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Using National Statistics to Increase Transparency of Large Land Acquisition: Evidence from Ethiopia

DANIEL AYALEW ALI [a], KLAUS DEININGER [a] and ANTHONY HARRIS [b,*]

[a] *World Bank, Washington DC, USA*
[b] *Mathematica Policy Research, Cambridge, USA*

Summary. — Almost a decade after the rise in land demand triggered by the 2007/08 commodity price boom, most potential target countries still lack access to relevant information on a routine basis. This has reduced their ability to effectively regulate, monitor, and attract responsible investors rather than speculators in their effort to increase agricultural productivity and have benefits accrue to the host communities. The example of Ethiopia shows how building on existing data collection efforts allows to address this challenge and help formulate policies that guide the path forward. Using the 2013/14 nationally representative smallholder and commercial farm surveys, we find that (i) for most crops commercial farms' yields are higher than smallholders', with a peak in the 10– 20-ha bracket; (ii) commercial farms create few permanent jobs (with just one permanent job per 20 ha) and use only 55% of the land transferred to them; and (iii) after a peak in 2008, formation of new commercial farms is down to the pre-2007 levels. These findings imply that having reliable data on commercial farms, collected on regular intervals, could generate feedback loops for policy formulation and also provide vital information to assess and take regulatory actions aimed at improving the performance and attracting higher levels of investment to the sector.

Key words — Q12, Q15, Q16, Q24

1. INTRODUCTION

Nearly a decade after the 2007/08 commodity-price boom triggered a global "rush" for agricultural land by investors, a number of stylized facts regarding this phenomenon seem agreed. First, weak or fragmented institutions compromised countries' ability to channel such demand toward areas where it would yield the highest returns or to reject non-viable proposals from inexperienced investors. As a result, benefits have often been below expectations and a sizeable share of investors either went out of business or failed to fully utilize all the land allocated to them. Second, though land demand retreated from 2008 levels, experts expect it to continue, albeit at lower levels than those observed at the height of the "land rush". In fact, efforts such as the principles of responsible agricultural investment (Committee for World Food Security, 2014) depart from the belief that, if guided by a coherent and enforceable policy, "responsible" agricultural investment can provide countries that continue to depend on agriculture with capital and opportunities to add value and generate local benefits. Yet there is little doubt that, to realize such benefits while minimizing the potential for negative effects in a way that takes account of local conditions, a clear and enforceable regulatory environment is needed.

Without reliable data on the performance of different types of farms, it will be difficult to discover new technologies, quantify risks, and identify ways to structure and enforce incentive compatible contracts. Regular and up-to date information is needed on (i) how well land transferred to investors is utilized and if not what remedial action (e.g., canceling of licenses) may be appropriate; (ii) the extent to which there is a level playing field between local producers of different sizes and outside investors and how their productive performance compares; and (iii) where in the value chain, either up-stream in agro-processing, in mixed nucleus estate models with outgrowers, or fully own production, investment would be most desirable and what complementary public inputs may encourage such investment. Beyond helping government to design and implement policy, reliable data on these issues will also help the investors by increasing transparency of technology options, allowing to quantify and insure against risks, and providing a basis for documenting compliance with global standards. Up to now, few countries where large-scale investment is an issue have developed systems to regularly provide the data needed and much of the empirical literature is still based on case studies the representativeness of which is difficult to establish and that are more suited to describing contextual and process-related issues than making causal inference.

To explore ways of satisfying such information needs in an effective and sustainable way, we draw on a nationally representative 2013/14 commercial farm survey in Ethiopia. Doing so allows us to document changes in levels and nature of land-based agricultural investment over time, the direct transfers to local communities it involved, and the extent to which land transferred is actually utilized. Ethiopia is of interest not only as a country that has recently attracted significant interest from investors but also because of a long tradition of collecting systematic data on large (state) farm performance which, due to poor data quality, were often not reported or even stopped intermittently. It also has an extensive national small farm survey which we can combine with large farm data to compare yield and input use between large and small farmers.

A number of interesting conclusions emerge. First, even at the peak of the "land rush", the amount of land transferred to investors in commercial farms, most owned by Ethiopians rather than foreigners, was much less than claimed in some widely quoted reports (Oakland Institute, 2011). In fact, after 2011, levels of annual land transfers reverted more or less to the levels reached before 2007. Second, largely due to technology and labor constraints, about 55% of land transferred remains unutilized. Third, with one permanent job per

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20 ha, in addition to some temporary jobs, commercial farms do not generate large amounts of direct employment. Finally, for most crops, commercial farms' yields (on area cultivated) are roughly 50% more than those by smallholders with yields highest in the 10–20-ha category. If this difference can be attributed to efficiency rather than more intensive input use or better endowments (e.g., irrigation, soil quality, or location close to infrastructure), it would increase the plausibility of positive spillovers from commercial to neighboring smallholder farms complementing their direct effects. The extent to which such spillovers materialize and the entry and exit dynamics in the farm sector merit further study.

