

# **EMERGING INFORMAL RENTAL LAND MARKETS: A QUEST FOR EQUITABLE BUT EFFICIENT TENURE SYSTEMS<sup>1</sup>**

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## **INTRODUCTION**

This paper is motivated by the need for an informed analytical discussion on land issues and policy options. “There is a danger that if a process of learning and policy dialogue on land tenure issues is not started soon, Ethiopia, like a number of other African countries, will adopt ‘ready made’ land tenure reforms that are based on ideological considerations and misconceptions about current problems” (Bruce, Hoben and Rahmato, 1994). This paper shares this view (or, warning) and follows it as a guiding principle.

The current debates on rural land policies are influenced by three prevailing thoughts (or, arguments). First, there is a great fear that opening up land markets provides inroads for involuntary dispossession of land from “poor and vulnerable” peasants and increased concentration of land. Protecting the “poor and vulnerable” peasants is the dominant political thinking that has shaped the prevailing land policy, as it is enshrined in the country’s constitution.

Second, there is a “safety net” type of argument that reinforces the justification for control of land by the state. It is assumed that a provision of a minimum guaranteed access to land is necessary to ensure the food security of peasant households. Every eligible farm household is thus entitled to a minimum size of land, regardless of its ability to cultivate. Such entitlement right potentially conflicts with growing demand for efficient productive use of land, especially in areas where there is scarcity of arable land.

The third perspective is centered on search for market-based land tenure system. Here the importance of land as a key economic input is recognized. The main objective is to search for “equitable but efficient” land tenure arrangements that promote land access to efficient farmers and provide incentives for efficient use of land so that the goal of productivity growth is pursued with low economic and environmental costs. With farmers increasingly engaged in market-mediated land transactions, albeit thin and fragmented, the quest is for market-mediated equitable but efficient tenure arrangements.

The thrust of this short paper is to describe briefly these nascent but growing rural rental land markets in Ethiopia. The discussion focuses on recent empirical evidence on some of the salient features of these markets. It first introduces briefly the different venue for acquiring agricultural land. It then establishes the rationale for transacting in rental land markets and the factors affecting participation both on demand and supply sides of these markets. This is followed by discussion of the different types of rental contracts that exist and their characteristics. It then traces the effect of these rental markets on area of land operated, factor intensity, adoption of new production technology, investment in land improvement, and agricultural productivity. Furthermore, the current evidence on correlation between these markets and welfare outcome, especially poverty, is reviewed. Finally, the paper concludes with a summary of the key findings and lessons for future research and policy.

## **EMERGING INFORMAL RENTAL LAND MARKETS**

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The land reform of 1975 and the subsequent constitutions of the country (1987, 1995) bestow the right of land ownership to the state. As of 1997, the rights to set and enforce rules governing land access, use and transfer are divided between the federal and regional governments. Qualified farmers have open-ended usufruct rights to land through state mandated peasant associations (PA-land)<sup>2</sup>. These use rights are inheritable. They are also tradable in form of rent in some of the regions. Farmers forfeit these use and transfer rights if they are unable to cultivate their land continuously and/or fail to comply with physical residency requirement.

The process of PA-based land allocation is largely driven by “equity” consideration where every eligible farm-household is provided land, subject to PA specific allocation criteria. The common practice is to allocate land in relation to number of household members so that equal sized households have equal sized PA-land. Other factors such as quality of land, size of family workforce and ownership of farm assets, which have substantial influence on ability to use land, are not given as much emphasis as family size. Hence, there are farmers who hold equal size of PA-land per household, but with significant variations in factor intensity, such as land per adult labor, land per oxen, and land per working capital.

While PA-based land allocation has been the principal venue for land acquisition, access to land through inheritance and informal rental land markets is gaining importance. There are four factors contributing to such development. First, the ability of the peasant associations to accommodate continuous demand for land is diminishing, as evident from the growing number of farmers with no PA-land, especially among the newly formed young farm households. Second, the technical ability of peasant associations to anticipate and correct changes in factor proportions at farm level is limited. Third, the policy changes that have been instituted since 1989, which include the rights to use hired labor, bequeath use rights to land, and rent land, have created enabling environment and incentive for growth of non-PA based venues for land acquisition. Fourth, farmers who participate in rental land markets are able to combine rental land contracts with other factor markets (e.g. labor, oxen, credit) and overcome problems associated with missing or incomplete factor markets.

