of acquisition by transactions.

Source: Roth et al. "An Analysis of Land Tenure and Water Allocation Issues in the Shalamood Irrigation Zone, Somalia," 1987.

ownership can be attributed to three factors: 1) land fragmentation has reduced land holdings to below subsistence needs, requiring land acquisition; 2) farmers have 2 or more parcels along several canals, as part of a risk management strategy, to ensure access to scarce water supplies; and 3) land inheritance.

Restrictions on multiple parcels in the Land Law appear to be aimed at curbing land fragmentation and excessive land accumulation. While fragmentation is problematic, there is no empirical evidence in the SRS context that productivity has declined as a result. Worries about land accumulation are unfounded. With an average of 2.2 hectares and 1.4 parcels, farm sizes are considerably below the 30 hectare ceiling imposed by law.

Farmers are very reluctant to disclose parcel information. Subsequent LTC research has revealed that at least half the farmers interviewed lie about the number of parcels they hold. Substantial welfare losses can result if multiple parcels are disclosed and enforcement of Land Laws leads to state reallocation of surplus parcels. Farmers are faced with a dilemma. Not registering land can result in loss of land to outsiders seeking leaseholds. Conversely, for farmers seeking to register one parcel, officials may learn during the registration process of other parcels held. Some farmers circumvent this restriction by registering land in other family member names.

Land Transactions

The Land Law bans all transactions in land, vesting the state with full authority for land allocation. Arguments that these provisions help curb land speculation and private land concentration have some merit, but such restrictions also impose economic inefficiencies. A transition occurs in the household economy, from buying and renting-in of land during early stages of

the household cycle when the family is growing, to land sales and renting-out in the tertiary stages when the family is maturing. Land transactions may increase allocative efficiency in three ways: (a) by facilitating access to land resources; (b) by increasing the mobility of land resources from labor scarce to labor abundant households to meet seasonal and annual land needs; and (c) by permitting the transfer of resources from less efficient to more efficient households. Points (a) and (b) are discussed here.

Access to land resources in the SRS is characterized by long standing land settlement (Table 3). Nearly 45 percent of the sample had cultivated their main parcel for 20 or more years; the sample average is 16.0 years. Of the 56 respondents in the survey, 18 percent acquired their main parcel through inheritance, 20 percent claimed land from unused areas, 11 percent bought the parcel, 13 percent were allocated the land after the failure of the Crash program, and 39 percent had been allocated the land by the government after the Italians had left (Table 3).

Although some farmers admit to renting, purchasing and selling land, there is no way of knowing precisely the extent of land transactions among families, neighbors and friends. Land sales are universally acknowledged to take place in the SRS. LTC survey results show that 13 percent of respondents had at some time acquired land through direct purchases. One land sale was reported (Table 4). Results also show that none of the respondents in the sample said they rented-out land in 1986, although 4 farmers rented-in land. Since land disputes often stem from rental arrangements, farmers are reluctant to fully disclose their transactions in land.

As demand for land resources has grown, land access has become more restrictive for farmers and their children. All unused areas of the scheme are now claimed. Permanent cropping is pervasive. Farmers would like to buy

Table 4: Land Transactions, LTC Smallholder Sample, 1987

	Male Respondents		Female Respondents		Total Respondents	
	(n)	(%)	(n)	(%)	(n)	(%)
1. Number of respondents who have ever bought land ^b	6	(13.6)	1	(8.3)	7	(12.5)
2. Why was land bought ^a :						
a) Land was good investment	6	(100.0)	0	(0.0)	6	(85.7)
b) Wanted better quality land	0	(0.0)	0	(0.0)	0	(0.0)
c) Wanted to control own farm	0	(0.0)	0	(0.0)	0	(0.0)
d) Previous land was inadequate to meet family food needs	0	(0.0)	0	(0.0)	0	(0.0)
e) not able to respond	0	(0.0)	1	(100.0)	1	(14.3)
3. Number of respondents who have ever sold or given away land ^b	1		0		1	(1.8)
4. Number of respondents ^b renting-out land:	0		0		0	(0.0)
5. Number of respondents ^b renting-in land:	3		1		4	(7.1)
Terms: Number paying cash	3		1		4	(7.1)
Number paying in-kind	0		0		0	(0.0)

a. Values in parentheses indicate percent of those who bought land.

b. Values in parentheses indicate percent of total number of farmers surveyed (56).

Source: Roth et al. "An Analysis of Land Tenure and Water Allocation Issues in the Shalambod Irrigation Zone, Somalia," 1987.

land, but according to one farmer, land prices have soared, rising from SoSh 2,000/ha. of land 10 years ago, to SoSh 60,000 today (SoSh 100 = \$1). In such an inflationary environment, it is not surprising that of 6 out of the 7 respondents who had ever bought land, did so because it was a good investment (Table 4). Children are reportedly unable to find land, and some farmers are selling land to return to nomadic life.

