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Smallholders' land access in Sub-Saharan Africa: A new landscape?

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ABSTRACT

While scholars long recognized the importance of land markets as a key driver of rural non-farm development and transformation in rural areas, evidence on the extent of their operation and the nature of participants remains limited. We use household data from 6 countries to show that there is great potential for such markets to increase productivity and equalize factor ratios. While rental markets transfer land to land-poor and labor-rich producers, their operation and thus impact may be constrained by policy restrictions. Their functioning may also be constrained by ill-defined or insecure rights that may arise from failure to fully compensate existing rights in cases of expropriation, a failure to implement more broadly land policies or to do so in a gender sensitive manner. Methodological and substantive conclusions are derived.

1. Introduction

Scholars and policy makers alike have long recognized the importance of secure land tenure for sustainable land management, productivity-enhancing investment, operation of land markets that transfer land to its best and most productive use, and eventually of access to credit markets by using land as a collateral (Besley and Ghatak, 2010). Yet, while this has given rise to an array of interventions to formalize land rights in virtually all of the world's regions, Africa remains in many ways an exception. A key reason is that in Africa, customary institutions traditionally provided levels of tenure security high enough to encourage investment (Bruce and Migot-Adholla, 1994). Given the continent's traditional features including relative land abundance and producers' use of rather simple un-mechanized technology with reliance on family labor, it is generally believed there is little scope for large investment that would require access to credit. This would imply limited scope for productivity differences across producers and consequently for land (rental) markets to improve productivity. Together with the high cost of formalization efforts, this has led to a widely held view that, in the African context, efforts to increase tenure security will be superfluous (Pinckney and Kimuyu, 1994), not sustainable (Atwood, 1990) or may, if they give rise to appropriation of land by well-connected individuals, even be harmful (Easterly, 2008).

Recently, studies started documenting that reality may diverge from this view in a number of respects. First, even without accounting for the recent demand for land acquisition by large farms in Africa (Deininger and Byerlee, 2011), productivity among smallholders may vary considerably even in non-mechanized settings (Restuccia and Santaeulalia-Llopis, 2015). Second, customary systems may be biased against women, in particular restricting their ability to inherit land and thus their bargaining power within the household. Also, as land becomes more scarce, traditional institutions may come under stress and be no longer able to ensure equitable land access. This is linked to increasing numbers of land disputes and possibly traditional chiefs transferring land for private gain rather than community benefit. Third, growth of the rural non-farm economy, rural-urban migration, and diversification of income sources increase the scope for efficiency-enhancing transactions as dispersion of skill increases, investment becomes more profitable, and land from those joining the non-agricultural can be leased to those specializing in agriculture. In such situations, rental markets can provide advantages by equalizing factor endowments and allowing gains from specialization (Holden et al., 2008; Jin and Jayne, 2013). If, as in commonly found, factor markets are imperfect (Dillon and Barrett, 2016) but production is labor- intensive with an inverse relationship between farm size and productivity, this will increase productivity. All of this implies that, in countries undergoing rapid economic change, regular and reliable data will be important to inform policy not only to indicate if reality still corresponds to common wisdom but also improve understanding of drivers and potential obstacles to structural transformation and growth of the rural non-farm economy.

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We draw on large representative cross-sectional household data from 6 countries (Ethiopia, Malawi, Niger, Nigeria, Tanzania, and Uganda) collected under the auspices of the LSMS-ISA program between 2010 and 2012.[1] In addition to providing updated and consistent information on differences across households in terms of endowments and productivity, we assess the extent to which rental markets help bring about the advantages expected from them. Variables available from the surveys, together with general information on the institutional environment prevalent in these countries, are used to identify determinants of land market functioning at a descriptive level. We estimate a reduced form model of land rental and sales market participation that makes use of the geo-referenced nature of the data at hand. In addition to affirming the scope for sizeable gains in equity and potentially efficiency from better functioning of land rental markets, we go beyond the existing literature, and we formulate: (i) hypotheses regarding obstacles to land market functioning that warrant discussion with policy makers and should be subjected to further empirical tests, and (ii) we suggest variables to include in future surveys that could inform such debates.

