Food Policy 48 (2014) 194–202

Contents lists available at ScienceDirect

Food Policy

journal homepage: www.elsevier.com/locate/foodpol

Structural transformation or elite land capture? The growth of "emergent" farmers in Zambia

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ARTICLE INFO

Article history:
Available online 13 June 2014

Keywords:
Elite capture
Land policy
Agricultural growth
Small-scale agriculture
Zambia
Sub-Saharan Africa

ABSTRACT

Over the last decade, Zambia has witnessed a rapid increase in the number of medium-scale "emergent farms" cultivating 5–20 ha of land. This study analyzes the factors underpinning this growth. We find that the growth of emergent farmers in Zambia is primarily attributable to land acquisition by salaried urbanites and by relatively privileged rural individuals. We found little evidence to support the hypothesis that the rise of emergent farmers primarily represents a process of successful accumulation by farmers who began farming with less than 5 ha of land, a situation faced by more than 95% of farming households. We argue that these outcomes are the result of Zambia's land administration and agricultural spending policies. Rising concentration of landholdings in Zambia raises serious questions about the potential of current agricultural growth to act as a vehicle for broad based economic growth and poverty reduction.

Introduction

The global food price spike of 2008 has reinvigorated interest throughout the world in securing adequate food supplies. An outgrowth of this is a renewed focus on agricultural production in Sub-Saharan Africa. Global interest in African agriculture is expressed in two principle ways. First, following the L'Aquila G8 summit in 2009, donor countries pledged to increase spending on smallholder agricultural development. This commitment gave rise to a host of new funding streams for agricultural development, including the Global Hunger and Food Security Initiative and Feed the Future. Second, the recent food price spikes have sparked an intense interest by investors in agricultural land in Africa (Deininger and Byerlee, 2011; Thurow, 2010).

These divergent interests in African agriculture highlight a fundamental tension in current debates about land and the future of the continent's development. In particular, these debates revolve around the question of how to most effectively transform Africa's rural landscape from one characterized by a predominance of very small-scale, semi-subsistence farms to one that is much more productive and commercially oriented. On one side of this debate are those who argue that with an appropriate mix of public policy and spending a smallholder-led development trajectory can not only succeed in raising national food production, but will effectively reduce rural poverty in the process (Mellor, 1995). This smallholder-led commercialization trajectory underpins the economic structural transformation experienced in many Asian countries (Mellor, 1976; Johnston and Kilby, 1975; Lipton, 2006).

The other side of the debate stems from 40 years of frustration and apparent failure of small-scale African agriculture to register a measurable transformation to more commercialized and productive agricultural systems. A small, but growing chorus of voices argues that a myopic and "romanticized" policy focus on small-scale farming systems in Africa is misguided. Instead, given the perceived abundance of arable, under-utilized land in Africa, the more effective strategy for improving food security and lowering rural poverty in Africa is to encourage large-scale investment in commercial farming through a conducive land administration and public spending policy (Collier, 2008; Collier and Dercon, 2013). Proponents of this view argue that encouraging investments in commercial farming offers a number of advantages over efforts aimed at engaging millions of dispersed small-scale farmers. First, larger farms are in a better position to feed rapidly expanding cities in Africa than millions of small-scale farmers with little or no surplus to sell. Second, these farms can provide remunerative employment to people unprofitably engaged in semi-subsistence agriculture. Finally, larger farms are in a far better position than small-scale farms to adopt and adapt technologies to local contexts, thereby allowing them to maintain yield growth over time.

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http://dx.doi.org/10.1016/j.foodpol.2014.05.006
0306-9192/

Experiences from Southeast Asia and Latin America show that there are multiple pathways by which agricultural commercialization and land consolidation can occur (Poulton et al., 2008). Commercialization pathways can be usefully distinguished between those that were primarily driven by smallholder accumulation, such as in the Northeast region of Thailand, and those that developed through relatively capital-investment commercial agriculture, such as in the *Cerrado* region of Brazil (Poulton et al., 2008). Yet in Africa there is scant evidence on how commercialization and land consolidation occurs over time due to the limited and non-random nature of the studies to draw upon (e.g., Muyanga et al., 2013; Chapoto et al., 2013; Neven et al., 2009; Poulton et al., 2008).

Interestingly, in Zambia nationally representative survey data show a rapid increase in the number of so-called "emergent" farmers over the last decade. By government definition, emergent farmers are smallholders[1] who cultivate more than 5 ha and up to 20 ha of land. As the name implies, emergent farmers are often characterized as occupying a transitional phase between small-scale, semi-subsistence production and larger-scale, more commercial farming. Between 2001 and 2011 the population of emergent farmer households in Zambia grew by 62.2%, vastly outstripping the 33.5% growth rate of the total smallholder population. When disaggregated further, farm households cultivating between 10 and 20 ha actually increased by 103.1% during the same time period (Central Statistical Office, 2011). Farms controlling between 5 and 100 ha now account for more land than the entire small-scale farm sector. Along with these developments, nationally representative surveys show that the Gini coefficient of landholding distribution has increased in Zambia from 0.42 in 2001 to 0.49 in 2012 (Jayne et al., 2014). Curiously, however, Zambia, like many other countries in the region, has not witnessed a significant increase in agricultural labor productivity or wage rates (Potts, 2012), which were fundamental in triggering smallholder-led commercialization and consolidation in East Asia (Pingali, 1997). This study explores the pathways by which the emergent farming sector has grown in Zambia. We then assess how Zambia's pattern of land use dynamics is likely to affect the potential of agricultural growth to effectively reduce rural poverty and hunger.