Informal rental land markets are thus emerging in rural Ethiopia in response to the inadequacies of the administratively based land distribution system to meet the growing demand for land and correct imbalances in factor proportions at farm level. The current evidence indicates as many as 15-30 percent of farm households in different parts of the country transact land through these markets (Gebremedhin, 1998; Kidanu and Alemu, 1994; Kaba, 1994; Habtu, 1994; Gavian and Teklu, 1996; Sandford and Sandford, 1994; Chekun, 1994). And they are thriving in some regions, particularly in areas with developed market infrastructure and commercialization of agriculture (Haile-Gabriel, 2000).

All the farmers participating in these informal rental markets share the common objectives of increasing production and income, and thereby improving their welfare status. But the reasons for participation are varied. For farmers with no access to either PA-land or parental land, the motivation to participate is simple. It is to acquire land to cultivate. For the majority of the transacting farmers, however, the need to balance factors of production (for example, land, labor, oxen and cash), increase factor intensity and increase production are the primary motivating factors.

Because other factor markets are missing or incomplete, farmers also use the land markets as substitute for missing or incomplete factor markets, such as access to credit. Thus, farmers who are short in oxen lease out land in exchange. Or, farmers who are constrained to get access to credit lease out land as part of the contractual arrangement. Similarly, farmers who seek

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<sup>2</sup> As of 1997, through Kebele Administration.

guaranteed labor during peak farm season engage in share tenancy to ensure timely availability of labor. By tying together these transactions in share tenancy contracts, these informal land markets provide a vehicle to overcome imbalances in factor proportions at farm level

On the demand side of these markets are mainly land-constrained farmers with relatively abundant family labor. Some of these farmers have no PA-land, especially the newly formed young households. Those farmers with demonstrated farming experience and established reputation of trustworthiness are able to acquire land through informal rental land markets (Amare, 1995; Abate, 1995; Habtu, 1995). The better off land-constrained farmers, who have labor, oxen and cash, either purchase land or rent-in land for cash or engage in tenancy arrangement at favorable terms. These farmers in particular do not fit into the typical profile of tenant farmers, who are commonly considered to fall in the middle of the “wage labor-tenant-own operator” social ladder. Both of these categories of farmers rarely hire out their labor. Labor selling is more prevalent among poor landless farm households with no parental support and who are unable to acquire rental land.

The regression estimates in Gebeyehu (1992) show that the decision whether to rent-in land or not (i.e. the decision to assume partial or full tenancy) is related positively with size of drought animals and household wealth, and negatively with size of officially allocated land, better quality land, average age of male household members who are at least 14 years old and female-headship. These coefficients suggest that young families, particularly male-headed, who are land-constrained but possess drought animals and other wealth are more likely to rent in land.

On the supply side, there are land abundant farm households (i.e., PA-land relative to their family labor or oxen or credit). But all land abundant farmers are not engaged in leasing out land. It is the land abundant (relative to their labor, oxen and access to credit) but poor households who often lease out land. These farmers cannot afford to hire in labor and/or oxen. Instead they share out their land in exchange for land and/or oxen or hire in labor to be paid in share of output. They are also financially constrained and often seek credit to meet their obligations including food consumption. They either rent-out land for cash or mortgage land for credit or include cash deposit as a requirement for tenants to access their land. These farmers are not the commonly understood “landlords” who are commonly associated with economic and social power. These include the poor, female-and elderly-headed households that rent out land due to necessity (Amare, 1995; Haile-Gabriel, 2000).

The results of a recent empirical analysis based on survey data from southern Ethiopia show that decision to lease out land is influenced mainly by household demographic and initial factor endowments (Teklu and Lemi 2001). Within the survey villages, farmers with more PA-land relative to their own labor or traction power tend to lease out land. They often lease out lower quality land. Increase in number of family members is associated with increase in leasing out land. But increase in adult members and improvement in adult nutritional conditions affect negatively the propensity to participate and shared out land. Female headed households, more than male headed households, share out land, especially the poor, because of their limited physical and managerial capacity to farm, shortage of assets, and constrained access to credit market. Ownership of assets, which functions as source of traction power and wealth, lowers the likelihood and extent of sharing out land.

Farmers transacting in these rental markets enter into different types of informally arranged rental contracts (fixed cash, share tenancy, borrowing). By far the major type of contract is a crop sharing arrangement (Kidanu and Alemu, 1994; Habtu, 1994; Abate, 1994; Kebede and Croppensedt, 1995). Share tenancy is prevalent in most parts of the country. It is more common among farmers who live in same locality and whose knowledge of farming experience and trustworthiness of fellow farmers is strong.