The paper is structured as follows. Section two provides background information on the "global land rush" discusses Ethiopia's context and data collection efforts as well as improvements made and our approach. Section three presents survey evidence on commercial farms including ownership structure, levels of land utilization, cropping patterns, perceived constraints. Section four compares commercial and small farmers' productive performance and draws out implications for future data collection. Section five concludes with implications for policy and research.

2. BACKGROUND AND LITERATURE

Although the volume of new land deals globally has declined from its 2007/08 peak, most experts agree that large-scale land acquisition will not disappear. To identify opportunities where different business models might make sense and adopt regulations to attract capable investors who can make effective use of transferred land, reliable information is essential. This requires complementing global or case study evidence with nationally representative figures. The case of Ethiopia provides lessons in this respect.

(a) *The global land rush (nearly) a decade on*

After decades of stagnant or declining commodity prices when agriculture was considered a "sunset industry", increased levels and volatility of commodity prices and a concomitant rise in global land demand led to what some view as a "grab" for land (Pearce, 2012) or water (Rulli, Saviori, & D'Odorico, 2013) that risks depriving farmers and communities of resources rather than providing them with development opportunities. The size of land demand took many country governments by surprise. Without the infrastructure to check investors' business plans, provide information or assistance with negotiation to communities where land demand had surfaced, document impact and verify compliance with contract terms, many transfers indeed failed to lead to increased productivity use or generate local benefits (Deininger & Byerlee, 2011).[1] In light of a historically high failure rate of such investments (Tyler & Dixie, 2013) and welfare effects depending on the labor intensity of new farms and the opportunities open to displaced land users (Kleemann & Thiele, 2015), the fact that many investments failed to not only live up to the high and possibly exaggerated expectations by their proponents but also to enhance local welfare should not come as a surprise.

At the same time, it is argued that in developing countries where land is relatively abundant, there is a need to go beyond the dichotomy of large *vs.* small and look at new ways of harnessing synergies between the two (Collier & Dercon, 2014). While principles for doing so have been developed,[2] countries face two challenges. First, they need to separate "pioneers" who have technical know-how and financial means to increase productivity and generate local benefits from "speculators", including urban elites (Sitko & Jayne, 2014), who may acquire large tracts of land without using it productively in the hope of benefiting from future price appreciation (Collier & Venables, 2012). Attracting the former requires clear regulations (including taxes), protection of existing rights, and strong negotiating and monitoring capacity. Second, as agricultural investment is risky and not all ventures will succeed, strategies to discover and deal with failed ventures, including ways for them to exit without imperiling local people, are needed. This is of relevance as in many of the concerned countries land markets that could otherwise be relied upon to transfer land to better uses are outlawed. Historical experience demonstrates that large land owners who are unable to compete in the market may use political channels to affect factor prices, e.g., by trying to keep down labor cost or constrain access to capital, with potentially very unfavorable long-term consequences.[3]

While the 2007/08 surge in land-related investment prompted efforts at systematic data collection (Anseeuw *et al.*, 2012), global databases suffer from weaknesses including a lack of representativeness (Cotula, 2014) and a failure to reflect nuances in local legal and physical environments (Hall, 2011). Studies relying on these data can help identify broad challenges for natural resources such as water (Rulli & D'Odorico, 2013) and land transfers' association with weak governance (Arezki, Deininger, & Selod, 2015) or corruption (Bujko, Fischer, Krieger, & Meierrieks, 2015) but not inform national policy. Case studies often find land deals to have ambiguous or negative effects (German, Schoneveld, & Mwangi, 2013) due to gaps at the negotiation or enforcement stage, i.e., lack of transparency, limited disclosure, and failure to adhere to legally required processes of local consultation (Nolte & Voget-Kleschin ,2014) or failure to monitor contract implementation (Cotula, 2014). While they can fill a gap, they often give little thought to representativeness or replicability (Schoneveld, 2014).[4]

To inform policy, data with broader coverage are often needed. Though use of representative data is still evolving for land-based investment,[5] the extractives literature illustrates how household or administrative data can help assess impacts of investment on gender wage gaps and female empowerment (Aragon, Rud, & Toews, 2015; Kotsadam & Tolonen, 2015), agricultural productivity (Aragon & Rud, 2013), local labor demand (Aragon & Rud, 2012), and long-term economic development (Hornbeck & Keskin, 2015).

(b) *Ethiopia's context*

Large farm investment is not new to Ethiopia; in fact in the pre-revolutionary period, the state used large subsidies to attract commercial investment in agriculture for mechanized cash crop production in so-called "model farms" the establishment of which was often associated with tenant evictions. After the 1974 revolution, the Derg converted most of these into state farms for food production. Although yields were above peasants', their efficiency and contribution to national agricultural output (2%) remained low (Abebe, 1990).

After 1990, a strategy of market liberalization and agriculture-led industrialization focusing on small-scale producers, defined as those with a size below 10 hectares, was adopted.[6] To assess its effect, Ethiopia's Central Statistical Agency (CSA) started collecting annual data on smallholders' productive performance using a survey administered by resident enumerators to a representative sample of 40,000 farmers nationally. Information has been collected on input applica-