Tenure Security

Unregistered land is more often involved in disputes than registered land, and disputes over ownership rights are more preponderant than boundary disputes. While only 9 percent of farmers in the sample reported ever having had any form of land dispute, 25 percent of all farmers perceive that land disputes are becoming more common in the SRS. The most serious land disputes are in frontier areas.

Land disputes normally originate from three sources. One, disputes frequently arise from rental arrangements in which a renter refuses to hand back unregistered land to the rightful landholder at the end of the rental term. Since idle land is perceived to be unproductive and/or not needed by the landholder, the provision in the Land Law that bans both land transactions and leaving land idle increases the risk of renting-out land. Farmers are particularly wary of renting-out for periods longer than a year, perceiving that the risk of losing the land increases with the rental term.

Two, disputes arise as a result of legal provisions declaring that land left unused for 2 years is considered abandoned. While Riddell (1986) maintains that this provision will reduce land speculation by absentee investors, Gunn (1986) questions the adverse impacts of such policies on

fragile soils due to permanent cropping. Arid zone farming requires fallow, in the absence of manure or fertilizers, to maintain fertility. Unless 'land use' is redefined to encompass fallow and fodder crops, long term dependence on costly inputs or a decline in agricultural productivity is imminent.

A third class of disputes involves official documents issued in Mogadishu that either assign leaseholds directly to individuals, or serve as directives to regional officials to locate unregistered land for someone. Long term land holders are being displaced from their lands by urban land speculators acting individually or as part of a group cooperative. Local small farmer representatives rank land grabbing the most serious problem small farmers face, even above irrigation issues.

Tenure insecurity is a more serious concern on more productive lands, usually those with better access to irrigation water. In a scheme where all lands are reached by irrigation canals, 11 percent of respondents received no irrigations, 46 percent received one irrigation, 35 percent received two or more irrigations, while 9 percent did not cultivate in the 1987 Gu (heavy rains) season. In the 1987 Deyr (light rains) season, 53 percent of the farmers received no irrigations (and could not plant), 40 percent received one irrigation and 7 percent received 2 or more irrigations. Substantial disparities in yields exist between parcels with good and poor access to irrigation water. Maize yields on land receiving 2 or more irrigations during the 1985 Gu season averaged 13.6 quintals/ha., compared with 7.0 quintals/ha. on land with one irrigation or less.

The largest farms, usually registered, have land closest to the primary canal with the best access to water. Since water is free by Islamic custom, these farms use as much as they wish, operating near or at the top of the yield response function to water. Small land holders with farms on the

month, there is an incentive for civil servants to extract a portion of the high economic rent associated with leasehold title.

Conclusions

Government intervention and donor programs are forcing tremendous structural change on the Somali economy. At the same time, high price inflation, a burgeoning class of civil servants, high real rates of return in crop agriculture, the collapse of financial institutions, and low rates of return in non-agricultural sectors are increasing the demand for land.

Irrigation development on the Shabelli is rapidly reaching full potential. Land reforms have resulted in higher land concentration ratios and have led to land speculation and tenure insecurity. Although the Land Law has been successful in increasing the amount of area under cultivation, low capital-land ratios and low productivity still persist.

The Land Law, despite its best intentions, has alienated farmers from their lands, and left them with little legal recourse for securing their tenure rights. Some farmers have not registered their lands because land resources do not merit leasehold title, or the modern world and formal tenure has not yet encroached on the domain of customary tenure. Others have not sought formal title because costs are high, procedures are too time consuming, or multiple parcels restrict registration.

For Somalia, running a system of land registry offices at district, regional and national levels imposes high recurrent costs on its budget and strains the efficacy of its skilled manpower. Compliance with land registration programs is thus voluntary, relying on individual participation to bear the high costs of implementation.

Land grabbing and land disputes cannot be ignored. In part, the Land Law must be faulted for encouraging land grabbing to take place. While farmers in rural areas perceive the process of acquiring formal land tenure as too bureaucratic and cumbersome, procedures are easier for urban land seekers who are more accustomed to bureaucracy and wealthy farmers who are better able to pay expenses. These groups have been able to legally acquire registered land in prime agricultural areas under the auspices of progressive reform. Policy makers must be faulted for not foreseeing the land conflicts that would arise, and for not clearly specifying the intent of the MOA to recognize legal rights based on long term land use. Concerning this, one positive development has taken in place in 1988. Official memoranda have been passed recognizing the importance of smallholder registration. The MOA has pushed for registration of smallholder lands as a condition precedent to construction contracts under a USAID funded irrigation project.