There are two modes of share arrangements. One is where the landholder provides land and the tenant contributes labor and other variable inputs, farm jointly, and share output according to mutually agreed formula. Such arrangement provides a legal cover in areas where farmers fear open land transaction and chose to disguise as labor hiring since the latter is legally permitted. The second modality is a more explicit land transaction where the tenant has a control (partial or full) over the rental land subject to commonly agreed rules and conditions.

Next in importance to crop sharing is fixed cash or fixed output rental. While it co-exists with share rental within the same localities, its incidence tends to be high in areas where rural road infrastructure and markets are better developed and agricultural production is commercialized, especially among cash producers (Gavian and Teklu, 1996; Haile-Gabriel, 2000; Bruce et al, 1994). Cash rental contract is common where the contractors who rent in land are either non-residents or recent immigrants. Unlike share contracts that are mostly orally arranged, cash rentals are mostly based on written agreements.

The contracts are short-term and rarely exceed more than two crop seasons. Where there are rare cases of long-term cash rental, these may be disguised land sale (Bruce et al, 1994). The rental rates are negotiated and vary depending on fertility of soil, scarcity of land, and resource endowment position of farmers including their financial status (Abate, 1994, Bruce et al, 1994, Haile-Gabriel, 2000). Rental rate is directly correlated with quality of land. Where arable land is scarce, farmers, who lease out land, tend to reduce their input share, and demand for cash deposit and greater output. Because these markets are thin and fragmented, rental rates are geographically localized and contingent on economic status of transacting households. Although land is generally scarce in rural Ethiopia, the rental markets are largely buyers' markets since the landholders who supply these markets are largely from economically weak segments of the population.

Why these informal contracts co-exist within same locality cannot be fully substantiated from existing empirical evidence. There are two forces that appear to influence the choice of contracts: transactions costs and risk attitude. The greater preference for sharecropping among farmers with long established social interaction suggests the costs for monitoring and enforcement of share contract are small compared to fixed rental arrangement. And to the extent these farmers are risk averse, share contract provides a vehicle to pool and share risks. But as costs of transaction rise, farmers tend to shift towards fixed cash rental, especially among farmers with little social interaction. Farmers who lease out land shift uncertainty in production to farmers who lease in land, especially if these are non-resident farmers.

The emerging land markets, while still in its infancy, appear to provide the venue for equalizing factor proportions at farm level through trade (Gavian and Teklu, 1996; Gavian and Ehui, 1999; Kebede and Croppensedt, 1995). The works of Gavian and Teklu (1996) and Gavian and Ehui (1999) in particular contrasts factor intensity between cash rental, share tenancy and PA-allocated land. There comparisons show little variation in factor intensity by tenure type, especially the ratio of land to labor. Since other factors that influence factor intensity such as initial factor endowments are not fully controlled, their conclusion is, however, tentative. It is plausible that the Marshallian prediction of undersupply of tenant labor effort in share tenancy is not as strong in Ethiopian environment where there is an apparent self-selection among farmers who choose share tenancy. Farmers with long farming experience and ability to supervise labor often choose share tenancy, especially in communities where they have knowledge of farming and trustworthiness of their fellow farmers.

Such equalization process permits farmers to effectively utilize their limiting factor. In the case of land constrained households, for example, they are able to get more land to fully utilize their labor. The most illustrative case is that of the households with no PA-land but manages to get

access to land through informal markets and have a positive ratio of land to labor. Even those who share out land are better off since the land that otherwise would not be cultivated is put into operation and benefit through output sharing. These farm households are thus in a better situation since they are able to improve their income position.

Transactions in informal land markets tend to contribute towards equality in size distribution of land area operated (Teklu and Tadesse, 2000). First, farmers who otherwise would not have access to land do have access and able to operate. There are thus more with access to land at lower end of the distribution. Second, the process of equalization of land holdings meant farmers with large initial landholdings (pre-transaction) transfer land to those with lower holdings. Third, the short-term nature of land transactions precludes farmers from accumulating land and widening disparity in land holdings in Ethiopia.

Land held under these short-term rental land contracts is rarely used to grow permanent crops (Chekun, 1994; Kebede and Croppensedt 1995; Sandford and Sandford, 1994). Application of improved or new technology such as chemical fertilizers is sparse and low in intensity. Farmers invest little in on-site land conservation and improvement since the probability of capturing future benefit from current investment is low (Gebre-Medhin, 1998; Amare Teklu, 1998).