Data and methods

Throughout this article we follow the Government of Zambia's definition of small-scale, emergent, smallholder, and large-scale farmers. Small-scale farmers are those *cultivating* 0.1–4.99 ha of land, while emergent farmers are those *cultivating* 5–20 ha (although as will be shown they may own considerably more land than this). The sum total of small-scale and emergent farmers (i.e., cultivating 0.1–20 hectares) are referred to as "smallholders" while farmers cultivating more than 20 ha are known as "large-scale" farmers. We adopted this taxonomy because it allows us to use the Government's nationally representative survey data to speak to some of the factors driving the development of the emergent farm sector in Zambia.

Survey data on smallholder agriculture in Zambia comes from three sources: the Crop Forecast Survey (CFS), the Supplemental Surveys to Post Harvest Survey (SS), and the Rural Agricultural Livelihoods Survey (RALS) of 2012. These surveys are conducted by the Central Statistics Office in partnership with the Ministry of Agriculture and Livestock and the Indaba Agricultural Policy Research Institute. These surveys are nationally representative for the smallholder population. The CFS surveys are conducted annually, while the SS was conducted in 2001, 2004, and 2008 and contains information on non-farm income that is lacking from the CFS. The RALS is similar to the SS, but utilizes a new sample frame based on the national census of 2010. All of these surveys contain households farming between 0.1 and 20 ha and hence exclude farmers categorized as large-scale. Data on the large-scale farm sector is collected through a mail-in survey of the known population based on records of the Zambia National Farmers Union. Because of low response rates, the official estimates of the crop area and production of the large-scale farm sector and the number of farms are known to be seriously underestimated.

To augment the data gathered from the nationally representative surveys we designed and implemented a structured survey for emergent farmers, which was administered in July 2011 in four districts in Zambia: Mumbwa, Choma, Kalomo, and Mpongwe. The four districts were purposively selected based on the concentration and number of emergent farmers in the 2010/2011 CFS. To ensure a reasonable concentration to sample from, at least 3% of all farmers in the district had to be classified as emergent farmers. We selected districts along a continuum of concentrations to ensure geographic diversity in the sample. However, it is important to note that emergent farmers are overwhelmingly concentrated in districts that are in close proximity to the "line of rail" and the urban mining areas of the "Copperbelt." Of the 72 District in Zambia, Kalomo District had the highest concentration of emergent farmers in the country (15%), Mumbwa had the third highest concentration with 9%, Mpongwe was tied for seventh with 5%, and Choma was tied for ninth with a 3% concentration level. The data presented here are, therefore, not nationally representative, but they do provide indicative findings on the emergent farming sector in districts where emergent farmers are concentrated.

However, to derive our sample of emergent farmers we intentionally deviated from the Government's definition of emergent farmer. Rather than use area cultivated to define emergent farmers we used total farm size. We did this based on anecdotal evidence that some emergent farmers may cultivate more than 20 ha of land, yet still have little in common with the traditional large-scale farms in terms of race (most large-scale farmers in Zambia, at least until very recently, have been of European decent), farm size, access to finance, input application rates, productivity, and farm management strategies. We, therefore, derived our sample of emergent farms from those farmers who *own* 10–200 ha of land. However, out of a total of 183 emergent farmers interviewed for this article none *cultivated* less than 5 ha of land and only one cultivated more than 20. Therefore, the vast majority of our respondents conformed to the government's definition of an emergent farmer.

The purpose of this survey was to explore the historical trajectories by which these emergent farmers achieved their current scale of operation. As such, the survey focused on land acquisition strategies, financing sources for farm expansion, land use patterns, and employment history. While the survey was designed to understand how farmers achieved their current scale of operation, it did not explore in detail questions about current farm productivity, aside from general questions about land use, or farm labor usage.

Farmers meeting our land size requirement were randomly selected from farmer contact lists kept by the Zambian National Farmers Union (ZNFU) and the District Agriculture and Cooperatives Office (DACO). While in all likelihood these lists are not exhaustive, they provided the only viable means for randomizing our sample of emergent farmers in each of the districts.

The final data source was the Ministry of Lands, Natural Resources and Environmental Protection Land Information Management System which captures the particulars of persons or institutions to which leasehold titles are offered, the date of offer, the areas in which the particular pieces of land are located, the extent

[1] In Zambia "smallholders" are defined as cultivating up to 20 ha of land. The broad category of smallholder is divided between small-scale farmers, defined as cultivating less than 5 ha of land, and emergent farmers, defined as cultivating 5–20 ha.