Does land legislation provide the necessary legal criteria for sound land use planning? Modernization has entailed significant economic and social costs in terms of resource dislocation. Land restrictions on number of parcels overly constrain formal land holdings of private individuals. Only one leasehold is allowed and for smallholders this is an onerous restriction. The law imposes restrictions on land transfers, mortgaging, and use rights. It provides disincentives for cultivating fodder and fallow crops while encouraging permanent cultivation and deforestation. The law does not accommodate property rights issues on range land; nor does it allow for land reserve, either for parks or conservation. The number of concerns raised here, and the economic and structural changes taking place in Somalia today, indicates that the time may now be right for a reform of land policy and land legislation.

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Annex 1: Key Provisions of the Somalian 1975 Agricultural Land Law.

- I. Mandatory Registration: Articles 5 and 19 of the 1975 Land Law make land registration compulsory. Permission to use land, that is not registered, ceases six months following implementation of the Law.
- II. Duration of Title: Usufructuary (leasehold) rights to land are granted to users by the State on the basis of variable-term leases which vary in length and degree of restrictiveness depending on whether the lessee is an individual, family, or corporate body. Leasehold titles for individuals or families are 50 years in duration and renewable. Titles for cooperatives, state farms or other autonomous agencies have no time limits imposed on the duration of the lease (Article 7).
- III. Parcel Restrictions: An individual or family may obtain only one leasehold title irrespective of farm size; granting of leasehold titles to absentee persons is prohibited (Article 6).
- IV. Land Area: Land ceilings on leaseholds are 30 hectares of irrigated land or 60 hectares of rainfed land for individuals or families. Special provisions allow this ceiling to be raised to 100 ha. for banana plantations leased by a family or individual. Cooperatives, local government bodies, state farms, autonomous agencies and private companies are excluded from these size restrictions (Article 8).
- V. Land Transactions: Registered leaseholds cannot be leased, sold or otherwise transferred to other parties, although the law provides for right of transfer to the state or heirs in the case where the lease holder becomes unable to farm the land for health or other reasons (Article 12). Title is allowed to transfer to rightful heirs upon the death of the leaseholder. If the heirs do not wish to farm the land, it may be redistributed by the state, with the heirs receiving compensation from the new holders based on the costs of investments that may have been made in the land, not the land per se.
- VI. Use Rights: The lessee has the right to: use the land for agricultural purposes; construct farm houses for the purpose of managing the farm; keep a reasonable number of livestock on the farm, and construct necessary facilities for rearing of the livestock; join a cooperative society, and contribute land to a cooperative society.

Annex 1: Continued

VII. Responsibilities of the Land holder: Provisions in Article 14 require the lessee (a) not to use the land for any purpose other than for what it was allocated (i.e., for agricultural purposes); (b) to cultivate the land in the best possible manner, to raise fertility, and to achieve the highest possible yields; (c) not to transfer, mortgage, sell, lease or in any way transfer the land to another party; (d) not to unnecessarily fragment the land; (e) to fairly compensate employees; (f) to pay the land tax levied by the government.

VIII. State Nationalization: The State reserves the right to nationalize lands in excess of the area restrictions in Article 8, and to repossess land of a current user who fails to meet the conditions set forth on a lease, or fails to cultivate the land for a successive two year period (Article 15). Article 10 establishes public domain rights of the state to nationalize lands for the public good. The state, by Article 11, has the right to allocate nationalized lands to landless individuals, cooperatives, state farms or other autonomous agencies.

Law No. 23 of 1976 reemphasized certain provisions in the law regarding agricultural land:

IX. National and Special Agencies: Land controlled by National agencies (presumably state farms) are not bound by size restrictions imposed by the 1975 Law. "Special Agencies", defined as agencies in which the Government is part owner, may have size restrictions imposed by the Minister of Agriculture.

X. Repossession/Nationalization of land: Any land that is not used for farming or livestock rearing for a period of two years will be given to someone else. Repossessed lands will be reallocated to those persons (a) who are adult and Somali by birth; (b) who have no other agricultural land; and (c) who have the economic capacity to pay compensation to the previous owner.

XI. Taxes: Tax rates are S.Sh. 5 (\$0.05) per hectare per year of rainfed lands, and S.Sh. 10 (\$0.10) per hectare per year of irrigated land. Tax revenues go to the municipal treasury.

Source: This section is summarized from a translation of the Somali Land Law, translated by Belleh, Abdirahman, trans. "Somali Legislation Relating to Land." Madison: Land Tenure Center, University of Wisconsin, February 1985.