The productivity gap between farms held under different tenure arrangements (PA-land, fixed cash, share tenancy) is small (Gebeyehu, 1990; Gavian and Ehui, 1999). Gavian and Ehui (1999), for example, found a smaller total factor productivity (TFP) gap of 10 to 13 percent on land held under fixed rental and share contract, as compared with PA-land. These small differences in productivity gap are not related to differences in factor intensity including purchased technical inputs such as chemical fertilizers. Tenant farmers tend to be slightly inefficient, particularly among the most efficient group of farmers (Gebeyehu, 1999). The reasons for lower technical efficiency are not found in differences in education, market participation and non-farm assets between tenant farmers and “own-operators” (Croppenstedt and Mammo, 1996; Gebeyehu, 1990). Gavian and Ehui (1999) ascribe the sources of differences in technical efficiency to youth, low farm experience and knowledge, and quality attributes of land of tenant farmers.

The effect of participation in informal rental land arrangements on welfare outcome (poverty, nutrition and health status) is seldom examined. The outcome depends on: (a) extent to which poor farmers have access to land; (b) increment in productivity associated with the increase in land; (c) rental terms affecting input and output shares; and (d) distribution of the gains in productivity between “tenant” and landholders who lease out land. The effect on poverty depends how these processes affect the land-constrained poor farmers who are on the demand side and land-abundant poor farmers who are on the supply side of the rental land markets.

The only study that deals with rental land markets and poverty is the work of Haile-Gabriel (2000). His thesis is based on a premise that the poor are the ones who lease or share out land. And, accordingly, the equalization process that occurs through the rental markets enhances the land to labor ratio of the non-poor at the cost of the poor. And, even more telling, is the disproportional flow of land from the poor to non-poor and the creation of what the author describes as the “superfluous” labor of the poor. He concludes that these rental land markets exacerbate unequal land distribution because of differences in initial farm resource endowments among the trading parties. The institutions of credit and oxen markets also provide the effective means for the rich to secure and accumulate more land at the expense of the poor.

Such strong conclusions, however, do not corroborate fully with the other studies referenced in this paper. Access to land is not limited only to the non-poor farmers. Some of the poor land-constrained farmers also gain access to land through the rental land markets. Second, farmers who transact in these markets are able to improve factor proportion at farm level. Even the poor land-abundant farmers would benefit from such transactions if the alternative were to leave their

land unused for lack of complementary inputs such as family labor and oxen. Third, there is no substantial loss in productivity because of differences due to tenure arrangements, particularly share tenancy. Hence, there is no substantial sacrifice in volume of output that is shared between the trading parties.

Farmers who participate in these markets are bound to improve their income position including the poor. However, the net income gain is likely to vary among the transacting farmers depending on their initial resource endowments (land, labor, oxen, access to credit), negotiated terms and conditions of contracts, production efficiency, and access to non-land input markets. Those who enter the rental land markets from low economic leverage or due to distress situation are liable to face high transactions costs and unfavorable terms of trade that lower the margin of their net income gain and their ability to cross poverty threshold. Some of these farmers are liable to downward income risk in time of unanticipated production failure. But the empirical evidence on distributive effect of rental land markets is thin and speculative.

### **CONCLUSIONS: LESSONS FOR FUTURE LAND POLICY**

There are important gains that have been achieved since the 1975 land reform. First, the complexity of land tenure systems is substantially simplified, as compared to the pre-1974 period. It is questionable, however, if the current level of homogeneity has a desirable mix of tenure arrangements, especially given the dominance of state-controlled land administration. Second, a large segment of the farm population is able to access and operate land, albeit diminishing size. Third, there is a broadening of the land distribution of the country by shifting the concentration of landholdings towards the middle and lower-sized farm categories. Fourth, there are incremental policy changes that broaden the use and transfer rights of the farm population such as the rights to transfer land to heirs, rent land, and get compensation for investment on land in case of transfer of land. The constitutionality of some of these expanded rights is questionable since the 1995 constitution still prohibits any transfer of land other than through state mandated institutions.