Main findings are as follows. First, we show that, contrary to expectations about limited potential of land rental, in the countries studied here, large differences in land endowments and productivity create potential for land market to equalize endowments and contribute to higher levels of productivity. Second, we find that land rental markets improve equity by promoting land access to those with limited land endowments. Finally, while a detailed examination of the impact of institutional factors is beyond the scope of this paper, our findings suggest that rental market performance seems lower where land rental is explicitly or implicitly outlawed, the threat of uncompensated expropriation increases tenure insecurity, and policies to document existing land rights, especially by women, are not implemented or out of reach for the majority of land holders. In addition to suggesting that there may be a need to revise traditionally held views on African agriculture and land markets, or at least to differentiate them in line with rapid changes of land scarcity, this also implies that greater attention to these issues in the policy and institutional dialogues and in future data collection efforts will be warranted.

The paper is structured as follows. Section two discusses conceptual background and literature regarding the role of land markets, their evolution over time, institutional pre-conditions for effective functioning, and welfare- and productivity impacts as well as institutional arrangements in study countries. Section three uses LSMS-ISA data to descriptively explore levels of documentation and productivity, as well as incidence and determinants of land rental market operation in the six countries. Section four explores determinants of participation in land rental and sales markets econometrically. Section five summarizes results and initial policy recommendations.

2. Background and justification

To contextualize issues, this section reviews the conceptual background and literature and the way in which they link to the context encountered in each of the study countries. Based on the notion that secure rights are required to provide the basis for their operation, land rental markets have been shown to be efficiency- and welfare enhancing all over the globe. While their potential in Africa is often assumed to be more limited, recent studies point towards high levels of variation across countries and show that this picture may be changing slowly in response to secular trends. Yet, a number of factors including a perceived threat of expropriation, women's or other groups' inability to obtain secure long-term right to the land they use, partial or ad-hoc implementation of certification program, or restrictions on transferability imposed to maintain rural equality or stem urban migration may in practice pose obstacles to their operation.

2.1. Conceptual framework

While Africa has traditionally been described as land abundant, the continent is characterized by enormous heterogeneity,[2] much of the land that could potentially be available for expansion is concentrated in few countries (Deininger and Byerlee, 2012), often with poor fertility or infrastructure access (Chamberlin et al., 2014). Technology-induced limits on farmers' ability to expand cultivated area and demand for African land from outsiders (Arezki et al., 2013; Schoneveld, 2014) imply that in many settings farm households have to adjust to higher levels of land scarcity, via investment and intensification of production or greater reliance on off-farm income, possibly alongside greater land rental market participation (Headey and Jayne, 2014). Continued high levels of population growth also point towards increasing land scarcity, as documented in Mali (Guirkinger and Platteau, 2014) or Ethiopia (Headey et al., 2014). All these factors suggest that economic development and structural transformation involve specialization and a shift of a part of the labor force out of the agricultural sector that create heterogeneity in the population, and increase the scope for efficiency-enhancing land transfers.

Markets for land sale or rental are largely absent in relatively land-abundant settings where the binding constraint is labor rather than land, and in subsistence economies where land is rather equally distributed, the skill-intensity of agricultural cultivation is low, and the availability of non-farm opportunities limited. These processes, together with economic diversification and growth in the non-farm sector, increase the scope for efficiency-enhancing land transfers beyond immediate kin and for periods that are likely to be longer than just one season. The literature documents that in this case, institutions, especially formal documentation of ownership to encourage long-term transfers extending beyond immediate family, can increase land use productivity and foster economic development and diversification (Badiane et al., 2012). Land markets will operate more smoothly if clear information on land ownership is available at low cost and social norms ensure that a landlord – who temporarily transfers land through rental -, does not risk the loss of this asset. This has historically provided the justification for public registries. Ill-defined or insecure property rights, including a failure of public institutions to respect and compensate existing rights in case of expropriation for public purpose, may put productivity-enhancing transactions out of reach for all or part of the population. Even if rights are clear and respected, inefficient institutions that make registering transactions costly and cumbersome will reduce the scope for land market transactions, e.g. by creating barriers to market participation (Sitko and Jayne, 2014). This can either undermine the ability to reap associated gains in terms of productivity and financial market development or drive such transactions into informality.

Empirical studies support this: Historically, reforms in Russia increased the scope for land leasing and promoted migration by easing financial constraints and decreasing opportunity costs (Chernina et al., 2014). More recently, a randomized roll-out of land registration in Rwanda helped to significantly improve land rental market operation and productivity (Ali et al., 2015b), provid-

[1] Living Standards Measurement Study – Integrated Surveys on Agriculture implemented by the World Bank www.worldbank.org/lsms-isa.

[2] Some African countries are quickly approaching or even surpassing levels of population density that are normally thought of to be more common in Asia. Rwanda, with 384 inhabitants/km^2 overall and 526/km^2 of agricultural land is a prominent example.