On the other hand, there are increasing number of small-sized farms. Some of these are uneconomic in size. There is a growing number of rural households with no access to government allocated land (“landless”). Insecurity of land and tree tenure militates the incentive to invest in land and grow perennial crops. The residence requirement for having and maintaining access to government allocated land distorts the migration process in rural areas. There is evidence of widespread breakdown in common property tenure arrangements such as common grazing and forestlands. Rahmato (2000) adds two more weakness in prevailing officially sanctioned tenure arrangements: (1) lack of legitimate institutions to ensure the rights of landholders, and (2) discriminatory practices in land distribution.

It is within the context of such state-controlled environment that rental land markets are emerging. There are positive and negative outcomes. These markets provide a venue for short-term land acquisition for landless farmers, especially for those with farm experience and established social ties within the village communities. Farmers trading in these markets tend to correct imbalances in factor proportions at farm level. These corrections occur regardless of tenure type. How much such transfer of land accrues to efficient farmers is still an empirical question. Transactions in these markets tend to reduce disparity in distribution of area of land operated, albeit short term. Productivity gaps between tenure types are small.

The most notable weakness in these markets is the absence of perennial crops on rental land. Since farmers operate on informally arranged short-term rental contracts, they have little incentive to take the risk of investing in land conservation and improvement. Use of improved production technology is also low. The evidence on effect of rental transactions on welfare

outcomes is thin and speculative. However, it is plausible that the welfare enhancing effect of rental land markets is constrained by underdevelopment of non-land factors such as labor, animals for traction and credit, and farmers' unequal access to these inputs.

These markets are bound to grow since an increasing number of farmers are already voting by showing their determination to trade in these markets despite restrictions imposed in the constitution. They provide a unique opportunity to learn and draw lessons for improving future land policy that emphasizes on searching for equitable but efficient tenure arrangements that are mediated through the market place. Mature and competitive land markets provide an effective mechanism to signal scarcity value of land, mediate land transfers to efficient farmers, and equalize factor proportions.

Public policy needs to recognize these chief functions of land markets and create the right environment and guide the process of market development. It has to be aware its role in facilitating the growth of these rental markets and strengthening their positive attributes – provision of land to farmers who seek to cultivate, equalization of factor of production at farm level, and narrowing disparity in landholdings. It has to strengthen in particular the production and welfare enhancing functions of these rental markets.

The broadening of transfer rights in some of the regions, which include the rights to bequeath and lease land, are in the right direction. These are consistent with the de facto practices of the farm population. With more choices of tenure arrangements, farmers are able to find alternatives venue to access land and correct imbalances in factor proportions at farm level. Providing a legal status to these informal contracts is an important step so that they operate in an environment where contracts are legal and enforceable. There is also a need to relax the current restrictions on mobility of labor so that farmers are able to transact land outside their residential boundaries.

Farmers are not secured with the land and trees they possess and express their preference to access land in perpetuity with right to transfer to their children. Providing secured and predictable tenure is essential to create incentives for farmers to adopt new technology and commit resources to invest in land. The current policy of freezing land redistribution provides only a temporary relief. Granting long-term tradable lease with the right to compensation in case of land transfer goes a long way.

When farmers and community leaders in Wello and north Shewa were asked what changes are necessary in future for sustainable adoption of soil conservation and afforestation innovation, the majority expressed the need to change the tenure situation, especially the need for secured land and tree tenure (Admassie, 2000). Most of these respondents proposed to “divide up the land equitably once and for all, handing it over to farmers in perpetuity with the right to pass it to their children”. They were, however, divided on how far the right of disposal of land should go; the majority favored full right including the right to sell and mortgage while the minority expressed the need to put a limit to the transferability of land. The ultimate preference of these farmers is private ownership of land. The challenge is how and how fast to get there. Different tenure arrangements along the whole state-private ownership continuum need to be explored instead of the on-going restrictive debate on choice of ownership.

Public policy has to also simultaneously address the development of incomplete non-land factor markets since farmers often engage in “distress” type of land transactions because of the absence of these markets. Part of the blame for distress type of land transaction lies not in rental land markets per se but in absence of these other markets. Farmers selling land at fair value that reflects its productive capacity need not be restricted. What is not desirable is the “distress” type of sale and accumulation for non-productive use. Understanding why farmers engage in latter type of transaction helps policy makers to apply corrective policy measures.

Finally public policy has to be guided by analytical empirical policy research that shows where policy changes are necessary to promote the goals of expanding access to land, enhancing production efficiency, and improving sustainable land use and management practices. The debate on land policy has to move out of the realm of political ideology and be guided by empirical based approach that finds equitable but efficient tenure system that is mediated through the market place. The challenge ahead is to strengthen these markets to pursue these goals.

## REFERENCES

Abate, Teferi, 1994. Land scarcity and landlessness in north Shewa: a case study from Wayu and Anget Mwegiya PA. In Dessalegn Rahmato (editor), Land tenure and land policy in Ethiopia after the Derg. Institute of Development Research, Addis Ababa University, Ethiopia.

Admassie, Yeraswork. 2000. Twenty Years to Nowhere: Property Rights, Land Management and Conservation in Ethiopia. New Jersey: The Red sea press, Inc.

Bruce, J.W., A. Hoben, D. Rahmato, 1994. After the Derg: an assessment of rural land tenure issues in Ethiopia. IDR.

Chekun, Tessema, 1994. Land tenure issues in high potential coffee growing areas: overview of south western Ethiopia (Keffa, Illubabor, Wollega). In Dessalegn Rahmato (editor), Land tenure and land policy in Ethiopia after the Derg. Institute of Development Research, Addis Ababa University, Ethiopia.

Croppenstedt, A., Abbi Mammo, 1996. An analysis of the extent and causes of technical efficiency of farmers growing cereals in Ethiopia: Evidence from three regions. Ethiopian Journal of Economics 5(1), 39-61.

Gavian, S. and Amare Teklu. 1996. Land tenure and farming practices: the case of Tiyo Woreda, Arsi, Ethiopia. In Mulat, D., Wolday, A., Tesfaye, Z., Solomon, B., and S. Ehui (editors), Sustainable intensification of agriculture in Ethiopia. Proceedings of the second conference of the agricultural economics society of Ethiopia, Addis Ababa, Ethiopia.

Gavian, S., Ehui, S., 1999. Measuring the production efficiency of alternative land tenure contracts in a mixed crop-livestock system in Ethiopia. Agricultural Economics 20, 37-49.

Gebeyehu, Worku, 1999. Technical efficiency of cereal producing farmers: A comparative analysis of own-operators and tenants. MSc. Thesis, Department of Economics, Addis Ababa university.

Gebremedhin, Berhanu, 1998. The economics of soil conservation investments in the Tigray region of Ethiopia. PhD Thesis, Michigan State University, Michigan, U.S.A.

Habtu, Yohannes, 1994. Land access and rural labor market constraints: a case study of northern Shewa. In Dessalegn Rahmato (editor), Land tenure and land policy in Ethiopia after the Derg. Institute of Development Research, Addis Ababa University, Ethiopia.

Haile Gabriel, Abebe, 2000. Development Strategies and Ethiopian Peasantry: Supply Response and Rural Differentiation, PhD Thesis, Institute of Social Studies, The Hague, The Netherlands.

Kaba, Mirgissa, 1994. Land tenure and resource management in a west Shewa Oromo Community. In Dessalegn Rahmato (editor), Land tenure and land policy in Ethiopia after the Derg. Institute of Development Research, Addis Ababa University, Ethiopia.

Kebede, Bereket and A. Croppenstedt, 1995. The nature of sharecropping in Ethiopia: some preliminary observations. In Dejene, A. and Mulat, D. (editors), Ethiopian agriculture: problems

of transformation. Proceedings of the fourth annual conference on the Ethiopian economy, Addis Ababa, Ethiopia.

Kidanu, Aklilu and Tadesse Alemu, 1994. Rapid population growth and access to farmland: coping strategies in two peasant associations in North Shoa. In Dessalegn Rahmato (editor), Land tenure and land policy in Ethiopia after the Derg. Institute of Development Research, Addis Ababa University, Ethiopia.

Rahmato, Dessalegn, 2000. Revisiting the land issue: Options for change.

Sandford, J. and Sandford, S. 1994. Land tenure in an enset-growing region. In Dessalegn Rahmato (editor), Land tenure and land policy in Ethiopia after the Derg. Institute of Development Research, Addis Ababa University, Ethiopia.

Teklu, Tesfaye and Adugna Lemi. 2001. Factors affecting entry and intensity in informal rental land markets in southern Ethiopian highlands (Processed).

Teklu, Tesfaye and Bedasa Tadesse, 2001. Access to agricultural land, farm size, quality and productivity relations in Ethiopian highlands (Processed).

Teklu, Amare, 1998. The effect of tenure security and land fragmentation on productivity and investment in smallholder agriculture: evidence from Tiyo Woreda, Arsi, Ethiopia. Msc thesis. Addis Ababa University.